

**Original article** 

# Selected aspects of ensuring energy security in the municipality

#### Klaudia Stachowiak

Faculty of National Security, War Studies University, Warsaw, Poland, e-mail: k.stachowiak@akademia.mil.pl

INFORMATION	ABSTRACT
INFORMATION Article history: Submited: 16 March 2020 Accepted: 16 July 2020 Published: 15 December 2021	In a modern democratic state, it is fully justified that local governments influ- ence on energy policy. The most serious reasons for municipalities to pursue their energy policy include implementing principles such as decentralization, subsidiarity, autonomy, and independence by local governments. It should be remembered that local governments are public authorities acting to meet the local communities' needs. In the Polish institutional conditions, local govern- ments may be jointly responsible for the national energy policy only if they can create local energy policy based on their energy potential. Bearing in mind the above, the relationship between the local energy policy and the national energy policy is different for each commune, depending on a given territorial unit's specific conditions. The specificity and quality of these relationships are also determined by the municipal authorities, which can approach the policies they create strategically or rely on improvisation. In the first case, local governments plan and implement specific activities that make up the energy policy process, while in the second case, they wait for the activity and involvement of government administration bodies.
	KEYWORDS 



© 2021 by Author(s). This is an open access article under the Creative Commons Attribution International License (CC BY). <u>http://creativecommons.org/licenses/by/4.0/</u>

# Introduction

Guaranteeing energy security to citizens, residents of individual self-government communities is a legal obligation of public authorities, implemented in practice by individual state administration levels, i.e., government and local government. Simultaneously, the scope of powers of individual public administration bodies has been legally specified, including the nature and purpose of actions taken in the area of energy security. Therefore, it will be essential to indicate and identify areas in which these tasks have been defined for individual units. In connection with the above, the article aims to analyze selected aspects of ensuring energy security in a municipality, which will allow showing whether the scope of energy security is correctly and adequately shaped and implemented by public authorities. The main research problem concerns how and with what methods, forms, and techniques energy security is ensured at the commune level? The article is based on the study of theoretical methods such as analysis, synthesis, comparison, and inference. The research scope covers the assessment of both legal and real aspects of energy security, which are executed by local government units. The local government units' activities in fulfilling and implementing their tasks regarding energy security will also be evaluated.

# **Energy security**

First, it is necessary to establish and define energy security to accurately determine the substantive areas in which local government units perform their tasks. The principles of shaping the energy policy of our state are set out in the Energy Act (PE) of April 10, 1997 [1], which contains regulations in the field of national energy security, the security of energy supply, and security of operation of the transmission system, and distribution systems.

Bearing in mind the aim of the article, the author will focus on two main concepts: energy security and security of supply. From a technical point of view, they cover a different goal, but they interpenetrate and depend on each other in practice. The legislator defines energy security as "the state of the economy that enables the coverage of the current and future consumers' demand for fuels and energy in a technically and economically justified manner while maintaining the environmental protection requirements" [1, Art. 3 (16)]. In this provision, the Act indicates two key elements. First, it estimates the state of energy security through the state of the economy in the short-term (current) and long-term perspective. Secondly, it determines the security from the presence of several factors: technical and economic possibilities, with the implementation of additional requirements related to environmental protection. The technical capacity is the technical condition of the energy transmission infrastructure to the end-user, including the management of the technical infrastructure, which the Energy Act defines as "a set of devices comprising the following subsystems: electricity, heat and power, gas, solid fuels, and liquid fuels". Given the critical issue, i.e., state security, "the most important are the electricity, gas, and solid and liquid fuels subsystems".

In turn, the economic factor relates to the scope of creating conditions ensuring the transparency of prices and costs of fuels and energy at a level acceptable to the recipient, including building competitive markets. An additional ecological aspect covers compliance of energy investments with the environment, thus minimizing the negative impact. The term energy security is much more precisely defined by the International Energy Agency (IEA), according to which it is "uninterrupted availability of energy sources at an affordable price" [2]. In this way, the Agency indicates the specific scope of tasks that public administration should undertake to implement energy security. Thus, it maintains a similar purpose to the definition in Article 3 of the Energy Act, assessing security in two-time limits – short and long term.

In the long-term, the state of energy security includes such a period of investment that ensures energy supplies following the demand resulting from economic development and environmental protection. The scope and size of investments in the entire energy sector throughout the country, from the state level, through voivodeships, poviats, to the municipality, provide consumers with the necessary energy supplies. It requires and determines the necessity of cooperation of local government units at individual levels. Under the tasks defined by the legislator, their role is to indicate and diagnose specific and detailed national, regional, and local needs. That requires the administrative units at all levels long-term planning of needs, including creating conditions for their implementation. After their definition and determination, units are obliged and responsible for taking specific, substantive actions to ensure and implement the determined energy needs. In the short term, energy security focuses on energy systems' ability to adequately respond to sudden changes in the so-called supply and demand in the market. It means the necessity to create mechanisms that, in practice, enable the prevention of unforeseen, sudden events that directly affect the time-limited availability of fuels or energy. In such conditions, constant cooperation between the various administration levels at the central and local government level and the relevant energy companies is also necessary. The cooperation should be directed mainly at "creating common mechanisms of crisis response" [3, p. 16-19]. Thus, both of the definitions mentioned above of energy security indicate two fundamental tasks of local government units: the planning obligation and the obligation to cooperate in crisis response. In turn, the second option of security, i.e., the security of supply, is treated in the subject literature slightly differently from the discussed energy aspect. This concept is best defined in ministerial documents of a strategic nature. According to the "Polish Energy Policy until 2030", security of supply is "ensuring stable supplies of fuels and energy at a level that guarantees meeting domestic needs and at prices acceptable to the economy and society, assuming the optimal use of domestic energy resources and by diversifying the sources and directions of supplies of crude oil, liquid and gas fuels" [4]. This document specifies ensuring supplies of energy resources for the country's needs as the primary strategic issue" [4]. The reference was only indirectly made to the "optimal use" of energy resources available on the domestic market. Unfortunately, the definition in question completely omits the "aspect of the security of supply within the country" [4], which is realized in practice by ensuring the resilience of energy systems, also ensuring the security of supply, through technical possibilities or mechanisms available and functioning in the country. The narrow scope of the concept of "security of supply" is defined in the Energy Act, indicating only the definition of "security of electricity supply" [1, Art. 3 (16a)], and thereby focuses only on electricity demand, excluding other strategic elements of energy policy. Under the provision, the security of electricity supply is "the ability of the power system to ensure the security of the electricity grid and to balance electricity supply with the demand for this energy" [1]. Otherwise, when defining "security of supply", the OECD points out that it is "the resilience of energy systems to exceptional and unpredictable events that threaten the physical integrity of energy flows, or that lead to continuous increases in energy prices regardless of economic fundamentals". It, therefore, focuses mainly on the specific effect of the lack of energy supply caused by "unforeseeable events" (for example, the inadequacy of energy prices and their disconnection from economic foundations, and the instability of systems ensuring supply) [5]. It can be concluded that the analyzed definition indicates the essential, vital role of individual levels of public administration in ensuring the security of supply.

Undoubtedly, the role, scope, and effectiveness of the analysis, including the assessment of the use of energy sources and fuels available in the area of a local government unit, i.e., a municipality, or in the near distance, including outside the country, is worth emphasizing in the context of ensuring energy security by the unit. Especially that communal-level units located at the Polish borders, neighboring with other countries, can efficiently guarantee supplies as part of cooperation at the local government level. The shared element of the discussed definitions of "energy security" and "security of supply" is the obligation to respond to crises by local government units, with the cooperation of all levels of government and local government administration and relevant energy companies.

# **Obligation to ensure energy security**

According to the catalog of entities obliged to ensure energy security, specified by the legislator, they should be arranged according to their competences and legally defined role. Hence, each entity, especially government and local government administration and energy sector companies, has strictly defined tasks and responsibilities within energy security. The relevant regulations of the national law indicate the group of entities and institutions which, in the current legal state, have a direct impact on the policy aimed at energy security, including real responsibility. These are the Council of Ministers, the minister responsible for energy, the president of the Energy Regulatory Office (URE), voivodes, and voivodeship and communal governments. It should be added that the poviat government only indirectly influence national energy security. It has competences covering spatial planning related to the implementation of all line investments (power lines, gas pipelines, infrastructure, including the transmission of crude oil and petroleum products) [6].

Based on Article 12 of the Energy Act, the legislator imposed on the minister in charge of energy the following catalog of obligations in the field of energy policy: "preparation of a draft energy policy and coordination of its implementation, supervision over the security of gas and electricity supply and supervision over the functioning of national energy systems, cooperation with voivodes and local governments in matters of planning and implementation of fuel and energy supply systems". Moreover, under Art. 15b of the Energy Act, the minister responsible for energy is also obliged to "develop a report on the results of monitoring the security of gaseous fuel supplies by June 30 of a given year. The minister responsible for energy issues also prepares a report on the results of monitoring the security of electricity supply every two years, by June 30 of a given year".

In turn, the tasks of the President of the Energy Regulatory Office (URE), which regulates the activities of energy enterprises in accordance with the Act and the state energy policy, aiming at balancing the interests of energy enterprises and fuel consumers, include "granting and revoking concessions, approving and controlling the application of tariffs for gaseous fuels, electricity, and heat, establishing control methods and taking actions to improve the efficiency of energy enterprises, monitoring the functioning of the gas and electricity system in the scope of conditions for connecting entities to network, completion of their supply, and repairs of the network, security of gas and electricity supply and fulfillment of their tasks by transmission and distribution system operators, imposing a fine on energy companies" [1, Art. 23].

In turn, voivodes and voivodeship and municipal governments perform the tasks imposed on them, specified in the relevant regulations of national law, as part of the cooperation of individual levels of administration with regard to planning aspects and implementation of fuel and energy supply systems.

The voivode also supervises the compliance of heat supply plans with the state energy policy and with applicable regulations. Both the aforementioned coordination and supervision concern only heat supply, i.e., one of the areas of energy policy that is of regional importance [1, Art. 17]. The legislator excluded the remaining areas, i.e., supply of gaseous fuels, electricity, petroleum products, including broadly understood energy efficiency measures, from the voivode's catalog of powers. It is worth adding that in the Self-Government Act [7], the legislator did not provide for any tasks regarding energy for the voivodeship government. The only exception are tasks related to ensuring public security [7], understood jointly as energy security and security of supply. Basically, the task is the wording of Art. 17 of the Energy Act, according to which "the voivodeship government participates in planning energy and fuel supplies in the voivodeship within the scope specified in Art. 19 paragraph 5 and examines the compliance of energy and fuel supply plans with the state energy policy" is consistent with Article 14. That is, it gives opinions on the draft assumptions in the scope resulting from the need to coordinate cooperation with other communes. At the same time, it should be stated that giving opinions on the draft is the weakest form of cooperation between public administration authorities. It does not entitle or provide any basis for designing with planning activities. It merely gives an "opportunity to indicate" specific solutions that are or may be important for ensuring energy security, understood as an element of cooperation between individual municipalities and compliance of municipal plans with the state energy policy. In my opinion, the voivodeship government should be able to initiate solutions ensuring energy security throughout the voivodeship. Besides, it covers the possibility of indicating to individual communes the need to coordinate their own plans and take specific actions in a broader territorial scope, i.e. within the voivodeship or within neighboring municipalities.

Therefore, it can be concluded that the municipality unit is directly responsible for pursuing the goal of its inhabitants' energy security. In order to achieve it, it must fulfill many detailed obligations aimed at the final state of security. The most vital duties include the issue of regular monitoring of the state of ensuring energy security and security of supplies (heat, electricity, gas fuel) in the commune. They provide a technical opportunity to create a legal framework in line with the expectations of the municipality inhabitants aimed at implementing energy security.

# The planning obligation of local government units

Public authorities implement energy security policy by imposing specific tasks. The first element are activities that boil down to tasks specified in the Act, imposed by the legislator, the priority objective of which is to ensure energy security. The second element includes the specific obligations of local government units for planning and managing specific tasks in their area. At this point, two legal acts which define in detail the first entity, i.e. the minister for energy and his/her role in planning should be mentioned. In Art. 7a paragraph 1 (1, 3 and 4) of the Act of September 4, 1997, on the activities of government administration [8], the legislator set out the minister's tasks: "creating the state energy policy and ensuring the national energy security, which includes the security of energy supply and the proper development of infrastructure energy and the functioning of energy systems, taking into account the principles of rational economy and the national energy security needs" [8]. The minister carries out the specified catalog of tasks under the aforementioned cooperation of all administration levels. In this case, it is about local structures of government administration, i.e. voivodes, with the constant participation of other local government units, especially communes. That is confirmed by Art. 12 of the Energy Act, according to which the minister's tasks in the field of energy policy comprise "cooperation with voivodes and local governments in matters of planning and implementation of fuel and energy supply systems" [1].

It should be emphasized that the creation of each planning document focused on energy security and its subsequent implementation requires all parties to this "cooperation process" to take account of the conditions that result from the specific needs of individual municipalities, poviats, and voivodeships [1, Art. 17-20]. Quite significant doubts, also mentioned in the literature [9], are raised by the participation of the voivode in the analyzed planning process, especially after the 1998 administration system reform. The advantage of cooperation between the minister for energy and the voivode results from the historical conditions in force before the reform. Especially that the original version of the Energy Act had entered into force even before the systemic reform establishing local government units on January 1, 1999 [10]. In the PE original version, the legislator actually indicated the voivode as obliged to "consider the conditions resulting from the needs and possibilities of individual areas of the state in the development of a planning document" [10], and thus in the implementation of the national energy security. After the aforementioned reform, the legislator transferred that

"planning task" to the appointed voivodeship government. The voivode's role was brought to the coordinator in the planning of heat supply in the voivodeship.

In the current legal status, the territorial area of the voivodeship is ignored in terms of the market that is focused on larger areas of possibilities of ensuring energy security. Thanks to specific voivodeship investments and cooperation in the regional area, the local government should be an inspiration for solutions ensuring real energy security in the entire voivodeship area. Undoubtedly, the commune plays a critical role among local government units responsible for planning activities in the field of energy security. In the catalog of the municipality's own tasks, the Act sets out "planning and organization of heat, electricity, and gas fuel supply" [1, Art. 18] in the entire municipality area. Thereby, the commune is obliged to fulfill the task under the adopted local spatial development plan. If it does not have it, it is based on the approved general directions of the commune's development contained in the so-called "Study of the conditions and directions of spatial development in a municipality" [11]. In addition, the commune carries out a specific task following the appropriate air protection program [12]. Article 7 (3) of the Act of March 8, 1990, on municipality government [13] specifies commune's own task aimed at "ensuring the supply of electricity, heat and gas" [13]. The provision specifies the municipal planning obligation to supply the local government community with fuels and energy. The catalog designated by the legislator, defines planning and implementation of plans in three stages. First, the development of the so-called "Project assumptions" to the procurement plan. The responsible entity is the municipality administrator (head, mayor, city president). The project is prepared for the entire area of the commune or its part. In accordance with the guidelines of the Energy Act, it should specify in detail "assessment of the current state and expected changes in the supply of heat, electricity, and gaseous fuels, projects rationalizing the use of heat, electricity, and gaseous fuels, the possibility of using the existing surplus and local electricity and heat resources generated in a renewable energy source and electricity produced in combination with heat generation, management of waste heat from industrial installations, and the scope of cooperation with other municipalities". Secondly, presenting it to the public for comments and objections to be raised by residents, individuals, or organizational units interested in providing supplies. The municipality council considers applications, objections, and comments submitted during the presentation of the project within 21 days from the day the assumptions are presented to the public. The presented "draft assumptions" is subject to opinion by the voivodeship government in terms of coordination of cooperation with other municipalities and compliance with the national energy policy. Only at this point, the third stage, i.e., the commune council's adoption the "assumptions" for the supply plan, may take place [1, Art. 19-20].

Then, the adopted assumptions must also be confronted with "plans of energy companies", which also have obligations specified by the legislator in this respect. "Energy companies dealing with the transmission or distribution of electricity prepare development plans for the area of their operation in terms of meeting the current and future electricity demand, taking account of the local spatial development plan or directions for the development of the commune specified in the study of the conditions and directions of spatial development of the commune" [1, Art. 16]. Pursuant to Article 16 paragraph 3, "development plans" cover, in particular, "the expected scope of electricity supply, projects in the field of modernization, expansion or construction of the network and possible new sources, electricity, including renewable sources, projects in the field of modernization, expansion or construction of sources of electric power systems, projects rationalizing energy consumption by consumers, the expected method of financing the investment, the expected

revenues necessary to implement the plans, the expected schedule of the investment implementation". Moreover, "an energy company engaged in the transmission or distribution of electricity is obliged to maintain the ability of equipment, installations and networks to supply electricity in a continuous and reliable manner, while maintaining the applicable quality requirements" [1, Art. 4 section 1]. Based on Article 9c paragraph 2 of the Act, the transmission system operator is responsible, among others, for "security of electricity supply by ensuring the safe operation of the power system and adequate transmission capacity of the transmission network, conducting the flow in the transmission network in an effective manner while maintaining the required reliability of energy supply and the quality of its supply, ensuring the long-term capability of the power system to meet justified needs in the field of energy transmission in domestic and cross-border trade, including the expansion of the transmission network, operation, maintenance, and repairs of the network, installation of devices, together with connections to other power systems, in a way that guarantees the reliable operation of the power system".

When the above-mentioned "plans of energy companies" do not ensure the implementation of the "municipal assumptions" referred to in Art. 19 paragraph 8 of the Energy Act, the head of the municipality, mayor, city president, etc., prepares a "draft supply plan" for heat, electricity, and gas fuels for the area of the commune or its part. Such a "draft supply plan" is prepared from "assumptions" adopted by the municipal council and should be consistent with it. The draft plan should have "proposals for the development and modernization of individual supply systems along with economic justification, a schedule for the fulfillment of tasks and the expected costs of realizing the proposed projects and their financing sources" [1, Art. 20]. After passing the administration path, the plan is adopted by the municipality council [See: 14].

It can be pointed out that the supply of fuels and energy to the commune is the municipality's own task defined by the legislator, but it is not obligatory as it does not impose a direct obligation on it to supply these fuels or energy. However, the commune is legally obliged to create conditions, i.e., prognostic framework for the supply in question, and ensure possible cooperation with specific energy companies to achieve energy security in its area. The commune's critical role in this respect is, first of all, long-term planning, taking into account all detailed data important from the point of view of energy security [15, p. 231-255]. The planning in question is permanent, spread over the years, and requires updating. The municipality manager (voit, mayor, city president) develops the above-described draft assumptions for the heat, electricity, and gas fuel supply plan for a period of at least 15 years. Such a plan requires updating every 3 years, due to the changing conditions, specific needs of residents, the technical condition of the transmission network, and their impact on the safety of the local community [1, Art. 19].

Quite an important group is detailed requirements that refer directly to the specific content of the "supply plan". First, such a plan should take into account both current and anticipated fuel and energy needs. Secondly, bearing in mind the aspect of the future, the plan is to list specific projects, their area, scope, and rationale for energy use. Thirdly, taking into account the specific location of the municipality and its energy base, it is necessary to indicate the possibilities of using local fuel and energy resources, regardless of their origin, arising either from the management of waste heat from industrial installations located in the commune or available renewable sources. Fourth, the legislator also mentioned possible cooperation and its scope with other communes, neighboring ones, which use and have their energy sources and resources.

The above detailed requirements and powers constitute the essential element of the municipality's prognostic analysis, which covers the present state of affairs, including a rational diagnosis and projection of the commune's future development perspective. At this point, attention should be paid to the extent of the autonomy enjoyed by the commune in the discussed issue. The municipality authorities have statutory autonomy in the use of local energy resources to ensure energy security at the local level. Ensuring security can also be achieved jointly, as part of cooperation between neighboring municipalities, by imposing and assessing the obligation to verify it.

Undoubtedly, the planning document, apart from its internal dimension, is also directed to energy companies that prepare adequate development plans and potential investors interested in local development and available infrastructure. While being substantially, substantively, and precisely prepared, it defines the potential of the needs of a specific municipality community. Both for energy companies and potential investors, the plan is a kind of guideline, the expected direction of development and modernization of the energy sector, in particular individual fuel and energy supply systems. In addition to the above, the plan should also include a detailed and realistic economic rationale for potential investments. That is an important issue due to the consequences or effects of local influences. Therefore, while preparing the planning document, the municipality authorities should make a good assessment of the investment needs that guarantee energy security for the local community at an economically reasonable price. In a regional energy system, local energy resources and their measurable advantages, such as renewable energy sources (OZE), are expected to increase the energy security of a given area. It is also essential to undertake all actions and intervention directions aimed at improving the energy efficiency of the infrastructure. The development of distributed energy based on renewable energy sources requires "adaptation to the new conditions of both the transmission and distribution grids, as well as the procedures for their operation or security" [16]. Moreover, residents of a given local community play an important role in this respect. Especially that, according to the law, the municipal authorities are obliged to submit the "supply plan" to public consultations, through which residents can define their comments or conclusions, including expectations regarding the manner of meeting energy needs.

The commune's assumptions to the plan of supplying individual energy carriers are to serve, above all, to compare the commune's needs with regard to the supply of these carriers with the development plans of energy enterprises. In the case when these enterprises do not ensure the fulfillment of the value of demand for individual energy utilities, the municipality must develop a draft plan for the supply of heat, electricity, and gaseous fuels. Such a plan allows achieving an energy order, which is directly in the interest of the local community and the economy. Thanks to it, it is possible to reconcile the strategic goals of the social and economic development of the commune and the development plans of energy enterprises. The possession and implementation of the plan creates conditions for the emergence of competitive, local energy markets, and the presence of external investors interested in the development of energy infrastructure in accordance with the needs of the commune. Among the most crucial benefits of adopting and implementing the energy policy by communes, the first one relates to the possibility of co-financing energy investments in a commune by energy companies. The possibilities of obtaining aid funds for energy investments, especially for ecology, are also expanding. Another benefit is the minimization of energy supply costs and the reduction of energy consumption. A well-prepared plan creates favorable conditions for planning development strategies by energy companies and allows defines economically justified conditions for connecting new consumers to the network.

However, due to the fact that most communes in Poland limit themselves only to developing assumptions for the plan, these benefits are not available to most of them. It should also be taken into account that the commune obtains a multi-layer inventory of the existing technical

base, mechanisms for monitoring and assessing the condition of infrastructure in terms of technology, economy, and environmental nuisance for the execution of works related to the development of an energy supply plan. Currently, a large part of Polish local governments does not have full knowledge about the quantity and quality of their infrastructure. The process of creating the plan is parallel to the process of identifying problems related to infrastructure and managing it and energy resources.

The knowledge acquired in this way enables specifying the forecasted needs and the possibilities of satisfying them, and indicates solutions that will lead to the improvement of the original state. Ultimately, it leads to a reduction in the cost of providing services to end users, improves energy security, and has a positive effect on the natural environment.

### Conclusions

Given the main objective, i.e., ensuring energy security, it is worth emphasizing that it requires local government units to cooperate and collaborate with the aim at long-term forecasting of specific trends in the local community's demand for fuels and energy. The scope of measures taken, including the direction of investments, should take into account regional energy resources that will satisfy the needs in a given area in a stable and economically justified manner. There is no doubt that the very nature of the task, including its importance, requires local government units to be more active, both in terms of their own, modern energy policy, and creating adequate mechanisms to respond to threats. As a result, attention is drawn to the need to create own energy and fuel supply plans, taking into account regional and interregional energy resources. The demand and effective energy management set new goals and tasks for local government units. It seems obvious that the increasing development of distributed energy generation, also renewable energy sources (OZE), requires the development of local and regional strategies [17, p. 348]. In addition, the growing demand of local communities increases the significance of strategic plans created by the commune authorities. Therefore, it appears indispensable to increase the active role of the inhabitants of municipalities in the entire process of creating the strategy, with the active participation on the part of the investor. Local government units, mainly communes, must increase their activity and operations in the creation of strategic planning solutions. The voivodeship government should also gain greater powers to create solutions and actively combine the existing energy potential of communes within wider regional initiatives.

Unfortunately, there is still no strategic, forward-looking regional and provincial cooperation. That shortcoming also applies to the limited opportunities for social dialogue and eliminating its openness in favor of only passive listening to the inhabitants. It is worth pointing to the need to rebuild administrative procedures (especially by raising standards, meeting deadlines, transparency of procedures, or the stability of rules). Certainly, many problems that limit the initiative of the local community must be sorted out. Currently, many energy investments implemented in municipalities (including wind farms, biogas plants) cause residents' protests regarding the negative impact on the environment and the residents' health and life. There is no openness in the dialogue with residents, no reliable explanation of legal procedures, or the establishment of substantive doubts or comments addressed to local authorities. In the field of energy investments, such as biogas plants, it is a mistake to eliminate an economic factor that local authorities never present.

Greater attention should be paid to increasing the active role of the commune and other local government units in initiating strategies and actions that ensure energy security, in cooperation

with enterprises, investors and residents. Strategic, proper energy planning can bring many benefits, including the achievement of the basic goals and tasks of an individual. First, these aimed at the development and modernization of transmission and distribution systems, thus ensuring the reliability and high quality of energy supplies to consumers. Secondly, satisfying the energy needs of the inhabitants, economically justified, i.e., at the lowest costs for the inhabitants, and high-quality transmission and distribution services. Thirdly, strategic planning has a positive effect on the economic development of the region, including the effective and rational use of local energy resources and possibly existing surpluses in the system. This aspect requires the cooperation of regions, the development of innovative technologies, including the consolidation of energy-related communities to solve problems in the field of energy security. It also seems justified to revise the current law in the context of the current state of energy security assessment carried out jointly between the local government and energy companies. The guaranteed by law cooperation of the commune with the enterprise should also specify binding deadlines for the development of communal planning documents. As part of this cooperation, the legislator should impose on energy companies the obligation to implement investments resulting from municipal "assumptions plans" based on the priority principle. When carrying out the priority task, enterprises should specify investment conditions to the commune (investment implementation conditions, work commencement and completion dates).

It is also related to the clarification of some tasks of the voivodeship government, in particular aimed at real and effective implementation of the energy policy in the region and increasing cooperation and responsibility for energy security. It would be appropriate to give the voivodeship governments supervisory powers over infrastructure investments in the field of energy security.

In addition, it would be vital to simplify the procedures related to the preparation for the implementation of energy investments, including considering its specific nature and location in the entire spatial planning process.

In conclusion, it should be emphasized that the development of democracy must be expressed in the increased competences of municipalities as well as greater responsibility of the local community. Even if there are relevant legal regulations in many areas, the initiative and commitment to solving local problems cannot be written down by any act. There is no doubt that municipalities will be forced to make difficult choices between social expectations and the possibility of their implementation. One can only expect them to be appropriate choices, in line with local needs and opportunities.

#### Acknowledgement

No acknowledgement and potential founding was reported by the author.

#### **Conflict of interests**

The author declared no conflict of interests.

#### Author contributions

The author contributed to the interpretation of results and writing of the paper. The author read and approved the final manuscript.

#### **Ethical statement**

The research complies with all national and international ethical requirements.

#### ORCID

Klaudia Stachowiak D https://orcid.org/0000-0002-0389-7437

### References

- 1. Obwieszczenie Marszałka Sejmu Rzeczypospolitej Polskiej z dnia 6 kwietnia 2020 r. w sprawie ogłoszenia jednolitego tekstu ustawy – Prawo energetyczne (Dz. U. z 2020 r., poz. 833 z późn. zm.).
- 2. *Electricity security*, [online]. International Energy Agency. Available at: https://www.iea.org/topics/ energy-security [Accessed: 5 March 2020].
- 3. Gołębiowska A, Zientarski P. Funkcjonowanie samorządu terytorialnego w Polsce uwarunkowania prawne i społeczne. Warszawa: Kancelaria Senatu; 2016.
- Ministerstwo Gospodarki. Polityka energetyczna Polski do 2030 r. z dnia 10 listopada 2009 r., [online]. Available at: https://www.gov.pl/web/aktywa-panstwowe/polityka-energetyczna-polski-do--2030-roku [Accessed: 4 March 20202].
- 5. Energy Supply Security. Emergency Response of IEA Countries 2014. Paris: International Energy Agency; 2014. DOI: 10.1787/9789264218420-en.
- 6. Obwieszczenie Marszałka Sejmu Rzeczypospolitej Polskiej z dnia 7 maja 2020 r. w sprawie ogłoszenia jednolitego tekstu ustawy o samorządzie powiatowym (Dz. U. z 2020 r., poz. 920).
- 7. Obwieszczenie Marszałka Sejmu Rzeczypospolitej Polskiej z dnia 22 lutego 2019 r. w sprawie ogłoszenia jednolitego tekstu ustawy o samorządzie województwa (Dz. U. 2019 r., poz. 512).
- Obwieszczenie Marszałka Sejmu Rzeczypospolitej Polskiej z dnia 12 kwietnia 2019 r. w sprawie ogłoszenia jednolitego tekstu ustawy o działach administracji rządowej (Dz. U. z 2019 r., poz. 945 z późn. zm.).
- 9. Szyrski M. *Energetyka lokalna. Studium administracyjnoprawne*. Warszawa: Wydawnictwo Naukowe Uniwersytetu Kardynała Stefana Wyszyńskiego; 2019.
- 10. Regulski J. Samorządna Polska. Warszawa: Rosner i Wspólnicy; 2005.
- 11. Obwieszczenie Marszałka Sejmu Rzeczypospolitej Polskiej z dnia 6 lutego 2020 r. w sprawie ogłoszenia jednolitego tekstu ustawy o planowaniu i zagospodarowaniu przestrzennym (Dz. U. 2020 r., poz. 293).
- 12. Obwieszczenie Marszałka Sejmu Rzeczypospolitej Polskiej z dnia 29 maja 2020 r. w sprawie ogłoszenia jednolitego tekstu ustawy – Prawo ochrony środowiska (Dz. U. 2020 r., poz. 1219).
- 13. Obwieszczenie Marszałka Sejmu Rzeczypospolitej Polskiej z dnia 22 lutego 2019 r. w sprawie ogłoszenia jednolitego tekstu ustawy o samorządzie gminnym (Dz. U. 2019 r., poz. 506).
- Wyrok z dnia 7 lutego 2002 r. w sprawie z odwołania Spółdzielni Mieszkaniowej Energetyk w Wejherowie przeciwko Prezesowi Urzędu Ochrony Konkurencji i Konsumentów (Sygn. akt. I CKN 1002/99) (Dz. Urz. UOKiK 2002.2.112).
- 15. Młynarkiewicz Ł. Zadania własne gminy oraz pozycja wójta w zakresie planowania energetycznego na obszarze gminy. In: Stec M, Małysa-Sulińska K (eds.). Pozycja ustrojowa organów wykonawczych jednostek samorządu terytorialnego. Warszawa: LEX a Wolters Kluwer Business; 2014.
- Popczyk J. Energetyka rozproszona. Od dominacji energetyki w gospodarce do zrównoważonego rozwoju, od paliw kopalnych do energii odnawialnej i efektywności energetycznej. Warszawa: Polski Klub Ekologiczny Okręg Mazowiecki; 2011.
- 17. Szyrski M. Zadania samorządu terytorialnego w przestrzeni energetyki odnawialnej potrzeba legislacyjnych zmian. In: Stec M, Płażek S (eds.). Charakter i konstrukcja zadań samorządu terytorialnego. Warszawa: Wolters Kluwer Polska; 2017.

#### **Biographical note**

Klaudia Stachowiak – doctor of social sciences, Assistant Professor at the Department of State Defense Preparations of the National Security Department of the Academy of War Studies University in Warsaw. She is a graduate of the Faculty of Journalism and Political Science at the University of Warsaw, a graduate of the Postgraduate National Security Studies at the

National Defense University in Warsaw. She completed doctoral studies at the National Defense University, where she defended her dissertation on the influence of the Russian Federation on the energy security of the European Union. The main area of her scientific interest concerns issues related to the national energy policy, energy security at the local government level, and the area of public security and local communities. She is the author of, among others Bezpieczeństwo publiczne wybranych krajów europejskich (Public safety of selected European countries). In: Lidwa W (ed.). Kształtowanie bezpieczeństwa publicznego w warunkach współczesnych zagrożeń (Shaping public safety in the conditions of contemporary threats). Warszawa: Wydawnictwo Akademii Sztuki Wojennej; 2019; Rola samorządu terytorialnego w tworzeniu bezpieczeństwa społecznego (The role of local government in creating social security). In: Lewandowski P, Bieniek J (eds.). Administracja porządku publicznego i bezpieczeństwo społeczności lokalnych (Administration of public order and security of local communities). Warszawa: Wydawnictwo Akademii Sztuki Wojennej; 2019; Bezpieczeństwo energetyczne Polski w relacjach z Rosją (Energy Security of Poland in relations with Russia). In: Banasik M, Rogozińska A (eds.). Bezpieczeństwo międzynarodowe w aspekcie niemilitarnych instrumentów oddziaływania Federacji Rosyjskiej (International security in the aspect of non-military instruments of influence of the Russian Federation). Warszawa: Difin; 2019; The influence of the Russian Federation on Poland's energy security. Safety & Defense. Scientific and Technical Journal. 2020;6(1).

STRESZCZENIE	We współczesnym państwie demokratycznym w pełni uzasadnione jest, że samorzą dy terytorialne również mają wpływ na politykę energetyczną. Do najpoważniejszych przesłanek, uzasadniających prowadzenie przez gminy własnej polityki energetycznej należy zaliczyć wcielanie przez samorządy terytorialne takich zasad, jak: decentrali zacja, subsydiarność, autonomia i samodzielność. Należy pamiętać, że samorządy te rytorialne są organami władzy publicznej, działającymi na rzecz zaspokojenia potrzek społeczności lokalnych. W polskich uwarunkowaniach instytucjonalnych, samorządy lokalne mogą współodpowiadać za politykę energetyczną na bazie własnego potencjału energetycznego. Mając na uwadze powyższe, związek między lokalną polityką ener getyczną a polityką energetyczną państwa jest dla każdej gminy inny, uzależniony od specyficznych warunków właściwych danej jednostce terytorialnej. O specyficce i jakości tych związków decydują również same władze gmin, które mogą podejść do kreowanej przez siebie polityki w sposób strategiczny lub oprzeć się na improwizacji W pierwszym z wymienionych przypadków, samorządy lokalne planują i realizują okre ślone czynności składające się na proces polityki energetycznej, natomiast w przypad ku drugim oczekują na aktywność i zaangażowanie organów administracji rządowej.

Wybrane aspekty zapewnienia bezpieczeństwa energetycznego w gminie

SŁOWA KLUCZOWE bezpieczeństwo energetyczne, gmina, planowanie, samorząd terytorialny

#### How to cite this paper

Stachowiak K. *Selected aspects of ensuring energy security in the municipality*. Scientific Journal of the Military University of Land Forces. 2021;53;4(202):690-701.

DOI: http://dx.doi.org/10.5604/01.3001.0015.6174



This work is licensed under the Creative Commons Attribution International License (CC BY). http://creativecommons.org/licenses/by/4.0/