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# THE REFORM OF THE ENERGY SECTOR IN THE REPUBLIC OF MOLDOVA

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**Abstract:** In economies in transition, including the Republic of Moldova, the reform of the energy sector should be carried out as quickly as possible, since this is a prerequisite for enhancing the country's energy security, as well as for integrating the internal energy market with the European one.

It is obvious that one cannot imagine a modern, evolving economy without an efficient energy sector, that is capable of providing and sustaining with energy resources different sectors of the economy, alongside with areas related to social development.

The major current problems that the energy sector is facing today include: supply, network losses, inefficiencies of the energy market, environmental impact, poor sources of investments, thus, making the sector unsustainable; and this is largely due to absence of an adequate institutional framework. In addition, all mentioned above is aggravated by complexity and difficulty of the problem related to inclusion of our country into Energy Package IV, which envisions the reform of the sector applying standards of the European Union aimed at overcoming obstacles caused by the economic and financial crisis that we are going through.

Therefore, enhancement of the quality and security of the energy sector can only be achieved if restructured energy industries rest on a stable and sustainable financial foundation.

Through this research, the authors set the following objective: identification of problems and offering viable solutions regarding the reform of the energy sector of the country using best European practices.

**Key words:** reform, energy sector, energy resources, energy security, energy efficiency.

JEL Classification: M1, L9, O13.

### **Relevance of the topic**

In order to implement liberalization of the electricity and natural gas markets in the Republic of Moldova it is necessary to undertake in-depth restructuring of the energy sector. In this context, the reform of the energy sector of the Republic of Moldova as a candidate country for EU accession has to be linked to implementation of European directives and regulations, taking into consideration the

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need to harmonize policies of our country in the respective field with relevant policies of the European Union.

Due to this process, we consider it necessary to analyze in this article the entire complexity of the problems in the field in order to summarize certain solutions that are needed in order to reform the energy sector of the country.

As a result of the set forth above, we can deduce that the subject of the respective research reflects the value of the energy sector as an area of strategic importance, and this requires an in-depth scientific study, a fact that demonstrates the relevance of the topic.

#### Research methods

For the purpose of carrying out this study, the authors used different research methods. In order to provide for the theoretical support of the research, a number of scientific papers from the energy sector were reviewed, the study was made possible due to thorough examination of the specialized literature in the field of energy management. The research method was aimed at studying theoretical and applied materials related to methods of reforming the energy sector in the Republic of Moldova. It was possible to collect date due to utilization of a wide range of materials on the research topic, as well as professional literature.

The research methodology was mainly focused on approaches to documentation, comparative analysis, elaboration of solutions and on models for exploring the real situation and on forecasting events related to integrated planning of energy resources.

**Results of the research** will allow for making conclusions regarding strategic objectives that have to accompany energy sector reforms. The undertaken research is of applied nature, since it relates to an important strategic area, namely the energy sector of the Republic of Moldova.

### Introduction

In the vast majority of European countries, the energy sector is among the top three priorities in terms of national importance. This hierarchy is not the result of using subjective criteria, but is rather dictated by the real situation of dependence of the entire society on the energy sector.

It should also be emphasized that in all countries with developed or developing economies, for economic and social security consideration, there is a need to adapt and implement strategic national energy security programs.

In this context, a correct choice of strategic objectives is absolutely essential for the entire process of reforms. For this purpose, an attribute of possible objectives is the result of studying international, European best practices and own national experience.

### **Approach to the topic**

The energy sector includes a number of basic functional components, which are primary energy resources, transport infrastructure, as well as the infrastructure for distribution of energy resources.

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An assessment, even a brief one, can demonstrate the extent and complexity of problems that the energy sector in the Republic of Moldova is facing today.

The current relatively modest performance of the energy sector as a whole is justified, on the one hand, by the quality of the infrastructure that largely inherited from the old political regime and, on the other hand, by the way this sector has been developing after the Republic of Moldova gained its independence, taking into consideration the following:

- political interference in organizational management through appointment of politically affiliated persons to decision-making positions;
- a vast chain of intermediaries that are included in the operational logistics;
- huge differences between the existing culture and that specific to market economies in terms of legal, financial, managerial and technological education;
- monopolization of the sector;
- government interventions, which as a rule affect the reliability of the sector.

At present, a lot of reforms in the energy sector cannot be implemented for two important reasons: imperfection of the legislation and lack of political will. Energy sector reforms could also fail to produce the expected results if supply and procurement activities encourage corruption, which in its turn will distorts investment priorities of the sector.

A correct assessment of these factors and of the state of affairs resulting from the situation both domestically and in other countries, plus major economic and financial difficulties of the extensive crisis caused by the war in neighboring Ukraine, are essential for implementing extensive reforms in the energy sector of the country.

We believe, that *the main challenge of the reform* is to ensure affordability of prices for energy resources without compromising sustainability of supplier companies.

Legislative barriers and complex supplier switching procedures make it difficult and create uncertainty for end consumers in terms of exercising the right of eligibility with the purpose of identifying a more reasonable price for energy resources.

On the other hand, if prices are distorted, they can seriously affect competitiveness of energy companies, entailing dramatic effects for economic development, as well as for security of energy resources supply, given the fact of our country's dependence on their import.

Another challenge to reform, in our opinion, is related to the social impact of the restructuring, because of several shortcomings, namely:

- low efficiency of energy markets as a result of weak competition both horizontally between participants and vertically between resources;
- persistence of distorted prices influenced by social actions due to inadequate linkages of market mechanisms with social welfare systems;
- low efficiency of all social support schemes for energy resources, primarily in terms of focus and coverage, but also in terms of supporting final consumer energy efficiency programs.

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Therefore, difficulties with affordability of prices for energy resources are not the result of competitive markets for energy resources, but rather represent results of poorly designed and implemented strategies.

Solutions for improving the situation with affordability of energy resources should be based on enhancing the level of market competitiveness, rather than on "energy poverty", which yet further aggravates access for low-income individuals and legal entities to energy resources according to their needs. [Leca A., Musatescu V. 2010].

Opening energy markets to competition imposes massive pressure on suppliers in terms of reducing prices for purchase, transportation, balancing and, respectively, sales costs, provided that market mechanisms do not allow for manipulations and abuse of a dominant position. Market monitoring and surveillance tools should therefore be essential.

The authors of the present study consider that due to the specificity and complexity of the energy market, new solutions that should be implemented are as following:

- 1. *Correction of market failures* by liberalizing and opening up the energy market, eliminating administrative errors and promoting transparency.
- 2. **Prevention of abuse of market dominance** by implementing clear rules in the wholesale energy market.
- 3. **More transparent pricing rules.** More efficient mechanisms are required for setting prices and tariffs in the regulated market, in order to make it possible to benefit from all advantages of openness and complementarity of the energy market.
- 4. *Fighting corruption.* It is important to avoid having "tick" (parasite) enterprises in the supply chain, the ones that can distort the entire mechanism of energy supply.

All the failures related to the energy market in the Republic of Moldova were reported by the press, the main problems being lack of transparency and manipulations in favor of certain groups.

Many specialists note that, although there are many discussions going on about adopting solutions regarding the reform of the energy sector, in general, this issue mostly includes collection of statements of intent, without any ongoing political will to achieve the proposed objectives and, most importantly, without providing necessary financial resources and continuity. [Leca A., Musatescu V., 2008, Voronca M., Constantinescu T., Cruceru M., Fodi A. Marin A., Voronca S., 2008]. There were many unrealized commitments, there were huge differences between what was envisioned and the actual achievements.

In order for the reform of the energy sector to be implemented with maximum efficiency, it is necessary that the decisions that have to be taken, be aimed both at the side of production, transportation and supply, and at the side of consumption of energy resources. In addition, the following is necessary:

- to implement European rules on integrity and transparency of the wholesale energy market;
- to establish an effective monitoring mechanism for wholesale energy markets;
- to intensify cooperation at both national and international levels through establishing mechanisms for monitoring and holding liable for manipulations in energy markets;
- to regulate financing of the sector;

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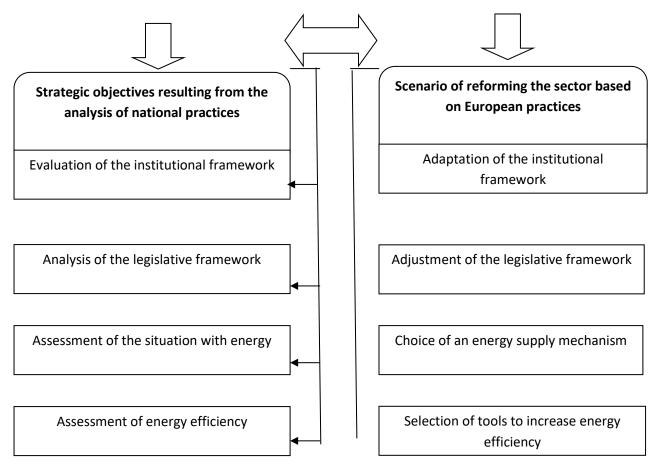
- to regulate utilization of renewable energy sources;
- to liberalize the situation with eligible final consumers;
- to open markets and minimize regulation of tariffs;
- to introduce modern advanced technologies;
- to enhance the level and quality of services;
- to reduce the environmental impact.

It is also important to analyze the concepts that guide the national strategy and determine the specificity of the long-term reform of the energy sector and its connection with the entire economic, social and cultural life of the country.

National practice for generating strategic objectives should be analyzed by means of the following:

- Evaluation of the institutional framework;
- Analysis of the legislative framework;
- Assessment of the situation with energy;
- Assessment of energy efficiency;
- Identification of problems and shortcomings;
- Choice of a Sector Reform scenario;
- Approval of the sector reform program.

Below, in *Figure 1* we will present the logical scheme for reforming the energy sector based on best European practices.



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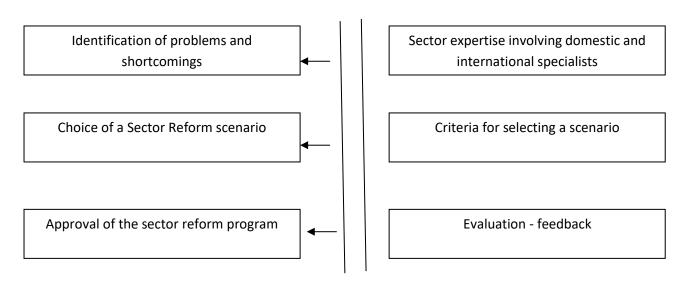


Figure 1. Energy sector reform scheme

Source: compiled by authors according to [Platon N., Vieru T. 2022, 2023].

Elaboration of a proprietary concept, as a common factor for the entire process of shaping a strategic energy sector reform becomes a compulsory action for ensuring appropriateness to the identified challenges and for justifying the submitted proposals.

#### **Conclusion**

In order to set strategic objectives that have to accompany the energy sector reforms, it is necessary to take into consideration the following:

- ✓ studying global energy trends, in particular, European energy policies;
- ✓ forecasts of the evolution of the demand for energy resources, including renewables;
- ✓ transposition and implementation of Energy Package IV that limits environmental pollution;
- ✓ conditionalities related to European and regional models;
- ✓ commitments taken by the state through ratified international treaties and conventions;
- ✓ policies for getting access to energy resource, forecasts of science and technologies in the field of energy environment.

### **Bibliography**

Leca, Aureliu, Mușatescu, Virgil. *Managementul energiei*. [Energy Management] București: Editura AGIR, 2008. 745 p., ISBN 978-973-720-190-4.

Leca, Aureliu, Mușatescu, Virgil. *Strategii și politici energie-mediu în România*. [Energy - environment related strategies and policies in Romania]. București: Editura AGIR, 2010. 547 p., ISBN 978-973-720-322-9.

PLATON, Nicolae, VIERU Tatiana. Durabilitatea și competitivitatea sectorului energetic al Republicii Moldova. [Sustainability and competitiveness of the energy sector of the Republic of Moldova]. In: scientific papers of the International Scientific Conference "Management strategies and policies in the modern economy", VII edition, as of June 09 - 10, 2022, Chisinau, ASEM, pp. 28-33, ISBN 978-9975-147-65-1, 0,46 HP.

PLATON, Nicolae, VIERU Tatiana. Planificarea integrată a resurselor energetice în cadrul unei societăți moderne. [Integrated planning of energy resources within the framework of a modern society.] In: Economica, 2022, no.1 (119), Asem, Chisinau, pp.83-92, ISSN 1810-9136, 0.50 c.a.

September 22nd-23th, 2023, Chisinau, Republic of Moldova

- PLATON, Nicolae, VIERU Tatiana. The specific risks of the energy market of the Republic of Moldova in times of crisis. In: International Scientific Conference" Competitiveness and innovation in the knowledge economy", XXVI<sup>th</sup> edition, September 23 24, 2022, Chisinau, ASEM, pages 66-73, ISBN 978-9975-3590-6-1, 0,53 c.a.
- PLATON, Nicolae, VIERU, Tatiana. *Strategii de asigurare a eficienței energetice. [Strategies for ensuring energy efficiency.]* In: scientific papers of the International Scientific Conference "Management Strategies and policies in the modern economy", VIII edition, as of March 24 25, 2023, Chisinau, ASEM, pp. 73-79, ISBN 978-9975-147-99-6, 0.49 HP.
- (EU) Regulation no. 1227/2011 of the European Parliament and of the Council as of 25 October 2011, On Wholesale Energy Market Integrity and Transparency, published in the Official Journal of the European Union L 326 as of 8 December 2011.
- Voronca Mihai-Marius, Constantinescu Tudor, Cruceru Mihai, Fodi Anca-Mihaela Marin Adrian, Voronca Simona-Louise. Finanțarea investițiilor în eficiența energetică. [Financing investments in energy efficiency.] București: Editura AGIR, 2008. 376 p., ISBN 973-720-200-0.