

Impact of improving the regulatory legal framework on the energy efficiency strategy of the fuel and energy complex

Elena Smorodina^{1,*} and *Oksana Belyantseva*¹, *Svetlana Revunova*², and *Vladimir Bolgov*¹

¹Voronezh State Technical University, Moscow Avenue, 14, Voronezh, 394026, Russia

²Moscow State University of Civil Engineering, Yaroslavskoe shosse, 26, Moscow, 129337, Russia

Abstract. The paper provides an overview of the main regulatory framework governing public relations in the energy sector. The fuel and energy complex is of great importance for the economy and development of Russia, but full use is impossible until a solution to the problem of improving the regulatory legal framework is achieved. The adoption of the Energy Strategy is aimed at solving the listed problems. The main provisions of regulatory legal acts are analyzed. The tasks of improving the legislative framework can be achieved through unification. The scientific research used the method of comparative analysis. This paper examines and analyzes the legislation applied in the energy sector, the concept of energy legislation, energy efficiency, the fuel and energy complex, the problems of developing and adopting the Energy Code of the Russian Federation. The urgency of improving the regulatory legal support for the energy efficiency of the fuel and energy complex is formulated. The main problems and the need for the adoption of regulations in the energy sector are identified.

1 Introduction

Recently, one of the most serious problems in the field of energy is the systematization of energy legislation, which leads not only to a deterioration in the implementation of the regulatory framework, but also to a decrease in the quality of life of citizens.

The development of the fuel and energy complex (FEC) requires a healthy economy and a long-term state energy policy, which is formed by developing and adopting strategically important documents in this area and analyzing problems in the economy. The fuel and energy complex determines this in the most appropriate way to solve them. The adoption of the Energy Strategy was designed for this, which will help in solving emerging problems. A positive point in this direction is that the strategy is a long-term document of the state's energy policy. It was adopted in April 2020 by the Government of the Russian Federation after lengthy discussions and is considered developed today [1].

However, the implementation of strategic objectives is not possible without improving the adequate regulatory legal framework in the energy sector. Energy should be understood

* Corresponding author: smorodinaep@mail.ru

as a branch of the economy, covering the production, transformation, transfer and use of various types of energy resources of all types [2]. Unified prescriptions for this concept introduce its predictability and consistency, the existence of its own progressive advantages and goals of the gradual formation of regulatory legal support, focus on the final strategic outcome, compliance with the general regulatory framework, transformation of the socio-economic improvement of the state. The mechanism of this technique should take into account the principles and structures of the implementation of the state energy policy.

At the beginning of the twentieth century, there was a need to improve the regulatory legal framework in the energy sector, which was caused by the intensive development of market relations in the energy sector [3].

The scientific works of Gudkov I.V. and Lakhno P.G. are devoted to the study of the legal framework in energy policy. Voronov A.M., Sigalov K.E., Gogolev A.M. dealt with the issues of legal regulation in the development of the energy complex. Romanova V.V. considered the unification of legal regulation in the field of energy. The work of Lavrik T.M. and Frolova S.A. devoted to the legal regulation of relations in the energy sector.

Despite the fact that the issues of legal support in the energy sector are widely considered in the scientific literature, the impact of improving the regulatory legal support on the energy efficiency of the fuel and energy complex has remained insufficiently studied. This determines the relevance of the chosen topic. Systematization of the regulatory framework and energy efficiency improvement, and analysis of current legislation are the purpose of this study.

2 Materials and Methods

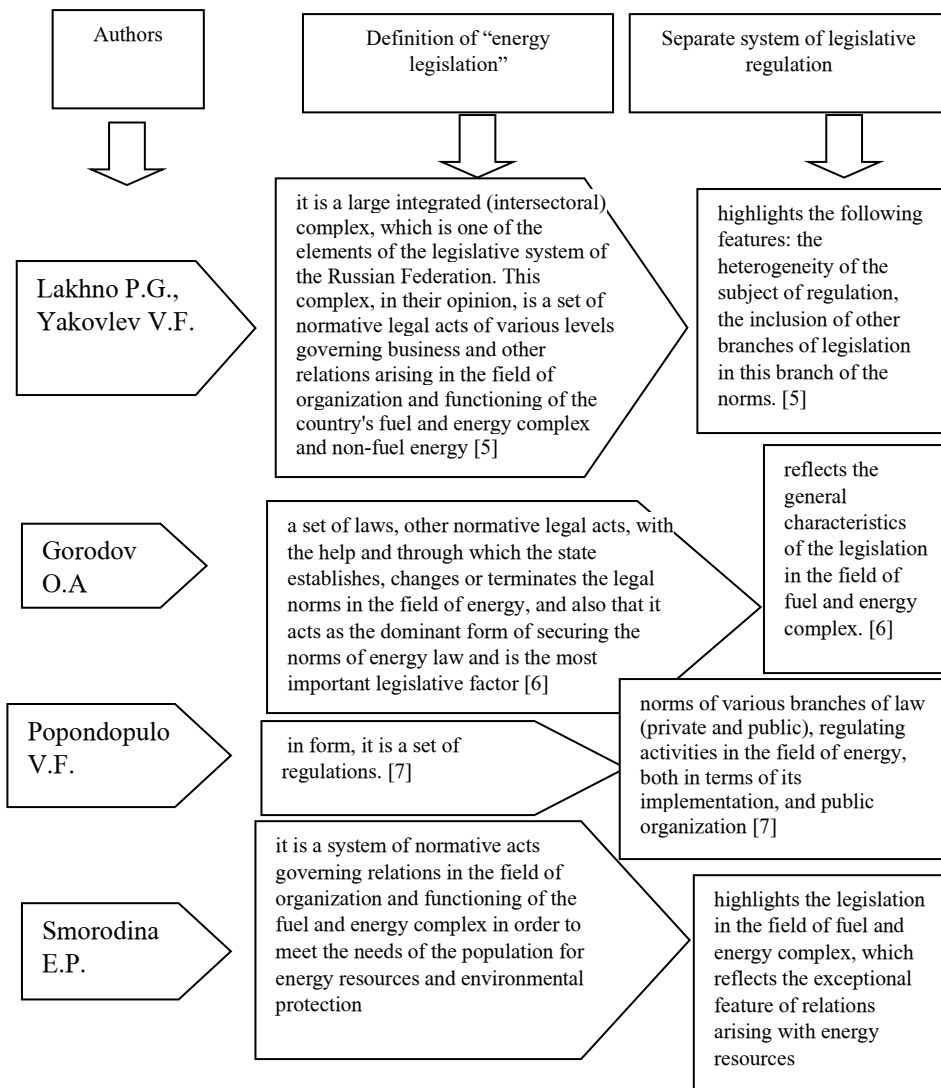
The object of scientific research is the regulatory legal framework in the field of energy. The main method for conducting this research is the analysis of energy legislation, strategic programs in the energy sector, analysis of the energy efficiency of the fuel and energy complex, taking into account the systematization of regulatory legal support, as well as research materials on this topic.

The scientific works of V.F. Yakovlev are devoted to the issues of legal regulation of the fuel and energy complex. As a result of the study of this issue, he came to the conclusion that “legislation in the field of energy is a complex, intersectoral array of normative acts”. While characterizing the overall system of legal regulation of the fuel and energy complex, he noted that “it includes elements of general legislation and special legislation, containing special norms reflecting the specifics of this sphere of relations”. [4]

Attention is always shown to the regulation of legal relations in the field of energy. We see this from history, and it is also evidenced by the recently adopted regulatory legal acts.

In scientific works, we meet the concept of “energy legislation”, but there is no single definition in existing works. We will present it in the form of table 1.

Table 1. The author's position of the definition of “energy legislation” and the regulatory system



Regulatory legal acts that regulate relations in the energy sector often use the term “energy legislation”. This expression can be found in narrowly focused regulations that have two levels of general legislation at the federal level, for example, the Constitution of the Russian Federation, and the second level - by-laws adopted by the executive authority of the Government, as well as the Ministry of Energy of the Russian Federation. However, in these normative acts, the legislator did not pay due attention to the terminology of the fuel and energy complex, which in practice, when implementing the norms, may encounter legal inaccuracies. From this we can conclude that energy legislation covers the entire fuel and energy complex, but we do not see its concept in the regulatory literature, not a single legal act contains a definition, which leads to legal inaccuracies in the implementation of these norms in practice.

One of the reasons affecting energy efficiency is the state of the legislative framework in the energy sector. Nowadays, the normative act governing energy efficiency is the Law

“On Energy Saving”. For the first time, the concept of energy efficiency appeared in the same law. This is a new term “energy efficiency - characteristics reflecting the ratio of the beneficial effect from the use of energy resources to the costs of energy resources produced in order to obtain such an effect in relation to products, technological process, legal entity, individual entrepreneur” [12].

The main provisions contributing to the implementation of the energy strategy include the legal improvement of relations in the fuel and energy complex, the development and adoption of stable legislation that ensures the energy efficiency of the fuel and energy complex.

In our economy, the FEC occupies the most important place and represents the main importance of the basic infrastructure, the basic principles of the formation of revenues of the budgetary system of the Russian Federation and the largest customer for other industries.

Many problems are associated with the definition and clarification of the place of the Energy Strategy in the system of official documents of the country (Fig. 1).

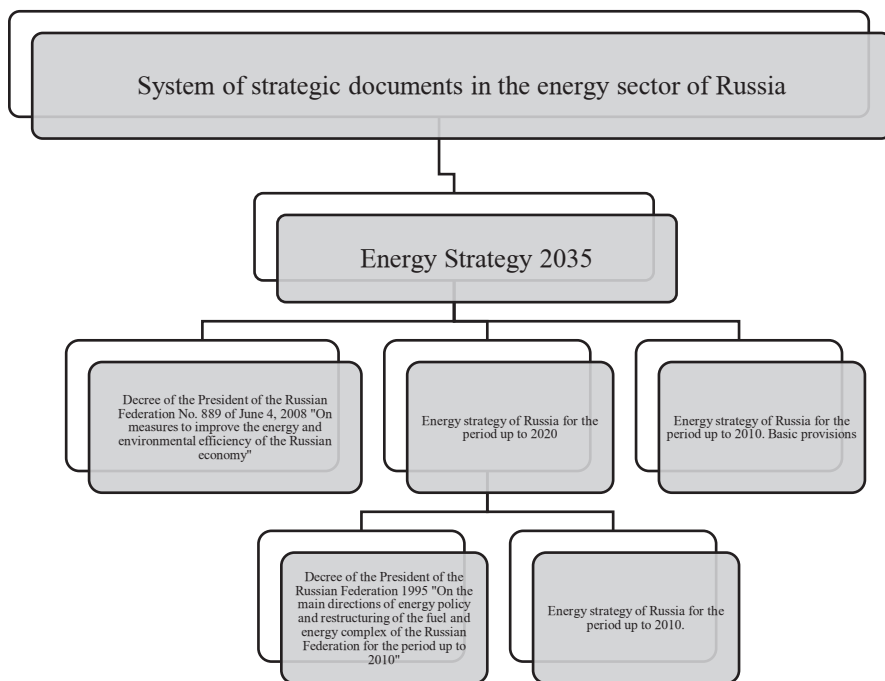


Fig. 1. System of strategic documents in the energy sector of Russia

The basic normative legal acts that regulate relations in the fuel and energy complex include the acts indicated in Fig. 2

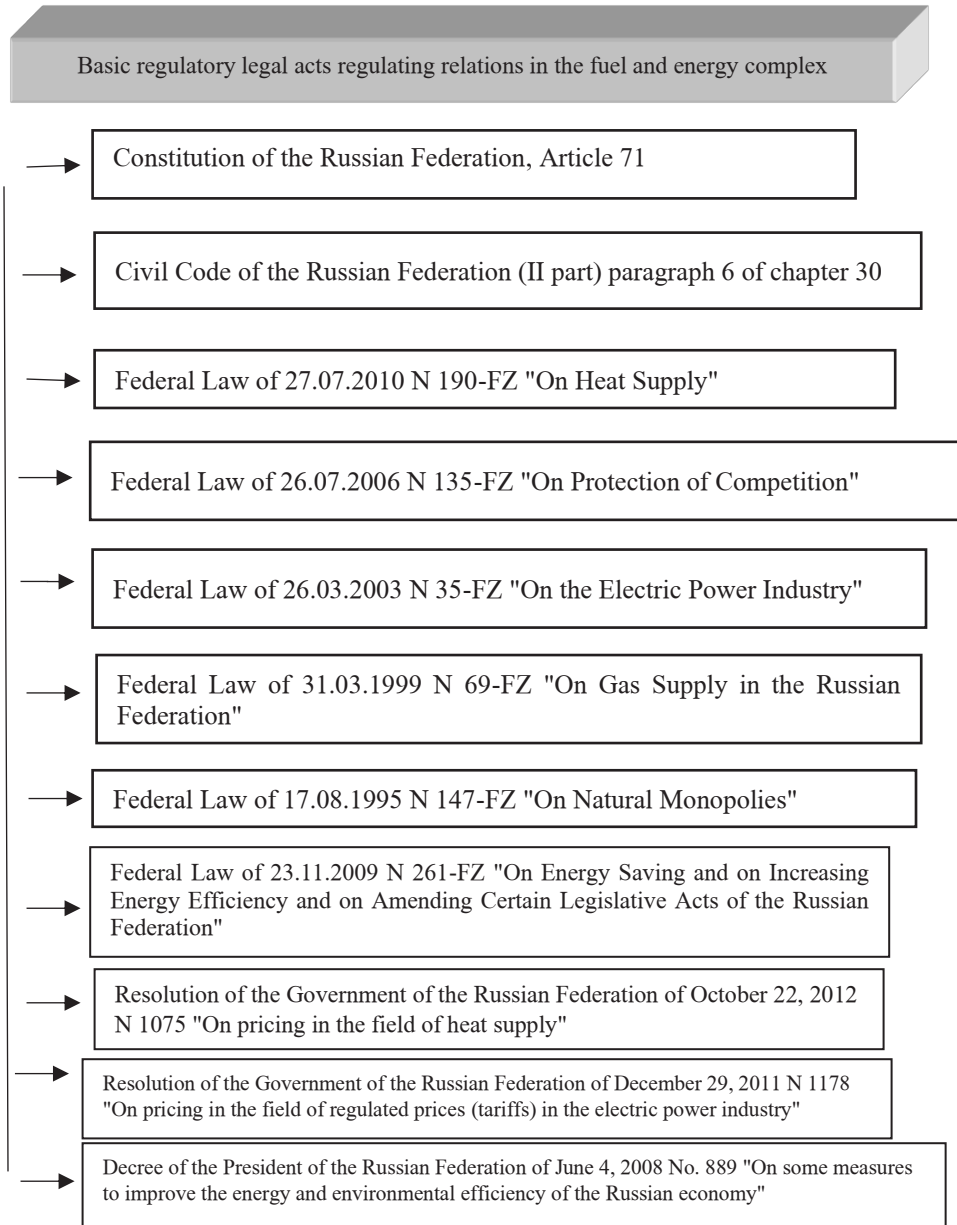


Fig. 2. Main regulatory legal acts regulating relations in the fuel and energy complex

Thus, this list is not exhaustive, it is most likely the basic one that regulates the energy sector. But at the same time, in practice, not everything is so perfect. Therefore, the regulatory framework should be refined, all federal bodies are engaged in this, but the profile in this area is the State Duma Committee on Energy, which prepares draft laws in advance for consideration by the State Duma.

3 Results

The development of the legal framework is the main, really operating tool for increasing the efficiency of the use of fuel and energy resources. Energy legislation today is a rather complex section of the regulatory framework system.

With the adoption of the Energy Strategy of Russia, as well as a number of regulations in various sectors of the fuel and energy complex, it leads to such an understanding as the imperfection of stable and effective legislation in the field of energy. The urgent problem of bringing legal regulation into an integral system needs further development and improvement.

After analyzing the available material, we can conclude that there are two levels of legal regulation - these are general and special legislation, and yet the regulatory support of the fuel and energy complex does not have a holistic understanding. This is caused by the lack of a general law on energy that would dispel the problems in this area. The tasks of improving the legislative framework can be achieved through unification. In the energy sector, there is no fundamental law defining the legal order. It is necessary to systematize and combine all the institutions in energy law. Some regulations have an ambiguous interpretation in practice, the laws are not sufficiently correlated with each other. This leads to contradictions, hence the corrupt arbitrariness of the regulatory authorities.

A tool that can unite and consolidate all existing normative acts into a single system, where relations have already been formed that contain norms for the formation and development of the fuel and energy complex into a single codified act is the Energy Code of the Russian Federation, which will provide comprehensive legal regulation in the energy sector.

Thus, the adoption of the Energy Code of the Russian Federation will be the main area for the development of the fuel and energy complex, which indicates its energy efficiency and the feasibility of introducing mechanisms and processes acting on it. As a result, it becomes necessary to say that in the study of the material, there is the expediency of adopting a new legislative act in the energy sector, which would consolidate the main statements and provisions, the principles of legal regulation in this area.

4 Discussions

The subsequent revitalization of the fuel and energy complex is impossible without improving the regulatory legal framework in the energy sector. And the beginning of this path would be the development and adoption of the Energy Code, which causes a lot of discussions and disagreements, since in our legal theory of Russia, there is a judgment that the code is only a codified act of legislation regulating a certain range of homogeneous relations and also representing branch of energy law. Besides, it should regulate a wider range of legal relations. It is impossible to understand the peculiarity of the fuel and energy complex with its relations between producers and consumers of energy resources at the federal level, since the adoption of federal laws, in particular the Energy Code, has nothing to do with the formation of industry legislation.

At the same time, it is clear that fragmented energy legislation and the lack of a unified methodology do not contribute to the development of the country's fuel and energy complex. Some issues of energy supply also cannot be resolved at the federal level. At present, the constituent entities of the Russian Federation are developing their own energy legislation at their own level, which is contrary to federal legislation in the field of energy. This contradiction suggests that it is necessary to create an integral, unified, consistent system of legal regulation of relations in the energy sector, which will be an inevitable condition for the effective development of the fuel and energy complex. This act should establish the terminology that is used in the fuel and energy

complex, the basic principles of legal regulation of energy, forms and methods of improving energy efficiency.

Table 2. The main problems of the development and adoption of the Energy Code of the Russian Federation

Problems in the economy and FEC	Basic tasks in problem solving
High wear of FEC equipment	High degree of wear of FEC fixed assets (60%) and the low renewal rate (10%), it is necessary to commission new facilities
High energy intensity of GDP	Reduction is impossible without the introduction of energy-saving technologies, it is necessary to implement the adopted programs in this industry
Delay of the technical capabilities of FEC from the global initial technical stage	Dependent position on the import of equipment from other countries, it is necessary to establish the production process of domestic technologies
High burden on the environment	Enterprises of this industry, emitting pollutants into the external environment, create a negative impact on the environment, while local cleaning from these pollutants is necessary.
Lack of developed and stable legislation	There are significant legislative problems in practice

5 Conclusion

Improving the regulatory framework for the energy efficiency strategy of the fuel and energy complex is a long and complex process that requires consolidated efforts on the part of the legislative and executive authorities.

The adoption of the Energy Strategy is aimed at solving the listed problems, while the implementation of strategic tasks is not possible without improving the adequate regulatory legal framework in the energy sector.

The development of the legal framework is the main, really operating tool for increasing the efficiency of the use of fuel and energy resources. Therefore, the adoption of the Energy Code of the Russian Federation will be the main area in the development of legal regulation in the field of energy and energy efficiency. The problems that need to be resolved are directly related to the development and implementation of new regulations that will bring the legislative framework in the energy sector to perfection and meet the modern requirements of legal regulation.

References

1. E. P. Smorodina, S. V. Belyaeva, O. M. Belyanceva, I. V. Kryuchkova, Osobennosti i problemy realizacii Energeticheskoy strategii 2035 goda, ZHurnal MGSU. Ekonomika i predprinimatel'stvo, 4, 240-244 (2020)
2. Bol'shoj tolkovyj slovar' russkogo yazyka, S. A. Kuznecov (ed.), ISBN 5-7711-0015-3, 397 (Saint-Petersburg, Norint, 2000)
3. M. T. Lavrik, S. A. Frolov, Pravovoe regulirovanie otnoshenij v sfere energetiki: uchebnoe posobie, 80 (Tambov, FGBOU VPO TGTU, 2014)
4. V. F. Yakovlev, Pravovoe regulirovanie toplivno-energeticheskogo kompleksa Rossii. Teoriya i praktika energeticheskogo prava. Materialy Mezhdunar.konf, ed. P.B. Lahno, 2, 10 (Moscow, 2008)

5. P. G. Lahno, V. F. Yakovlev, Energeticheskoe pravo kak kompleksnaya otrasl' prava Rossii, Energeticheskoe pravo Rossii i Germanii: sravnitel'nopravovoe issledovanie, ed. F. Yu. Zekkera, P. G. Lahno, Energetika i pravo, 4, 60 (Moscow, Yurist, 2011)
6. O. A. Gorodov, Vvedenie v energeticheskoe pravo: ucheb. Posobie, 17 (Moscow, Prospekt, 2012)
7. V. F. Popondopulo, Energeticheskoe pravo i energeticheskoe zakonodatel'stvo: obshchaya harakteristika, tendencii razvitiya, Energetika i pravo, 205-207 (Yurist, 2008)
8. Ob energosberezhenii i o povyshenii energeticheskoy effektivnosti i o vnesenii izmenenij v ot del'nye zakonodatel'nye akty Rossijskoj Federacii: feder. zakon ot 23 noyabrya 2009 g. № 261-FZ Sobr. zakonodatel'stva Ros. Federacii, 48, 5711 (2009)
9. <https://minenergo.gov.ru/node/1920>. (Last accessed 13.05.2020)
10. T. V. Alesinskaya, D. V. Arutyunova, V. G. Orlova, I. V. Ilin, S. V. Shirokova, Conception BSC for investment support of port and industrial complexes Academy of Strategic Management Journal, 16(1), 10-20 (2017)
11. V. Ilin, A. V. Izotov, S. V. Shirokova, O. V. Rostova, A. I. Levina, Method of decision making support for it market analysis Proceedings of 2017 20th IEEE International Conference on Soft Computing and Measurements, SCM 2017, 7970732, 812-814 (2017)
12. S. Kalyazina, A. Borremans, A. Dubgorn, Participation of citizens in sustainable development of big cities, MATEC Web of Conferences, 193, 01029 (2018)