

# ENERGY SECURITY: THE LEGAL APPROACHES IN EUROPE AND IN RUSSIA

DOI 10.18572/2410-4390-2018-3-93-99



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*The article considers the legal meaning of the notion of energy security taking into account the energy interests of various states, outlines and analyses the main components of energy security and the state's role in their ensuring. It also studies the legal fundamentals of energy security at the level of the European Union and the Eurasian Economic Union, as well as the sources of national legal regulation with Germany and Russia taken as examples.*

*Among the main components of energy security, one can distinguish, inter alia, the proper technical condition of the energy infrastructure and ensuring of the reliability of its functioning (including its accident-free operation and security), the availability of an amount of energy (energy resources) of appropriate quality at any time sufficient to satisfy the existing demand, affordable consumer prices, and the compliance of the energy supply and the operations in the sphere of energy with the environmental requirements and standards. Studying the role of the state in ensuring energy security, the author notes that the state uses both the methods of public law and those of private law and concludes that the role of the state in ensuring energy supply security consists, on the one hand, in forecasting of demand and supply, ensuring of favorable environment for the energy companies' operation, regulation, state monitoring (surveillance), energy (energy resources) quality regulation, and implementation of the state energy policy, and, on the other hand, in influencing directly the energy (energy resources) production using the private law methods by way of holding stakes in the authorized (share) capital of energy companies and participating in corporate decisions making.*

*Based on the research findings, a range of proposals has been formed, particularly, on the necessity to define the notion "energy security" in the laws in effect, and the author's definition of the notion is suggested.*

**Keywords:** energy law, energy security, legal regulation of energy supply security and reliability, energy resource prices.

## **1. The notion of energy security: the European and the Russian approach**

The first and one of the key questions related to energy security ensuring is the question

of the meaning of this notion, since the political and legal, economic, and other tools to ensure energy security are developed depending on what is understood as "energy security".

The answer to the question “What is energy security?” is not universal. There is no single and unambiguous approach in the world to what should be understood by the term. Apart from that, energy security varies from one nation to another; accordingly, no common universal means exist to ensure it. Such means and tools to ensure energy security are determined individually taking into account the socioeconomic and political conditions, the geographical location, the condition of the energy industry development, and the energy interests of each particular state.

Due to that, the meaning of the notion of energy security, and, accordingly, the legal tools to ensure it, vary in energy resource importing countries (for example, the EU countries, including Germany), transit countries (for example, Ukraine and, partially, Poland), and exporting countries. Thus, while, from the economic point of view, energy resource importing countries are primarily interested in ensuring supply security, exporting countries associate energy security in many aspects with the demand security, i.e. the presence of sustainable demand in external markets for the energy resources exported. For transit countries, representing, in fact, the market intermediaries between the sellers and the buyers, both components are generally important. [1]

As the most commonly shared definition of the notion “energy security”, one can quote the one suggested by the International Energy Agency (hereinafter, the “IEA”), according to which energy security shall be understood as the availability of energy (energy resources) at an affordable price at any time. Along with that, the Agency differentiates between the long-term and the short-term energy security. The long-term energy security mainly deals with timely investment to ensure energy supply in accordance with the economic changes and environmental needs. The short-term energy security is focused on the ability of energy systems to respond promptly to sudden changes in the demand/supply balance. [2]

The definition of energy security suggested by the IEA reflects the prevailing worldwide

approach to the understanding of energy security, and, in our opinion, can be deemed the basic one for the purposes of defining energy security in particular countries (subject to national specific features). [3]

European scientists in their research characterize the notion of energy security using not only the parameters of energy availability and affordability, but also those of acceptability and accessibility.[4] In his work, Sovacool substantiates the position that energy security should be considered in five dimensions: energy availability, affordability, efficiency and technology development, sustainability, governance and regulation.[5] Barton, Redgwell, Rønne, and Zillman define energy security as “such condition when the nation and all, or the majority of, its citizens and enterprises have the access to a sufficient amount of energy resources at acceptable prices for the foreseeable future period without serious risk of energy supply disruptions”. [6]

The national laws of some EU member states provide for legal definition of the notion “energy security”. Thus, in accordance with Clause 16, Article 3 of the Energy Law of the Republic of Poland, energy security is understood as “the condition of the economy which enables full coverage of the customer’s ongoing and prospective demand for fuels and energy in a technically and economically justified manner, with the observance of the environment protection requirements”. [7]

However, let us return to the basic definition of the notion “energy security” suggested by the IEA. In the definition, the energy availability in terms of physical *availability* and *affordability* is the key component. The second criterion (affordable price) is very important, particularly for Europe, where the issue of the populations’ energy poverty is becoming more topical with each year. [8]

Energy (energy resources) availability at any time is the key component of energy supply security traditionally understood as such condition of the energy industry when, in order to cover the existing need for energy, the physical and technical conditions are met at

any time. Speaking in terms of economic categories, this means to satisfy fully the existing demand for energy during a particular period of time.

Thus, another important aspect should be distinguished as an energy security component immediately influencing energy supply security: the proper technical condition of the energy infrastructure and ensuring of the reliability of its functioning (including its accident-free operation and security).

In terms of availability of an amount of energy (energy resources) sufficient to satisfy the existing demand, each state can achieve energy security in two basic ways: ensuring of sufficient energy production within the country or importing of energy and/or primary energy resources. In case of the second option, as applied to **exporting countries**, the energy supply security issues are also closely associated with the issues of supply (imports) diversification to increase energy supply reliability and reduce the dependence on the exporting countries. [3] However, for exporting countries, the supply (exports) diversification is also important, since it allows reducing of the geopolitical risks associated with intergovernmental energy relations.

To summarize the above, let us distinguish the main components (basics) of energy security and analyze the tools to ensure their presence.

**a. The availability of an amount of energy (energy resources) of appropriate quality at any time sufficient to satisfy the existing demand.** This objective is associated, first of all, with ensuring of the physical availability of energy (energy resources) within an energy system (in energy markets). The means to ensure this depend on how the demand for energy is satisfied: by domestic production or by imports.

The role of the state in ensuring energy supply security (under the market economy conditions) consists in, on the one hand, in forecasting of demand and supply, ensuring of favorable environment for the energy companies' operation, regulation, state monitoring (surveillance), energy (energy

resources) quality regulation, and implementation of the state energy policy, and, on the other hand, in influencing directly the energy (energy resources) production using the private law methods by way of holding stakes in the authorized (share) capital of energy companies and participating in corporate decisions making.

Creation of energy (energy resources) reserves by energy companies to cover the demand during the peak consumption periods is also an important aspect of this energy security component. However, in contrast to natural gas or oil (oil products) storage where no unusual problems arise, the task to accumulate electric power is very challenging. The task is especially relevant for European states under the conditions of “energy turn” and the transition to generation primarily based on highly volatile renewable energy sources. That is why the development and implementation of modern electric power accumulation technology (for example, Power-to-Gas) is important to ensure energy security. For importing states, supply route diversification also plays an important role.

**b. The infrastructure's ability to ensure a reliable uninterrupted energy (energy resources) supply to end consumers.** Here one has to consider several aspects:

— ensuring of technical soundness, safe functioning, and security of energy facilities, including by way of development of state and corporate safety standards, requirements to energy facility operation, and documents aimed at accident prevention and regulating the actions in emergencies and forecasting of natural climatic threats able to damage the technological infrastructure, etc.

— ensuring of technical and technological capability to supply energy to consumers, including the presence of necessary main grids (pipelines) of appropriate capacity, as well as of technical capability for the consumers to access the networks (the presence of distribution networks). In any state, grid construction requires serious investment; accordingly, the role of the state should consist inter alia

in creation of a favorable investment environment and well-developed legal mechanisms, including those of public-private partnership in the field of energy. State planning of energy facilities construction is also important. From the legal point of view, planning may be performed using various legal measures. For example, in Germany, the legal basis of energy facility construction is formed by the provisions of the Federal Requirement Plan Law (Bundesbedarfsplangesetz), and in Russia, the general energy facility placement scheme, and the schemes and development programs for the Unified Energy System of Russia, as well as for the energy industry of the constituent entities of the Russian Federation, are used. Apart from that, the state must create the environment (including the legal environment) as required for the development of new modern technology in the field of energy.

— the ability of the market commercial infrastructure to ensure market members' interaction and entering into agreements. In this case, the state's role consists in creation of proper organizational and legal environment for the energy markets functioning.

*c. Affordable consumer prices for energy (energy resources).* This aspect is of huge social importance, first of all, for the population. However, for industrial consumers, affordable prices are also of no less importance, since the enterprises' expenses on the energy required for the goods manufacture are part of the goods cost. And if the goods cost is high (due to the expensive production), they can become simply uncompetitive. As a result, this may lead to production relocation abroad which will considerably damage the national economy and, eventually, involve an adverse social effect (for example, in the form of jobs reduction within the country, budget tax income decrease, etc.). In ensuring affordable prices on energy, regulation plays an important role, including the regulation of the grid companies operations aimed at ensuring of the non-discriminatory access to the networks and the price and tariff regulation.

*d. The compliance of the energy supply and the operations in the sphere of energy*

*with the environmental requirements and standards.* This component is optional in principle, and its inclusion in the energy security fundamentals depends directly on the level of the environmental responsibility of a particular state, its international obligations (for example, within the framework of the Paris Agreement), and the state environmental policy being implemented. The key lines of activity to achieve this objective include the enhancement of energy efficiency and energy saving, the "green" technology development (priority of eco-friendly fuel types and RES), the activities on the reduction of greenhouse gas emissions by energy facilities (including the emission quotas trading system), etc.

Speaking of the Russian approach to energy security, one has to note, first of all, that none of the Russian federal laws in the field of energy contains the definition of this fundamental notion, despite the fact that it is used in laws rather widely. Thus, ensuring of energy security of the Russian Federation is one of the general principle of economic relations arrangement and the foundation of the state policy in the sphere of electric power industry (Clause 1, Article 6 of Federal Law dd. March 26, 2003 No. 35-Φ3 On the Electric Power Industry), as well as one of the principles of the state policy in the field of gas supply (Article 4 of Federal Law dd. March 31, 1999 No. 69-Φ3 On Gas Supply in the Russian Federation).

A definition of energy security is provided for in the current Energy Strategy 2030 as approved by Order of the Government of the Russian Federation dd. November 13, 2009, N 1715-p On the Energy Strategy of the Russian Federation for the Period up to 2030 (hereinafter, the "Strategy"). According to Paragraph 2, Part 2, Section 5 of the Strategy, energy security is understood as "the condition of protection of the country, its citizens, society, state, and economy against the threats to a reliable fuel and energy supply. These threats are determined by external (geopolitical, macroeconomic, and market) factors, as well as by the condition and functioning of the country's energy sector".

At the same time, the definition leaves unclear what is understood precisely by a reliable fuel and energy supply. In contrast to the approach accepted in Europe, the given definition of energy security lacks the fundamental criteria of availability (affordability, physical availability, and technical accessibility).

Further, the Strategy explains that ensuring of energy security “is determined by the resources sufficiency, economic affordability, and the environmental and technological acceptability”.

It seems that here the affordability and sufficiency criteria occur, and that the Russian government, as if following the common European approach, also proceeds from the energy resources’ physical availability and affordability. However, this is true only in part.

As the Strategy clarifies, “the resources sufficiency determines the physical capability for the deficit-free supply of the national economy and the population with energy resources, while the affordability determines the profitability of such supply subject to the respective market price situation”. In other words, at first reading, it is unclear what is meant here, but, in any case, it is not ensuring of affordable consumer prices. Affordable prices are touched upon further and by implication only. The Strategy names “the ability of the fuel and energy complex to reliably cover the economically justified domestic demand for energy carriers of appropriate quality and at an acceptable price” as one of the main characteristics of energy security.

The meaning of the notion “energy security” is also explained in Clause 60 of the Russian Federation National Security Strategy approved by Decree of the President of the Russian Federation dd. December 31, 2015, No. 683 On the National Security Strategy of the Russian Federation, according to which energy security includes: “sustainable ensuring of domestic demand for energy carriers of standard quality, enhancement of energy efficiency and energy saving, and the competitiveness of domestic energy companies and energy resources producers, prevention of the fuel and energy resources deficit, creation of strategic

fuel reserves and reserve capacities, accessory equipment manufacturing, and stable functioning of the energy and heat supply systems”. As we see, this document lists many things associated, to various extent, with energy security; however, the energy (energy resources) affordability factor is not taken into account at all, as well as the factor of foreign trade in energy resources (the demand security), which is of key importance for ensuring of the economic component of national energy security.

The issue of implementing a general policy of ensuring energy security within the Eurasian Economic Union (EAEU) is another important aspect in the analysis of the Russian approach to energy security.

Clause 1, Article 79 of the Treaty on the EAEU stipulates that the EAEU member states shall implement a coordinated energy policy and form the common energy resources markets on a stage-by-stage basis “taking into account ensuring of energy security”. The Treaty does not clarify what is understood under the “energy security”.

A definition of “energy security” is contained, however, in Ruling of the Parliamentary Assembly of the Collective Security Treaty Organization (CSTO) dd. October 13, 2017, No. 10-4.1 The Model Law On Energy Security, defining it as “the condition of protection of the citizens, the society, the state, and the economy against the threats of deficit in coverage of their needs in energy by affordable energy resources of acceptable quality and the threats to an uninterrupted energy supply” [9]. All EAEU member states are also CSTO members, that is why one should suppose that the EAEU member states have nevertheless a common understanding of energy security, despite the fact that this definition is officially reflected in a regulation of another international organization. Still, it seems expedient to document a common approach to understanding of energy security among the EAEU member states in the regulations of this international organization.

Russian scientists study various aspects of legal regulation of energy security [10]. V.V. Romanova in her legal analysis of the works of

legal scientists on energy security notes that in determining the components of legal regulation of energy security, the necessity to ensure energy security at both the national and international levels, subject to the issues and challenges of the economic, social, political, technological, and environmental nature, is a common feature, and draws attention to that the differences in the legal studies conducted are due to the study object, subject, and objectives, which are relevant, inter alia, for the development of a particular law branch.[11]

V.V. Romanova notes reasonably that energy security is a key category in energy law, since its legal regulation is indicative of the observance of the main principles of energy law: the legal regulation of the balance of interests of participants of social (private-law and public-law) relations in the sphere of energy and, first of all, of the balance of interests of the energy resources suppliers and consumers, the legal regulation of protection of the rights and interests of participants of social relations in the sphere of energy, etc.[11]

It seems that a definition of the notion of national energy security should be elaborated taking into account the multidimensionality of the notion and the contemporary challenges in the sphere of energy, as well as documenting of the definition of this notion in the Russian Federation federal level legislation is required. However, there is one more problem: which of the existing federal laws could include this notion, taking into account its global nature and the applicability to the energy industry in general rather than to its particular branches? In our opinion, the problem consists in the lack

of a core federal law in Russia in the sphere of energy setting general principles and general rules in the sphere of energy applicable to all its branches.

V.V. Romanova in her work notes that the legal regulation of energy security represents an entirety of rules governing relations, inter alia, between the energy resources suppliers and consumers, setting the requirements for the energy resources quality and their price, the requirements to energy efficiency and energy saving, defining the legal treatment of energy systems and energy equipment, establishing the state authorities' powers and documenting the delimitation of their powers, regulating the legal status of energy companies, documenting the investment activity performance procedure, stipulating the procedure for protection of the social relations participants as related to the production, supply, transportation, and storage of energy resources and the construction and upgrading of energy facilities within the country and abroad.[11]

The following definition of energy security of the Russian Federation is suggested as an option: energy security means the condition of protection of the energy (energy resources) consumers, the society, and the state against the domestic and foreign threats of economic, political, anthropogenic, and other nature to a reliable, uninterrupted, environmentally benign, and affordable energy supply (the supply of electric power and heat energy and gas to consumers), as well as the condition of protection of the country's economy against the domestic and foreign threats to the competitiveness of, and the sustainable demand for, the energy resources. ■

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