

ENERGY EFFICIENCY AS A SECURITY FACTOR AND ITS IMPACT ON THE NATIONAL AND INTERNATIONAL SECURITY SYSTEM

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Abstract: *Our country is both a producer and a consumer of energy, with its own resources ensuring energy stability (coal, thermal power plants, hydropower potential, and other renewable energy sources) on one hand, and on the other hand, a country that cannot survive without importing energy resources we lack (oil and gas), making us energy-dependent, interconnected with the international energy system, and potentially vulnerable. By adhering to the new EU energy regulations (of which we are an associated member and towards full integration), accepted deadlines and conditions for transitioning to renewable energy sources (wind, solar, geothermal energy, biomass) while maintaining the country's energy balance by keeping classic ecologically unpopular and unacceptable energy sources (fuel oil, coal, etc.) and diversifying supply sources (South or Turkish Stream), our country is trying to maintain energy security and thus national security, as it lies on the path of conflicts and interests of major powers. Energy efficiency as part of energy security, and therefore the national security system, has a significant impact and is an important factor within our energy and national security. However, it is an area that has not been given enough importance due to its great influence on energy security and the economy of the state, and consequently on national security as a whole.*

Key words: Security, Energy, Energy efficiency, International relations, Economic interests

1. INTRODUCTION

Energy, as a strategic vital resource, as a daily need, and as a concern for a sustainable and stable future for the next generations, is one of the most important areas in the overall socio-political life and daily discourse. From the level of the individual and family household through local self-government and the national state to global institutions—the United Nations and other world organizations—and the planet as a whole, energy today is one of the key elements of stability and a prerequisite for the life of citizens, the functioning of the state, but also a constant source of effort and struggle for secure and sufficient procurement, controlled

and safe distribution, and long-term sustainable placement. As an indispensable factor in all spheres of social life and the functioning of the economy, the influence of energy is multidimensional, and it concerns the economy, ecology, geography, demography, security, standard, and quality of life. In general terms, energy has a great influence on the overall development and life of society on Earth, as well as on the future survival of our planet and the life of future generations on it. Knowing how the exploitation of fossil—non-renewable—energy sources (coal, oil, gas, uranium) is increasing due to the growth of the population and rapid economic development on one hand, and how this imposes a financial burden on governments due to the need for huge investments in renewable energy sources (water, wind, geothermal energy, biomass) on the other, to preserve our planet for future generations, it is clear how significant the role of energy efficiency and the rational use of energy is, with its impact on the economy being enormous. Therefore, in addition to energy, energy efficiency itself becomes a security issue. This is also the topic of this paper, which aims to highlight the importance and impact of energy efficiency on the national and international security system as a factor that should be an important element within the current, and especially future, national strategy of every country, including Serbia, given the geopolitical position of our country, transit routes, and energy corridors, our existing energy resources and capacities, and the needs and dependence on the missing energy.

2. THEORETICAL FRAMEWORK

2.1. Concept and Definition of Energy Security

The global nature of energy problems, the need for economic development, and the necessity to preserve energy resources and reduce pollution have led to the requirement for defining a specific mechanism to achieve energy security and stability. These are imperative in planning processes at all levels, from families and businesses, through local governments and regions, to nations and the international community as a whole. The European Union defines energy security as "the ability to meet future energy needs through the use of domestic resources in an economically justified manner or from external sources under adequate and acceptable conditions." On the other hand, the UNDP (United Nations Development Program) defines energy security as "*part of national security, which implies continuous energy supply in various forms, in sufficient quantities, and at an acceptable price (Radovanovic, 2019).*" "*Energy security is the ability of a country to ensure sufficient energy (by type, quantity, and quality), at the necessary place, at the required time, to meet the needs of the economy and society, without harming the environment, at an acceptable price and with adequate reserves.*" *Energy security today is defined at the national level, in accordance with each country's perception of the present and plans for the future (Radovanovic, 2019).*

In the strategic and doctrinal documents of the Russian Federation, energy security is emphasized as a vital component of national security, defined as the state of protection of the country, its citizens, society, and economy from all forms of dangers and threats to the energy sector. These threats are determined by external (geopolitical, macroeconomic, market) factors as well as the condition and functioning of the state energy sector. One of the main strategic goals of Russian national energy policy is identified as the sustainability, preservation, and protection of the energy sector from all forms of internal and external (economic, technological, and natural) threats and risks, along with the ability to minimize damage caused by various destabilizing factors (Milosavljevic, 2021).

The efforts of every country to achieve and maintain energy self-sufficiency, as well as to develop and preserve an energy system that is resilient to disruptions, become an imperative of energy policy in all countries striving to maintain national security as a whole. Therefore, the stability of the energy system, its vulnerability, resilience, and self-sufficiency should be

the fundamental parameters of energy security. Additionally, it is necessary to consider the fact that energy security is a dynamic category since different priorities can exist at different times within the same country. From this, the conclusion arises that *stability in the sphere of energy security is much more important than the measured quantity itself, as well as the economic and ecological costs that arise in connection with it* (Radovanovic, 2019).

There are four basic dimensions of energy security:

1. **Security of Supply** (priority is the security of supply from domestic sources and/or imports):

- a) Technical stability and resilience of the energy system
- b) Energy policy (regulation of energy production and imports)

2. **Foreign Policy** (relations with countries possessing energy resources, relations with other alliances)

3. **Security of Energy Infrastructure** (security of people, facilities, and equipment)

4. **Stability of Financial Markets** (trade in energy, stock exchanges) (Radovanovic, 2019).

Energy resources are one of the fundamental drivers and prerequisites for the development of humanity. Energy security, like all other measures and goals of energy policy as a whole, must align with sustainable development, a concept aimed at preserving the planet's resources to meet the needs of present generations without compromising the ability of future generations to meet those same needs.

The production and consumption of energy presents a particular challenge for the modern world on several levels. First and foremost, with the population growth, the need to secure sufficient energy supplies proportionally increases. Given the nature of population growth and the inability to halt this trend, the problem of securing energy for all human needs becomes constant and global (Radovanovic, 2019).

3. CHARACTERISTICS AND GOALS OF ENERGY EFFICIENCY

Sustainable development of the planet entails, among other things, gradually implementing certain measures that drastically change the current approach to energy production and consumption. This involves the development of new technologies, the use of new energy sources, the formulation and implementation of comprehensive saving measures, and the creation and enforcement of numerous legal frameworks, all with the aim of raising the level of energy efficiency and gradually halting the trend of uncontrolled energy consumption, which inevitably leads to the rapid and total depletion of existing energy resources. These measures are mandatory for all countries that adopt the concept of sustainable development and ratify numerous international agreements and protocols regulating this area (Radovanovic, 2019).

Every day, people use energy for transportation, cooking, heating, cooling, production, lighting, entertainment, and numerous other purposes. However, the way in which all this energy is used significantly affects our environment and life. Therefore, it is very important not only to save energy (for example, by turning off appliances when not in use) but also to use it in the most efficient way (by using energy-efficient appliances and technology). Taking this into account, we can distinguish between two categories: energy saving and energy efficiency. Energy saving refers to all the steps we take to avoid wasting energy—simple actions that everyone can adopt as a habit, such as turning off lights when leaving a room or

recycling plastic or aluminum packaging. On the other hand, energy efficiency refers to the use of technology that requires less energy to operate (Energy Portal of the Republic of Serbia, 2023). A good and widely known example is energy-saving LED bulbs, which consume less energy than traditional bulbs while providing the same amount of light.

Why is energy efficiency so important? Because, although we can never reduce energy losses to zero, various techniques and technologies, combined with an efficient approach and careful control, can ensure that energy is consumed in optimal quantities. When energy is used inefficiently, there is a clear difference between the amount of energy supplied and the amount of energy needed, which leads to wastage and consequently to financial losses. *Inefficient energy use is largely the result of poor design, inadequate operational performance of processes, poor maintenance, idle operation, or equipment running when not needed (such as lights left on or processes running at unnecessarily high temperatures)* (Energy Portal of the Republic of Serbia, 2023). The benefits of implementing energy efficiency measures include: **reduced energy dependence, reduced pollution and direct improvement of living conditions** (Energy Portal of the Republic of Serbia, 2023).

Political, economic, and environmental reasons, as well as the growing need for more intensive use of existing energy resources to support accelerated industrial development, require Serbia to develop new energy sources and energy efficiency. *To achieve energy stability and sustainable development, energy efficiency must be improved in both production and all sectors of consumption: industry, municipal energy, construction, and transport* (Kovacic, 2010). The sustainable development of Serbia depends on the willingness of each individual to accept the necessity of change, but also on the state's readiness to implement energy sector reforms and create conditions for improving energy efficiency in all sectors of consumption through the adoption of legislative regulations and incentive measures. Through the ongoing informational and communication campaign "Save Energy – Be Smart," the Energy Efficiency Agency encourages and motivates all social target groups to positively influence their work, social, and natural environment, and to learn how to use energy wisely. Additionally, *it is important to influence the change of beliefs, habits, and behavior of energy consumers, create new patterns and routines, and, given the previous socially irresponsible practice of "wasting" energy, introduce the concept of socially responsible behavior and rational attitudes toward energy and energy sources* (Kovacic, 2010).

On the other hand, the State Energy Efficiency Agency proposes the legal introduction or requirement for the appointment of energy managers in municipalities. In this sense, it should be defined that in every local government unit (city or municipality) with more than 30,000 inhabitants, the duties of an energy manager are established (Kovacic, 2010). These duties include: collecting data for the development of energy development plans for the local government unit; collecting and monitoring data on energy consumption in public facilities under the jurisdiction of the local government unit; proposing, preparing, and implementing measures to improve the energy efficiency of public facilities under the jurisdiction of the local government unit; and other tasks determined by law or local government acts (Kovacic, 2010).

It is possible to distinguish four different types of reasons for advocating energy efficiency, among which there are no inherent disagreements. Therefore, it would be perfectly possible for someone to rationally advocate all four types of reasons simultaneously (Damjanovic, 2010). The least radical reason for advocating energy efficiency, and at the same time the most frequently mentioned by public authorities, is the *achievement of financial savings*, where authorities invest in the implementation of policies to promote energy efficiency, and the return on this "investment" is, in fact, the money not spent on energy (Damjanovic, 2010). Private and business consumers save money in this way, the public sector as an energy consumer also

achieves savings, and electricity producers are able to meet demand without investing in the construction of additional production capacities. This is the conventional non-environmental reason for energy efficiency policies. The second reason for advocating the promotion of energy efficiency lies in the possibility of reducing the energy dependence of the economy, among other things, through the rational use of energy (Damjanovic, 2010). The third type of reason for this advocacy is the *need to avoid a dramatic increase in the greenhouse effect*. Fourth, *energy efficiency can also be viewed as part of a general shift in the global economy toward sustainability*. All resources, not just energy, should be used rationally, and all natural cycles, not just the carbon cycle, should be balanced. In this context, energy efficiency policies are highlighted as part of the overall comprehensive process of "greening" the global economy (Damjanovic, 2010).

4. ENERGY SECTOR AND ITS SIGNIFICANCE FOR NATIONAL SECURITY

4.1. Energy Development Strategy of the Republic of Serbia and Its Impact on National Security

The Energy Development Strategy of the Republic of Serbia for the period up to 2025, with projections up to 2030, proposes a path for market restructuring and technological modernization of the Serbian energy sector to better prepare for a period of increased demand for goods and services. A strategic approach to energy involves ensuring that processes in the economy and state, as well as in citizens' lives, occur with lower economic costs and higher levels of social and environmental sustainability—higher standards of living with reduced pollution and better nature protection. In this sense, the application of the Energy Law and the Energy Development Strategy of the Republic of Serbia should lead to the development of an appropriate energy policy. This policy, along with adequate economic and social policies and environmental protection policies, should guide towards a sustainable energy system, a more efficient economy, and greater social welfare, with sustainable balances of natural resources and the lowest possible levels of pollution (Energy Sector Development Strategy, 2015).

All analyses of key economic and technological changes indicate that energy has been and remains a driver and key factor of economic changes and the backbone of economic development over the past two and a half centuries. Global changes require expert and long-term consideration of their impacts at the national level and appropriate management of energy development. Today's world continues to witness strategic positioning by states, nations, and companies for access to remaining natural resources, especially mineral energy sources such as oil and gas, as well as technological competition in energy transformations, energy efficiency, and commercial use of renewable energy sources. *In the 20th century alone, the global population increased 3.7 times, while the demand for final energy grew more than 30 times. This means that, alongside the intense exponential growth of the world population, particularly in the latter half of the 20th century, energy consumption per capita grew even more markedly. Although the exponential trend of population growth was mitigated at the end of the century, energy consumption per capita continues to rise. In the final three decades of the 20th century, the global population grew at a rate of 1.6%, the world gross domestic product grew at a rate of 3%, while primary energy consumption increased at an average annual rate of 2.1% (Energy Sector Development Strategy, 2015).* This indicates that despite a reduction in energy intensity, primary energy consumption continues to grow faster than the population (Energy Sector Development Strategy, 2015).

Even in the countries that are technologically advancing the fastest and achieving the highest income per unit of energy used, thus becoming more energy efficient, energy production and consumption per capita are still increasing. *According to the International Energy Agency,*

primary energy consumption is expected to increase by 40% from 2005 to 2025. Therefore, it is essential to strategically plan and thoroughly analyze energy development from all aspects, including general development, technological-economic, social, environmental, and other aspects (Energy Sector Development Strategy, 2015).

The global development scenario assumes an economy based on the efficient use of relatively "clean" energy from various sources. According to all development scenarios, energy will still have the task of providing significant quantities of energy and energy carriers to the economy and society for a relatively long period, but with a trend towards reducing energy intensity, i.e., consumption per unit of monetary product. Another requirement for energy is to be cleaner, meaning that it should rely more on renewable energy sources and less on depleting resources. A third requirement is that energy production and consumption should have minimal negative impacts on the environment—on water, air, soil, and indirectly on the entire food chain, biodiversity, and human health. The fourth requirement concerns economic efficiency and energy markets. Energy is a commodity, and its trade and prices must have a market character. Supply and demand for energy are linked to its price, delivery conditions, and international flows. *Since the energy sector has significant external effects (costs or benefits for indirect participants who may not be immediate users or suppliers), a corrective mechanism for internalizing externalities (applying the "polluter pays" principle) is necessary for this market (Energy Sector Development Strategy, 2015).* This means that retail energy prices must include environmental protection costs and other external costs—through fees, taxes, fines, or other economic-financial instruments. *In the future energy sector, external costs, including transition costs, substitution, and technological adaptation to the use of other, generally more expensive energy carriers when depleting non-renewable conventional sources, must be included (Energy Sector Development Strategy, 2015).* Such requirements cannot be implemented without an appropriate legal framework, institutions, and bodies responsible for the realization of this concept. Energy-efficient and environmentally friendly behavior in the energy sector requires the non-selective application of laws and non-discriminatory practices. The energy-environmental culture and changes in the behavior of users, consumers, and energy producers are crucial, stemming from the dispersion of knowledge as a key development factor in today's economy. Energy development must also be socially acceptable, meaning that sudden changes in the energy market must not cause overly severe social consequences for the majority of the population. The opportunities provided by the dynamic development of energy should be used for the rational redistribution of costs and benefits at the state level. *Key positive social impacts of such energy development include employment, increased living standards, and improved human rights and access to public goods. New technological solutions, based on market incentives, should guarantee that a more efficient, cleaner, and more renewable energy sector will also be socially sustainable (Energy Sector Development Strategy, 2015).*

5. THE PLACE AND ROLE OF ENERGY EFFICIENCY WITHIN ENERGY SECURITY

The enactment of the Energy Efficiency Law and associated regulations in 2013 created the conditions for implementing an Energy Management System across all energy consumption sectors in the Republic of Serbia. *This law regulates the conditions and methods for the efficient use of energy and fuels in the sectors of energy production, transmission, distribution, and consumption; the policy of energy efficiency; the energy management system; the labeling of the energy efficiency levels of products affecting energy consumption; minimum energy efficiency requirements in the production, transmission, and distribution of electrical and thermal energy and the supply of natural gas; financing, incentive, and other measures in this area, as well as other issues of significance for the rights and obligations of individuals and*

legal entities related to the efficient use of energy (Law on Efficient Use of Energy, 2013). The Energy Efficiency Law further stipulates the main goals of energy efficiency in its second article:

- 1. Increasing energy supply security and its more efficient use;**
- 2. Enhancing economic competitiveness;**
- 3. Reducing the negative impacts of the energy sector on the environment;**
- 4. Encouraging responsible energy behavior based on the implementation of energy efficiency policies and measures in the sectors of energy production, transmission, distribution, and consumption (Law on Efficient Use of Energy, 2013).**

This law finds practical application primarily in public enterprises, particularly in Elektroprivreda Srbije (Electric Power Industry of Serbia), which, in addition to implementing energy efficiency measures, is also obligated to energy management and is required to annually prepare and submit a report on the achieved goals in primary energy savings to the Ministry of Energy. On the website of Elektroprivreda Srbije, *efforts to increase energy efficiency, reduce and properly manage waste, lower emissions, educate staff, and integrate these aspects into decision-making processes at the branch management level have been a long-standing practice, including meeting the requirements and standards of ISO 14001, which are incorporated into all development projects undertaken and prepared by EPS (Electric Power Industry of Serbia, 2022).*

The impact of energy efficiency on energy security and thereby on the national security of every country is significant. Due to poor planning, untimely responses, unprofessional, negligent, or deliberately induced behavior, there can be exceptionally severe consequences, including energy and economic crises. *Any slowing of economic growth, stagnation, economic crises, and economic collapse are deeply destabilizing and conflict-inducing factors for society (Milasinovic et al, 2012).* The natural reaction to such unpleasant conditions is an effort to avoid situations that produce them – more precisely, situations that are recognized as such, whether reasonably or unreasonably. A national security strategy should articulate this natural reaction into a set of measures to prevent such situations from arising or to mitigate their consequences (Kilibarda, 2010).

6. ENERGY CHALLENGES AS THREATS TO GLOBAL AND NATIONAL SECURITY

6.1. Conflicts among major powers and their interests in energy sources, flows, and control

Seneca once said *that nature is too small for all human greed.* This ancient and harsh truth is best exemplified today by the struggle of major powers and multinational companies for energy and other natural resources. Human needs grow from generation to generation while natural resources become increasingly scarce and unevenly distributed, leading to constant competition for control over these resources. *Competition for control, i.e., ownership of production and material resources, contributes to various social frustrations and tensions, creating favorable conditions for the emergence of diverse social conflicts (Milasinovic et al, 2012).* Therefore, any mention of natural resources as goods that directly or indirectly serve various human needs is accompanied by questions about the quantity of these goods and their distribution (Kilibarda et al, 2014).

The sensitivity of each country to a lack of energy resources (for any reason) is high and increasing. Modern exposure of energy systems to new threats (e.g., cyberattacks) has made energy security one of the most complex issues faced by states, governments, regions, and the world as a whole (Radovanovic, 2019). The uneven distribution of fossil fuel reserves has historically led and continues to lead to major geopolitical changes, crises, and armed conflicts on the global stage, making energy security a priority for all countries' development (Radovanovic, 2019).

Considering the energy dependence of developed countries and the uneven distribution of energy resources, the production and distribution of energy have become problems of particular international political and economic significance. Energy in all its forms has become a subject of international trade, numerous disputes, conditions, and military conflicts. Given the fact that global energy needs are constantly increasing, it is undeniable that energy will play an increasingly significant role in global economic and political changes. *The deficit of natural resources, as a limiting factor for the economic development of a state, has always been a determinant of its political aspirations, manifesting in various ways, from the open attempt to permanently control a territory through occupation or annexation—most clearly demonstrated during colonial conquests—to numerous modern sophisticated forms of indirect influence on the establishment and functioning of authority in territories under the formal sovereignty of other states (Kilibarda et al, 2014).* The example we have today with our southern province and with the entire state of Serbia best illustrates these sophisticated and less sophisticated, i.e., direct forms of influence by major powers. For instance, the opponents of the former construction and today the use of the "Balkan Stream" as well as the previously much larger and halted project "South Stream" were major powers outside our region who, due to their geopolitical aspirations, did not find these strategic energy projects favorable, despite their importance and benefits for the energy security of the entire Balkans, Serbia, and all its citizens.

7. CONCLUDING CONSIDERATIONS

Energy security, and thus its integral part, energy efficiency, has become an indispensable element of security and national policy for all modern states. The dynamism of changes we live in—geopolitical, economic, and climatic due to global warming—has given energy security the highest priority, equating it with food and water, economic stability, healthcare, and defense. The possession of energy, its continuous availability, and the possibility of sufficient use of energy resources at the national level have become a pressing need and a major challenge for all national governments and state companies involved in energy, representing an integral part of overall national security. Given the large total volume of production, transport, and consumption on an annual basis, it is clear that even small costs arising during production, insufficient utilization, transportation, or inadequate technology, or costs incurred from inefficient energy objects and boilers of end consumers, collectively result in enormous losses. Therefore, the importance of energy efficiency in all its applications—from quality resource analysis, market conditions, and trends, to proper and long-term development strategies, specific measures and activities, quality management, efficient organization of the energy system and all its components, and the application of the latest and most modern technology in the production, transportation, and distribution of energy—is immense. Energy efficiency directly impacts energy security and the energy balance of the system, and thus strongly influences the state's economy, and through strong economic fluctuations, the social national stability of a state. As we have seen and consider confirmed in this work, **economic efficiency becomes an indispensable and integral component of every national security strategy.** Our country, through relevant ministries, has begun active measures and support to improve energy efficiency both for economic entities and social

housing, and has adopted several measures and laws, including national security strategies, energy development strategies, strategies for transitioning to renewable energy sources, feed-in tariffs, support for green energy producers, the Energy Efficiency Law, etc. These are clear and significant steps and activities. On the other hand, due to the strong economic development of the country, foreign investment inflows, and increased consumption of all forms of energy on the electricity and gas networks, there is a growing need to accelerate this process further, allocate significant funds to stimulate the economy and citizens to become educated and energy-responsible. Stimulating consumers to invest in energy-efficient buildings, the latest energy-efficient appliances, and the transition to renewable energy sources leads to an inseparable symbiosis between citizens and the state, i.e., a form of integrating personal and national security. Just as with the rights to life, air, water, food, work, and freedom of expression, citizens are increasingly becoming aware of the need and right to energy—specifically, a continuous and sustainable "slice" of energy that will be available throughout their lives. This ensures that the quality of life, in terms of the amount, manner, and consumption of energy, will be at least equally available to future generations, without impacting the quality and substance of life for future generations in any aspect compared to the present ones. This is certainly one of the most challenging and significant tasks facing those involved in applied security in the field of energy and energy efficiency. It represents a major challenge that will require the best responses and appropriate concrete measures continuously and over the decades to come.

REFERENCES

- Damjanovic, D. (2010). Strategic Urban Marketing – Energy Efficiency as an Opportunity for Creating a New Brand for Local Communities. Rational Use of Energy in the Function of the Local Community – A Collection of Best Practices, Palgo Center Belgrade, pp. 29-30.
- Electric Power Industry of Serbia, <http://www.eps.rs/cir/panonske/Pages/Energetska-efikasnost-ZZS-BZR.aspx>, accessed on 15.10.2022.
- Energy Portal of the Republic of Serbia, Energy Efficiency, <https://energetskiportal.rs/energetska-efikasnost/>, accessed on 22.10.2023.
- Energy Sector Development Strategy of the Republic of Serbia until 2025 with Projections until 2030. (2015). Official Gazette of the RS, No. 101/15, 08.12.2015. Belgrade
- Kilibarda, Z. (2010). Geopolitical Foundations of the National Security Strategy, in Collection: Risk, Power, Protection – Introduction to Security Sciences, Cvetkovic, N., Vladimir (ed.), Faculty of Security and Official Gazette, Belgrade. p. 161.
- Kilibarda, Z., Mladenovic, M., Aizenhauer, W. (2014). Geopolitical Perspectives of the Contemporary World. Faculty of Security. Belgrade. p. 213.
- Kovacic, B. (2010). State-Level Activities Regarding Energy Efficiency and Energy Management in Cities and Municipalities in Serbia. Rational Use of Energy in the Function of the Local Community – A Collection of Best Practices. Palgo Center Belgrade p. 13.
- Law on Efficient Use of Energy (2013). Official Gazette of the RS, No. 25/13. Belgrade
- Milasinovic, R., Milasinovic, S., Putnik, R. (2012). Conflict Theories. Faculty of Security, Belgrade. p. 141.
- Milosavljevic, S. (2021). Russia and Peace, Russian Federation Security Strategy: Geopolitical, Energy, and Military Aspects. Akademska Misao. Belgrade. pp. 294-295.
- Radovanovic, T., M. (2019). Energy Security. Educons University. Sremska Kamenica. p. 10.