

THE IMPACT OF ALTERNATIVE ENERGY SOURCES ON CONSUMERS

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Abstract. *In the last 10 years there has been an unprecedented change in the way of energy resources consumption. The scenery of the energy sector has been modified by the unexpected increase of the exploitation of alternative energy sources, by attracting investments in the field of renewable energies and increasing the consumption capacities by the domestic consumers. The avalanche of changes was set off within the process of developing the unconventional resources and technologies for all forms of energy resources. This has contributed to a significant reduction of prices, to a decoupling of economic growth and including the greenhouse gas emissions. Within this process of the energy market development, the consumer is the one who can influence directly or indirectly, the legal nature of the energy consumption ratio obtained from alternative sources. From this point of view, the present scientific approach reflects the main aspects regarding the rights of consumers to have access to energy consumption obtained from renewable sources, the active role they can hold in the market, the ability to see the quality of the producer and their need to benefit of a special protection because they are in a condition of energy vulnerability.*

Keywords: *consumer, alternative sources, energy, vulnerability.*

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INTRODUCTION

Stimulated by public policies for protection of the environment and the development of alternative energy sources, the demand for the energy obtained from renewable sources is constantly increasing. This interest has become more and more actual, with the increase of economic worries, the worsening of climatic conditions, the lack of own energy resources and also because the consumers are more and more informed and they impose on the energy market their own requirements regarding the supply and purchase of the electricity.

In this regard, within the process of transforming the global energy markets, the European Commission and the Member States have set out to expand and diversify the alternative energy sources which will have a minimal impact on the environment and population health.

In this context, the reorganization of the energy market is accomplished through the implementation of a diversified set of normative acts at European and national level, by means of which there are regulated the actions of the energy producers and suppliers. At the same time, by issuing legal provisions, we are trying to ensure the organization and transformation of the energy system in such a way as to allow both producers and consumers - to fully benefit from the energy obtained from the alternative energy sources. In other words, it is important that these legal norms to be able to transform the energy system so as to enable network operators, producers and consumers - both domestic and industrial - to fully benefit from new technologies in the context of obtaining the energy from alternative sources. [3, p. 2]

The reasoning is confirmed by the fact that the organization and improvement of the energy market, an initiative that was put forward by the European Commission, had as an objective: the demonopolization of the energy market at the European level, the ensurance of free competition at the cross-border level and the maintainance of the completeness at global level. In this regard, the Commission has taken numerous actions, some of them being manifested through the implementation of the European strategies in the field of energy that were aimed at attracting the

investments needed to diversify alternative energy sources and streamline the process of energy use obtained from renewable sources for consumers. Therefore, taken together, the investments attraction and streamlining of the process of the energy use contributes to supporting the countries within the process of transforming the energy markets at global level.

The support is also needed in the context in which the European states, and not only, require an appropriate financial assistance and support because countries have different resources and distinctly implement policies regarding the steps to be taken for complying with their obligations in the context of the development of alternative energy sources and promoting the consumer's primary interest.

By supporting these actions, the European Union offers consumers the opportunity to participate more actively in the energy market by selecting the energy supplier, and not only. In this way, they contribute to gradual elimination of the regulated prices, including the inefficient support schemes applied in case of tariff increases that do not reflect effectively, the actual costs.

Being considered "the engines of the energy transaction", the consumers become active players in the market as they implement new technologies, such as smart networks, smart homes, highly competitive solar panels and battery storage solutions [2, p. 23]. This fact denotes the importance of the energy consumer by his ability and possibility to become the own producer, the obtained energy being directed towards his own consumption or multiple consumption.

MATERIAL AND METHOD

In this order of ideas, the promotion of consumers' interests in the energy market has been triggered with the adoption and implementation of the Directive 2009/28/EC of the European Parliament and the Council from April 23, 2009 on promoting the use of energy from renewable sources. This legal instrument aimed to protect the interests of the consumers who obtain the energy from renewable sources and their right to consume it without facing unjustified restrictions.

This Directive has given the consumer the right to:

- a) To have priority access and guaranteed access to the energy produced from renewable energy sources. This right is one of the most important because it contributes to the integration of renewable energy sources in the internal market of electricity.
- b) To produce by itself energy with the possibility of introducing any surplus into the network;
- c) To organize in renewable energy communities to produce, consume, store and sell respectively, if there is a surplus of energy;
- d) To stop the consumption and purchase of thermal energy from a centralized system, if it can achieve significantly better energy performance [4].

Therefore, by regulating the mentioned rights, the legislator comes to protect the consumer from the many problems and difficulties that countries face in the process of implementation and development of alternative energy sources. These problems and difficulties include:

- Dependence on the import of electricity;
- Limited or inefficient cooperation of electricity interconnections with neighboring countries;
- Advanced physical and moral wear of the energy complex's infrastructure;
- The low level that is registered in the field of energy efficiency;
- The low level of capitalization of renewable energy sources;
- Lack of financial resources for the development of the energy sector through the implementation of alternative energy sources, etc.

Without going away from the subject under consideration, it is important to understand what "consumer protection" means. Thus, this term refers to an assembly of regulations and actions meant to provide the unrestricted access of the consumers to qualitative products and services, accurate information regarding their essential characteristics, defending them against abusive practices and giving them the possibility to participate at the foundation of the decisions that directly concern their material interests [6, p. 43].

In this regard, providing a framework that would regulate and ensure the creation of an energy infrastructure through the efficient use of renewable energy sources and its integration into the network at the European and national level, is a way of support for all the producers who promote the the energy obtained from the alternative sources. The support of the producers also comes in the context in which they independently develop their own capacity to provide consumers with energy at much more affordable and competitive prices compared to the tariffs that are established for the energy obtained from the burning of fossil fuels.

In this regard, through the implementation of an appropriate legal framework, both there will be protected the consumers from illegal and monopolistic actions of the energy suppliers, and small industrial producers who can offer the domestic consumers new possibilities to have access to a more accessible energy source, less harmful to the environment and the population health. Despite of this fact, as it was mentioned before, most of the time, consumers are those who can become "prosumers" (producers - consumers) and can have the freedom to produce and consume their own energy. In case the consumers are unable to maintain this quality, they are in conditions of energy vulnerability or poverty and must be properly protected within this process of energy markets transformation.

Even though at present, the rights of energy consumers obtained from renewable sources are not fully regulated, we are content that the existing legal framework, European and national, regulates the ways through which the rights of the consumers can be protected. First of all, they can be directly protected, in an explicit manner, through judicial and paralegal actions. And secondly, indirectly, in an implicit manner, involving various activities of standardization, accreditation and certification [1, p. 9].

RESULTS AND DISCUSSIONS

Going from the legal framework in force, as well as from the fact that the development of renewable energy sources has a continuous ascendancy, the transition to a new level of obtaining the energy involves, besides problems and difficulties, numerous challenges. The biggest challenges are caused by the fact that the consumer who gets energy from alternative sources starts to become a competitor for the network operators. In this case, he directly influences their ability to form the energy surplus in the network.

Another challenge faced by the producers and consumers it is related to the secure flexibility of the network and the integration on the market of the energy surplus obtained as the result of projects implementation related to the development of renewable energy sources. Thus, from the initiative to obtain "green energy" meant for own consumption, the producers can obtain a surplus of energy that must be stored in the network. Faced with numerous impediments in this regard, the industrial producers often give up to store the energy and become consumers of their own energy. From this point of view, the European Commission, together with the relevant stakeholders, are preparing new legislative proposals to strengthen the position of the energy consumer - producer on the market, determining him to be more active and to develop the field itself.

Regarding the Republic of Moldova and the field of renewable energy sources, we can say that despite the fact that we have a small country, our country tries to face the challenges that are determined by the emergence and development of renewable energy sources, a subject that is widely discussed on international arena due to worsening of the weather conditions.

In this context, our state has taken exact actions, changed and improved its legal framework in order to promote the obtaining of the energy from renewable sources. These actions resulted in the adoption of the Law no.10 of 26.02.2016 regarding the promotion of the energy use from the renewable sources that comes to replace the Law no. 160 of July 12, 2007 concerning the renewable energy. The new legal instrument comes to meet the requirements imposed on the Republic of Moldova with the implementation of the Association Agreement with the European Union, which was signed on June 27, 2014. We can say that signing and ratifying the Association Agreement triggered the process of modernizing the energy sector at the national level because with the assistance and support of the European Union, the access to the energy market of local producers and consumers has become much more accessible and efficient.

In this regard, it is important to mention that Package III entitled "liberalization of energy markets" of this Agreement, played a crucial role in modernizing the energy sector in the Republic of Moldova, because by its implementation the aim was to dismantle the following vicious cycle that was instituted at national level:

- a) Lack of cross-border capacities with the energy market in the European Union;
- b) Lack of trading products to European standards;
- c) Energy inefficiency and dependence;
- d) Lack of interest from external investors and
- e) Lack of competition.

Also, within the process of modernizing the energy sector, a great attention was paid to the consumer. Thus, by implementing the Association Agreement with the European Union, it was intended that the consumer would benefit directly:

1. from the possibility to choose the electricity supplier from all the subjects that activate on common market of the Energy Community and offer services on the domestic market;
2. to change quickly and easily the supplier in case the last one does not satisfy him anymore due to the increase of the electricity costs;
3. to receive the information requested regarding the energy consumption;
4. to establish contractual relations with the supplier and to terminate the contract in case of any disagreements;
5. to obtain the energy performance certificates for the house in which he lives;
6. to resolve quickly and efficiently the disputes arising in connection with the energy supply, in case the consumer is not satisfied with the decision of the supplier regarding the amendment of at least one of the contractual clauses. In this context, the consumer can appeal to an independent institution to claim quickly the actions of the energy supplier, being exempted from any additional expenses.

As we can see, both at the European and national level, the consumer plays an active role in the energy market. From this point of view, the Republic of Moldova tries to implement the European energy market model, applying in practice the legal and technical requirements imposed by the obligations established by the Treaty on the European Atomic Energy Community (Euratom).

It is obvious that our country is making considerable efforts in this regard, but given the complexity of the target model of the European Union's internal electricity market and the capacity of the Member States to reach the European objective set in the field of renewable energy, the

Republic of Moldova does not have sufficient mechanisms for implementation and regulation. This situation brings enormous risks for our state because the stagnation of the development process takes place simply because national consumers cannot have full access to energy obtained from a renewable source, under the same conditions as European consumers. Also, this situation is created due to the fact that in the energy sector there are certain legal and technical barriers, which hinders the multilateral development of the field of renewable energy sources and, respectively, the attraction of investments.

CONCLUSIONS

The development of the energy sector by amplifying the alternative energy sources is an actual tendency for the states which are aware that the energy sustainability, completeness and security represents the future. Considering these aspects, the demand for renewable energy has become an increasingly important promotional factor in the context of the motivational, socio-economic and industrial development.

Another promoting factor for the demand of the energy obtained from renewable sources, also called "green energy" is the increase of prices. For this reason, the consumers are faced with a situation where they have to analyze different strategies of obtaining the energy and reducing the costs. The demand for renewable energy continues to grow up in the context of implementing the measures of streamlining the energy sector. These actions aim to protect the energy producers from renewable sources that have begun to strengthen their position in the energy market because they extend the consumer's access to an energy source at much lower, more competitive prices and less harmful to the environment.

Thus, promoting the interests of the consumers in the energy market has acquired a special connotation with their regulation by means of the Directive regarding the promotion of the energy use from the renewable sources and by some regulations specially adopted in this regard. The implementation of a new legal framework aimed at establishing a protection, especially for producers - consumers of the energy obtained from renewable sources.

However, the considerable efforts which are made by the European community and national authorities are insufficient as consumers' rights are not valorized. This is largely due to the lack of investments and the implementation of measures to ensure the functionality of the field of renewable energy sources and energy efficiency.

From this point of view we consider would be appropriate:

1. Liberalization of the internal market, in particular as regards transparency, differentiated prices and increased interconnection capacity to allow access to new innovative actors that will contribute to the efficiency and development of the energy sector.

2. Informing potential consumers about the possibility of accessing an energy source obtained from alternative sources, and of using it without restriction.

3. Strengthening institutional capacities in the field of energy efficiency and renewable energy sources.

4. The connection of the energy market of the Republic of Moldova to the requirements and standards imposed by the European Union regarding the development of alternative energy sources.

5. Attracting new investments in order to diversify the alternative energy sources, the suppliers, the modality and the transport modes of the obtained energy.

6. Scientific and institutional cooperation at European and international level with the aim of promoting energy efficiency, reducing gas emissions and enhancing a healthy way of life.

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