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LEGAL REGULATION ANALYSIS OF ENERGY EFFICIENCY IN THE REPUBLIC OF SERBIA

Abstract: Sustainable development, as a generally accepted concept of modern society, implies the protection of the environment as one of the basic goals. This goal is achieved, among other things, through the use of renewable energy sources and energy efficiency. The improvement of energy efficiency and application of renewable energy sources should be incorporated while preserving the economic interests of the state. In order to harmonize these interests, the state must introduce the policy in the field of energy, which will simultaneously take care of both the environment and the economy. Among the most important instruments of such a policy are legal regulations. The Republic of Serbia has an extensive and thoroughly structured system of regulations in the field of energy efficiency. The mere existence of regulations in this area is not enough. It is only a necessary precondition for their consistent application, as well as control of the application by inspection bodies.

Keywords: energy, energy efficiency, laws, bylaws.

INTRODUCTION

It is well-known that global ecological awareness began to develop in the second half of the 20th century. The consequences of various events on the environment and human health became evident at that point [1]. Mass construction of power plants has led to the emission of pollutants in concentrations above the prescribed limit values. One of the biggest problems that humanity faces is global warming, which is a direct consequence of the greenhouse effect. In recent decades, there has been an increase in the emission of toxic gases, therefore, respiratory diseases, carcinogens and other diseases became more frequent. Finally, the consequences of climate change are widely observed [2]. All this has led to the fact that in the modern world there is increased awareness of the need for renewable energy sources and the improvement of various technologies in order to make energy use as accessible, economical and environmentally friendly as possible.

In recent decades energy efficiency policy is gaining in importance and more and more attention is being paid to it. In the conditions of the very fast development of the world economy and increasing limitation of the availability of natural resources, energy efficiency is becoming one of the key goals of the states, as well as the international community [3]. The goal is to reduce energy consumption while keeping the level of comfort and quality of life unchanged. This goal is not easy to achieve, but a significant resource in this regard is legal regulations on energy efficiency. In order to use energy rationally and efficiently in Serbia, a number of laws and bylaws that thoroughly regulate energy efficiency has been introduced. Legal regulation of this issue is important in order to establish a system in which its

subjects, their rights and obligations, as well as sanctions in case of non-compliance, are clearly defined.

The Republic of Serbia is in the process of negotiations for accession to the European Union. By opting for accession to the European Union, Serbia has accepted the obligation to harmonize its regulations with the regulations of the European Union, improve the existing ones and adopt new, and a large part of those regulations concerns the protection of the environment [4]. The goal of this commitment is to improve the efficiency and legal regulations concerning the environment, including energy. Serbia has largely incorporated the EU acquis in the field of energy and energy efficiency into its national legal framework, which stems from its membership in the Energy Community [5].

LEGAL REGULATIONS ON ENERGY EFFICIENCY

During the last two decades, the Republic of Serbia, as a candidate for membership in the European Union, has implemented an intensive policy of adopting regulations in the field of environmental protection. Four basic laws that form the basis of the environmental protection system and the basis of the legal regulation of environmental protection were adopted in the Republic of Serbia in 2004. Those are the Law on Environmental Protection, Law on Environmental Impact Assessment, Law on Strategic Environmental Assessment, and Law on Integrated Prevention and Control of Environmental Pollution.

Table 1. *The subject of regulation of legal acts in the field of energy policy and energy efficiency*

Law	Subject of regulation
Energy Law	- national goals and plans concerning energy policy and the manner of its realization
	- conditions for reliable, safe and quality delivery of energy and energy products
	- conditions for secure supply to customers
	- protection of energy customers and energy sources,
	- conditions and manner of performing energy activities
	- conditions for the construction of new energy facilities
	- status and scope of work of the Energy Agency of the Republic of Serbia
	- use of renewable energy sources
	- incentives and guarantees of origin
	- the manner of organizing and functioning of the electricity, natural gas and oil derivatives markets
	- rights and obligations of market participants
	- establishment of ownership on the networks of system operators
	- supervision of law enforcement
	- conditions and manner of efficient use of energy and energy sources in the sector of production, transmission, distribution and consumption of energy
	- financing, incentives and other measures in this area
	- minimum energy efficiency requirements in the production, transmission and distribution of electricity and heat and natural gas delivery
Law on Efficient Use of Energy	- marking the levels of energy efficiency of products that affect energy consumption
	- energy management system
	- energy efficiency policy
	- other issues of importance for the rights and obligations of natural and legal persons related to the efficient use of energy

Source: Ministry of Mining and Energy of the Republic of Serbia

The adoption of these four laws was followed by a rich activity aimed at the adoption of laws governing the protection of certain segments of the environment, such as nature, air, soil, water, forests, protection from ionizing and non-ionizing radiation, waste management, chemical management, etc. Laws dealing with the legal regulation of energy efficiency belong to this group. All these recently adopted laws are accompanied by appropriate bylaws that are enacted in the form of rulebooks and ordinances.

In order to harmonize domestic with European regulation, the Republic of Serbia has recently adopted documents in the field of energy, including laws, bylaws, strategies, reports, etc. Unlike other regulations governing the protection of certain segments of the environment, it seems that regulations on energy efficiency have not excited the curiosity of the scientific community sufficiently. Thus, the scientific literature abounds in research dedicated to environmental regulations, but there are few publications dedicated to energy efficiency regulations. The two basic laws in the field of energy and energy efficiency are the Energy Law and the Law on Efficient Use of Energy.

The Energy Law defines national goals and plans concerning energy policy and the manner of its implementation, conditions for reliable, safe and quality delivery of energy and energy sources and conditions for a secure supply of customers, protection of energy and energy sources customers, conditions and manner of performing energy activities, conditions for the construction of new energy facilities, status and scope of work of the Energy Agency, use of renewable energy sources, incentive measures and guarantees of origin, manner of organization and functioning of electricity, natural gas and oil, and oil derivative markets, rights and obligations of market participants, the establishment of ownership on the networks of system operators, as well as supervision over the implementation of this law. This law regulates the production, distribution and supply of thermal energy as an energy activity [6].

The Law on Efficient Use of Energy regulates the conditions and manner of efficient use of energy and energy sources in the sector of production, transmission, distribution and consumption of energy, energy efficiency policy, energy management system, marking the level of energy efficiency of products affecting energy consumption, minimum energy efficiency requirements in the production, transmission and distribution of electricity and heat and delivery of natural gas, financing, incentives and other measures in this area, as well as other issues of importance for the rights and obligations of individuals and legal entities related to energy efficiency [7]. This law aims at achieving increased security of energy supply and its more efficient use, increased competitiveness of the economy, reduced the negative impact of the energy

sector on the environment, encouragement of responsible behavior towards energy.

BYLAWS ON ENERGY EFFICIENCY

Based on the mentioned legal documents, many bylaws, mostly decrees and rulebooks, has been adopted. Some of them are particularly important for energy efficiency, and bylaws related to energy management can be considered as a separate unit.

The Decree on conditions and procedure for acquiring the status of privileged power producer, temporary privileged producer and producer of electricity from renewable energy sources prescribes the conditions and procedures necessary for the acquisition, duration and termination of the status of a privileged producer, temporary privileged producer of electricity and producer of electricity from renewable energy sources.

Table 2. *Bylaws in the field of energy efficiency*

Decrees	Rulebooks
Decree on conditions and procedure for acquiring the status of privileged power producer, temporary privileged producer and producer of electricity from renewable energy sources	Rulebook on energy permits
Decree on incentive measures for the production of electricity from renewable energy sources and highly efficient combined heat and power production	Rulebook on minimum criteria regarding energy efficiency in the public procurement procedure
Decree on compensation for incentives for privileged power producers	
Decree on minimum energy efficiency requirements that must be met by new and revitalized plants	
Decree on the types of products that affect energy consumption for which it is necessary to label energy consumption and other resources	

Source: Ministry of Mining and Energy of the Republic of Serbia

The Decree also prescribes the requirements and evidence of meeting the conditions required to obtain the status of a privileged producer, the maximum capacity of power plants using wind energy and solar

energy that will receive the status of a privileged producer, or a temporary privileged producer [8].

In order for an energy entity and a natural person to be able to acquire the status of a privileged producer for a power plant or part of a power plant, it is necessary to meet many requirements prescribed in detail by this regulation. The Decree on incentive measures for the production of electricity from renewable energy sources and highly efficient combined heat and power production thoroughly prescribes incentive measures for the production of electricity from renewable sources and highly efficient combined heat and power production, conditions for their realization, duration of incentive periods, rights and obligations arising from these measures for eligible electricity producers and other energy entities. [9]. The incentive measures provided in this regulation include the incentive period, the incentive purchase price at which producers sell a certain amount of produced electricity to the supplier, taking over balance responsibility for the points of delivery of electricity by the privileged electricity producer during the incentive period by the guaranteed supplier, etc. The manner of calculation, payment and collection of funds based on compensation for incentive measures, as well as the manner of distribution of collected funds are prescribed by the Decree on compensation for incentives for privileged electricity producers [10]. The Decree on minimum energy efficiency requirements that must be met by new and revitalized plants prescribes minimum energy efficiency requirements that must be met by new and revitalized plants for electricity and heat production, as well as plants for combined heat and power production, i.e. systems for electricity transmission and systems for distribution of electricity and heat [11]. The Decree on the types of products that affect energy consumption for which it is necessary to label energy consumption and other resources prescribes for which types of products that directly or indirectly affect energy consumption it is necessary to label energy consumption and other important resources, i.e. label their energy efficiency, before being placed on the market. Also, the dynamics of the mandatory introduction of energy efficiency labels for different types of products are prescribed [12].

As for rulebooks, the Rulebook on energy permits and the Rulebook on minimum criteria regarding energy efficiency in the public procurement procedure are considered important. The Rulebook on Energy Permits prescribes the conditions for issuing energy permits, the content of applications for issuing energy permits depending on the type and purpose of the energy facility, the manner of issuing energy permits and the contents of the register of issued energy permits and the register of energy permits which are no longer valid [13]. The Rulebook on minimum criteria regarding energy efficiency in the public procurement procedure prescribes the minimum criteria in terms of energy efficiency that contracting authorities determine in the

procedure of public procurement of goods (office IT equipment, air conditioning devices, etc.) [14].

REGULATIONS ON ENERGY MANAGEMENT

The legal document that regulates the energy management system is the Law on Efficient Use of Energy. Several bylaws have been adopted based on this law.

The Decree on setting limit values for annual energy consumption defines the limit values based on which it is determined which companies are liable for the energy management system, annual energy saving targets and the application form for the realized primary energy consumption of the system payers [15].

The Rulebook on the conditions for the appointment of energy managers in the bodies of local self-government units regulates the conditions for the appointment of energy managers in the bodies of local self-government units with more than 20,000 inhabitants as obligors of the energy management system [16].

Table 3. *Regulations in the field of energy management*

LAW ON EFFICIENT USE OF ENERGY	
Decrees	Rulebooks
Decree on setting limit values for annual energy consumption	Rulebook on the conditions for the appointment of energy managers in the bodies of local self-government units
	Rulebook on the conditions for the appointment of energy managers in the companies whose predominant activity is in the manufacturing sector and companies as public services
	Rulebook on the conditions for the appointment of energy managers in the companies whose predominant activity is in the trade and services sector, state administration bodies, other bodies of the Republic of Serbia, bodies of the Autonomous Province and institutions

Source: Ministry of Mining and Energy of the Republic of Serbia

According to this rulebook, the local self-government unit is obliged to appoint at least one energy manager. The Rulebook on the conditions for the appointment of energy managers in the companies whose predominant activity is in the manufacturing sector and companies as public services thoroughly regulates the conditions for the appointment of energy managers as energy management system payers, including companies

whose predominant activity is in the manufacturing sector and companies treated as public services, which perform activities in the field of postal traffic, energy, roads, utilities [17].

The Rulebook on the conditions for the appointment of energy managers in the companies whose predominant activity is in the trade and services sector, state administration bodies, other bodies of the Republic of Serbia, bodies of the Autonomous Province and institutions regulates the conditions for the appointment of energy managers in energy management companies whose predominant activity is in the trade and services sector, state administration bodies, other bodies of the Republic of Serbia, bodies of the Autonomous Province and institutions that perform activities in the field of education, science, culture, healthcare and other areas following the law and which use public facilities [18]. In both rulebooks, it is mandatory to designate at least one energy manager for each location.

CONCLUSION

Since the right to a healthy environment is one of the basic human rights [19], the idea of sustainable development, among other things, requires active energy policy [20]. We need an environment based on the use of renewable energy sources and with an even greater share of energy efficiency. This policy requires the application of various measures in order to reduce energy consumption so that the quality of life remains the same.

One of the most important instruments of the energy efficiency policy is its legal regulation. The Republic of Serbia is committed to renewable energy sources and one of the important initial steps towards this goal was the ratification of the Kyoto Protocol and the signing of the Energy Community Treaty when Serbia agreed to harmonize its laws with EU Directive 2001/77 /EC promoting electricity produced from renewable sources [2][21].

During the past two decades, Serbia has intensified its activity in the direction of setting the legal framework for the efficient work of the energy sector, which resulted in the adoption of the Law on Energy [4] and the Law on Efficient Use of Energy [5]. As for bylaws, decrees and rulebooks are of special importance, all of which have been adopted relatively recently. It is noticeable that this matter is regulated almost equally by decrees and rulebooks, although decrees have a stronger political significance since they are passed by the state government as a whole, while rulebooks are mostly issued by the line minister. In addition to all the above-mentioned documents that have binding legal force, planning and strategic documents have a very important role in the energy policy. The Strategy for the Development of Energy of the Republic of Serbia until 2025 with projections until 2030 [22] and the National Action Plan for the Use of Renewable Energy

Sources of the Republic of Serbia [23] are especially significant.

Bearing in mind the abundant legal regulation described above, it can be concluded that the field of energy, energy efficiency and renewable energy sources in Serbia is thoroughly regulated by clearly structured documents of different legal force. Another issue is their application where problems such as lack of financial resources, complex administrative procedures, etc. can be recorded. All these challenges require the commitment of our country to energy efficiency policy and efficient mechanisms for implementing regulations in this area.

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ACKNOWLEDGEMENTS

This research was funded by the Ministry of Education, Science and Technological Development of the Republic of Serbia.

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ANALIZA PRAVNOG UREĐENJA ENERGETSKE EFIKASNOSTI U REPUBLICI SRBIJI

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Rezime: *Održivi razvoj, kao opšteprihvaćen koncept savremenog društva, podrazumeva zaštitu životne sredine kao jedan od osnovnih ciljeva. Ovaj cilj se ostvaruje, pored ostalog, i korišćenjem obnovljivih izvora energije i energetske efikasnošću. Unapređenje energetske efikasnosti i primena obnovljivih izvora energije treba da se odvija uz očuvanje ekonomskih interesa države. Da bi se ovi interesi uskladili, neophodna je intervencija države kroz vođenje politike u oblasti energetike tako da se istovremeno vodi računa, i o životnoj sredini, i o ekonomiji. Jedan od najvažnijih instrumenata ovakve politike jesu propisi. Republika Srbija poseduje razgranat i temeljno strukturiran sistem propisa u oblasti energetske efikasnosti.*

Ključne reči: energetika, energetska efikasnost, zakoni, podzakonska akta.