

ROMANIAN ENERGY MARKET EVOLUTION: TOWARDS A COMMON EUROPEAN MARKET

Delia Vasilica Rotaru*

Abstract: *This paper is offering a presentation of the energy market in Romania by analyzing its characteristics before and after the fall of communism. Becoming a member of the European Union brought many challenges for our country on different levels, the restructuring of the energy market being one of them. The final aim of the European Union is to create a common European energy market based on sustainable development where the consumers would benefit from quality services and lower prices. An insight on how the market is currently functioning in Romania is provided together with a presentation of the new challenges we have to face in reaching a fully liberalized energy market.*

Keywords: liberalization; energy market; European policy; regulation, challenge
JEL Classification: D47; L11; O25

INTRODUCTION

Many of the European Union members have put in practice the liberalization process of the energy market as a consequence of the Energy Strategy adopted by the Union. Though Romania has a free market since July 2007, it is considered that our country is still far behind other members due to the fact that the prices are still under the state's control and though the customers have the option to choose their suppliers this process is not an easy one. The liberalization of the energy market is desired because it is considered that this will bring many advantages for the consumers: setting the prices through the usual confrontation between supply and demand would translate into these being competitive and lower, more suppliers on the market would bring quality services and a raise of the investments on this market.

The energy market liberalization in Romania means, in the definition of the European Union, the relaxation of the legislation in the area, in order to permit the easy entrance of new suppliers and the separation of the generation, transport and supply activities. This separation has already been put in place. The consumer is entitled to choose freely his supplier. The main objective now is to liberalize the prices which are at the moment regulated by the government. The process of price liberalization has begun as well, a calendar for the liberalization being adopted by the government. All prices should be fully liberalized by the end of 2018. However,

*Delia Vasilica Rotaru is a PhD Student in Economics at the Faculty of Economics and Business Administration within Alexandru Ioan Cuza University of Iasi, Romania, email:rotaru.delia@yahoo.com.

at the moment, this translates into higher invoices for householders each January, July and October. In these conditions it is pretty clear that the consumers have their reasons doubt the benefits of this process. Nevertheless, the new laws adopted in the energy market area seem to be the next logical step forward that we committed to take when we signed the moment we decided to be part of this big European family. Although the government has postponed the price liberalization moment as long as it could, it seems that, at the moment, both the European Commission and the International Monetary Fund are putting pressure on our country so that we respect our commitment and ensure a competitive energy market. Though this is the way a market should normally function, where the actors are able to make decisions based on the available supply and demand, our rather low standard of living will be our biggest enemy and the initial price growth will affect us more or less. This will be the initial impact, the price increase will result in an effort for consumers to pay their bills or to decrease their consumption of electricity and gas. It takes time for the market to normalize and to bring competitive prices and quality services. However, the liberalization could bring investments in the generation plants, transportation and distribution which are now old and outdated and generate high operating costs. The investments could lead to lower production costs and this could translate into lower prices for the consumers.

1. ROMANIAN ENERGY MARKET BEFORE 2007

In order to understand the changes our energy industry needs to undertake, it is necessary a short analysis of the market history and evolution. In 1990, immediately after the fall of communism, the energy industry was under the state's monopoly exclusively. RENEL Company took over the Department of Electrical and Thermal Energy which was in place during communism. RENEL was controlling all sectors of the electricity industry – generation, transmission and distribution with the prices being dictated by the government.

A first step towards liberalization was made in 1998 when the dissolution of RENEL took place, the company being reorganized into The National Company of Electric Energy (known as CONEL). CONEL had three subsidiaries: Termoelectrica – producing thermal and electric energy, Hidroelectrica – for hydropower and Electrica – responsible for the distribution and supply of energy. Besides these, there are two more institutions that we need to mention: Nuclearelectrica – providing electricity produced in nuclear stations and Transelectrica which was responsible with the transport of electricity in Romania. With the preparation to join the

European Union, Romania took further action in privatizing the state owned companies as this was a mandatory step. Electrica was divided into another eight regional companies responsible with the distribution of electricity. Five of these companies were sold to private buyers such as EON, Enel and CEZ (Diaconu, Oprescu and Pitmann, 2007).

Further important steps for the liberalization process of the energy market in Romania worth mentioning are: the market opening to 10%, the establishment of OPCOM responsible with the administration of the energy market, the creation of a spot market (2000), the reorganization of Termoelectrica into separate legal entities for electricity generation (2002), market opening to 83.5%, introduction of green certificates and introduction of the centralized market for bilateral contracts (2005) (ANRE Report, 2013).

In figures, by the end of 2007, the energy market in Romania was represented by:

- 63 producers of energy, part of them regulated;
- 1 company responsible with the transmission, Transelectrica, state owned and regulated;
- 8 distribution network operators with only three of them state being owned;
- 104 commodity suppliers;
- 8.6 million consumers (Diaconu, Oprescu and Pitmann, 2007).

Regarding the gas market, at the beginning this was regulated by the government through the Romgaz company, which was reorganized in 2000 and split into Exprogaz responsible for gas exploitation, Depogaz responsible with storage, Transgaz responsible for transport and Distrigaz Nord together with Distrigaz Sud which were responsible for the distribution of natural gas to final consumers. In 2005 these two distribution companies were privatized and today there are 37 suppliers present on the Romanian market, most important being EON and GDF Suez.

As it results from the presentation above, Romania took action in liberalizing the energy market and meeting the conditions set by the European Union. However, the market is far from being fully free as there is still a regulated segment where the prices and tariffs are set by ANRE (National Authority for Energy Regulation).

2. ROMANIAN ENERGY MARKET AFTER 2007

Starting from the 1st of January 2007, Romania is part of the European Union. This has brought many challenges to our country as we needed to make lots of changes in order to

address all the requirements of this institution. Among others, we had to manage to organize a competitive energy market and to ensure the energy security politics, given the climate change we are currently facing, the continuous raise of the energy demand and the insecure future access to energy resources. Once we became an EU member we had to adopt the energy policy put in place by the European Union which supports the concept of sustainable development and the one of a common energy market for all the members.

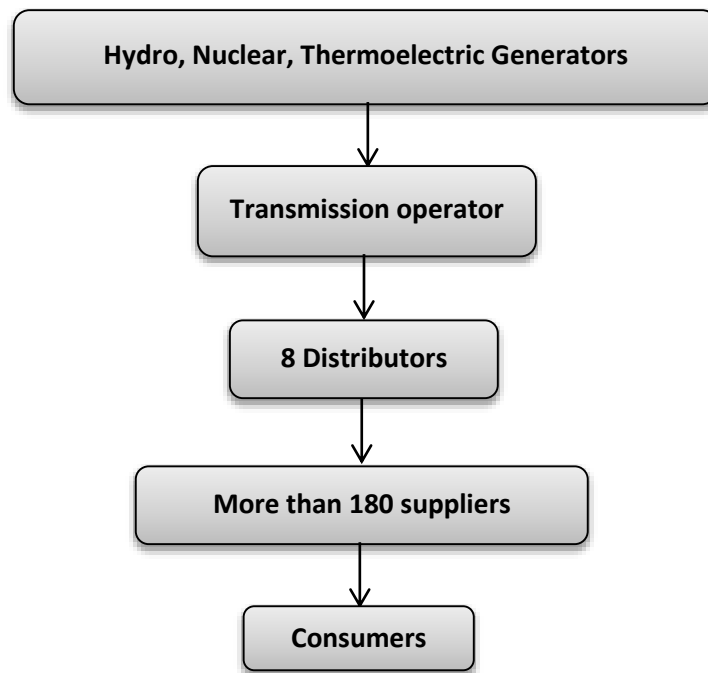
In general, the EU energy policy aims to ensure the functioning of energy markets under competitive circumstances, ensuring security of energy supply, promote energy efficiency and energy saving, support the development of renewable energy resources, reduce the greenhouse emissions and promote the interconnection of energy networks. The implementation of these measures will have a high impact on our country as there are necessary a wide range of changes in order to manage the restructuring and privatization of some companies, a introduction of new regulations and a review of the legislation in the area.

2.1. Current structure of the energy sector

Starting with 2007, the Romanian energy market is considered to be a deregulated one, where suppliers can freely join the market as long as they register with the National Authority for Energy Regulation (ANRE). Consumers are also able to choose between suppliers. However, there are still many restrictions in place that will be discussed further.

For a better understanding of the changes we need to implement on our energy market it is important to understand how the market is currently running. This is highlighted in the figure below:

Figure 1 - Chain of electricity delivery in Romania

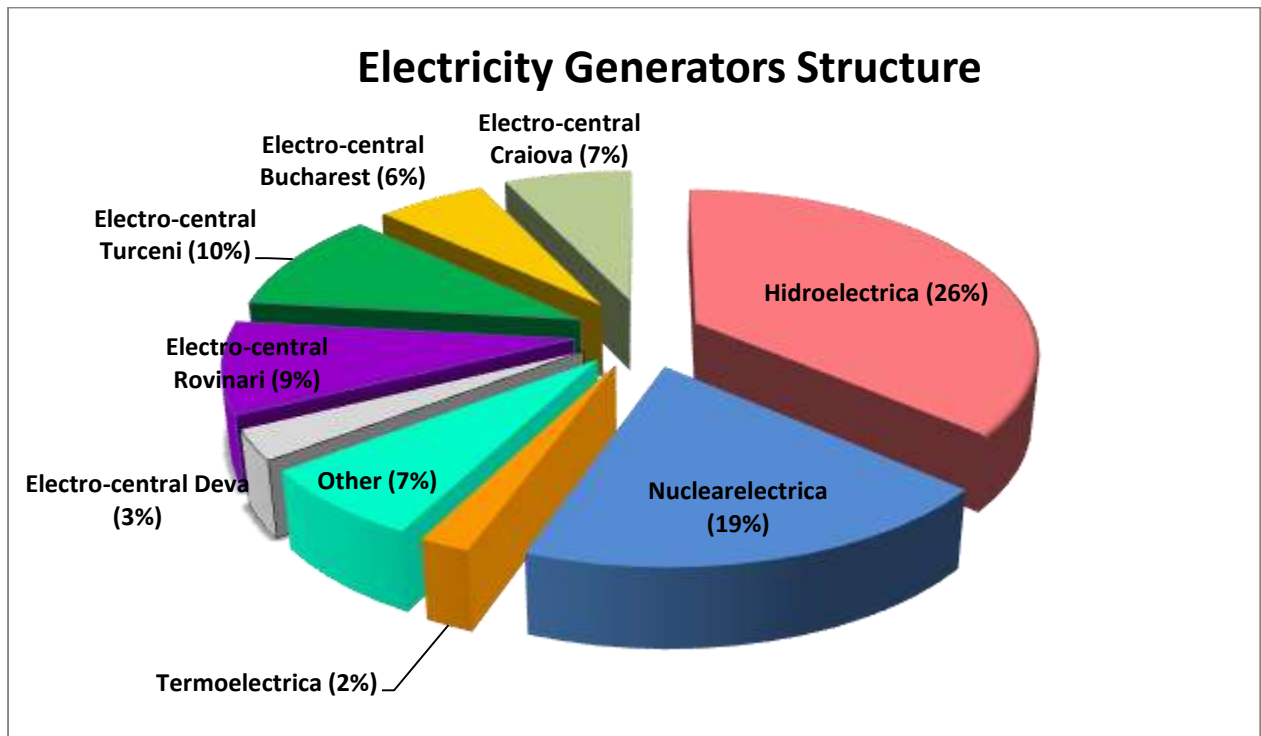


Source: KPMG Report & ANRE

As presented in the figure above the chain of delivery for the energy market starts with the generators. There are lots of generators registered at the moment with ANRE, but most of them are small scale generators, some of the using renewable resources. The most important generators on the energy market in Romania are Hidroelectrica, Nuclearelectrica, Energetic Complex Turceni, Energetic Complex Rovinari, Energetic Complex Craiova, Energetic, Electro centrals Bucharest, Electro centrals Deva, Electro centrals Galati and Termoelectrica (KPMG Report, 2012). These generators account for more than 89% of the energy necessary in Romania. The most important generator in Romania is Hidroelectrica. The company generates electricity using water resources and produces an annual estimated of 11.8 TWh. As they declare on their website, the company was included in the top of the most valuable 100 companies in Romania, occupying the 7th position.

The figure below presents the percentage of electricity generated by all of these generators in Romania.

Figure 2 - Electricity Generators Structure



Source: ANRE

The transmission operator in Romania is Transelectrica, created in 2000 and owned by the government. The International Monetary Fund is currently insisting in privatizing this company, among others, so Romania listed in 2012 15% of the shares on the market.

Regarding the distributors on the Romanian energy market, there are a number of 8 main operators that divided the market geographically: CEZ, Electrica Distribution Muntenia North, Enel Muntenia, Electrica Distribution Transylvania South, Electrica Distribution Transylvania North, EON Moldova Distribution, Enel Distribution Banat and Enel Distribution Dobrogea.

Between the most important suppliers operating on the energy market in Romania we mention: EON, CEZ, Enel, Electrica, Alpiq, GDF Suez, Biol, etc.

2.2. Energy market organization

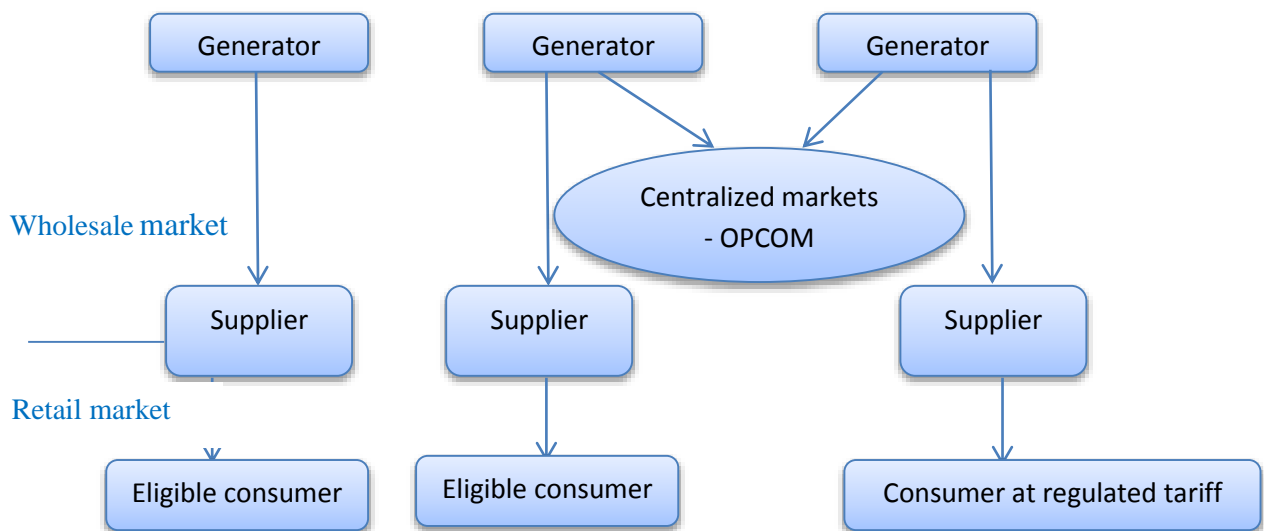
Nowadays, the energy market in Romania is divided into the wholesale and the retail market. On the **wholesale market** there are negotiated and closed bilateral contracts between

generators and suppliers. Once the new law on electricity and natural gas from 2012 was put in place, the wholesale market structure has been modified by introducing the obligation to organize all the transactions on the energy market transparently, publicly and nondiscriminatory. In these conditions, all the transactions between producers and suppliers must be closed on one of the centralized markets organized by the market operator – OPCOM. The company is responsible with the organization and administration of the centralized energy markets, organization and administration of the green certificates market, overview and supervision of the market.

As described by ANRE, the **retail market** is divided into a regulated market where utilities are supplied to consumers at a fixed tariff established by ANRE, for the consumers that did not exercised their right to choose their supplier and a competitive market where eligible consumers have negotiated their contracts.

The wholesale and retail markets are better represented by the following figure:

Figure 3 - Wholesale and retail energy markets



Source: http://www.energyarea.ro/romania_electricity_market.html

The government enacted a plan in 2012 to slowly liberalize the remained regulated market as well. This is happening because the fixed prices set by the government are most often not covering the production costs, bringing additional debts. Also, although the consumer is faced with the opportunity to choose their supplier, this is unlikely to occur because no other supplier can provide a lower price than the regulated one.

According to the liberalizing calendar published by ANRE, the electricity prices for industrial consumers are going to be deregulated by 1st of January 2014 and by 1st of January 2018 for households; the regulated gas prices are going to be eliminated as well by 1st of October 2014 for industrial consumers and by 1st of October 2018 for domestic consumers (ANRE, 2012). This will most likely translate into higher prices paid by the consumers.

3. FUTURE CHALLENGES

In order to meet the EU's requirements and to become part of the integrated energy market, Romania has to make changes in the energy policy as this has to be correlated with the ones across Europe. One of the major challenges for the European Union and its members refers to the way countries can provide competitive and clean energy given the climate change conditions and the continuous demand growth. The future vision of the European Union regarding the energy policy takes into consideration the access of consumers to energy resources at stable and affordable prices, sustainable development of production, transport and energy consumption, the safety of energy supply and the reduction of greenhouse emissions. EU has put in place an ambitious energy policy taking into consideration all energy sources from fossil fuels to nuclear and renewable resources in an attempt to trigger a new industrial revolution that will lead to an economy with low energy consumption and a limitation of the climate change (Energy 2020, 2011).

Under these conditions, besides the full market liberalization that still needs several adjustments in order to function properly, Romania has to address other issues as well, as detailed below:

- a) Increase of energy demand – as this is a worldwide reflected problem, Romania is confronting it as well. There is an estimated increase in demand of 2-3% per year as mentioned in the KPMG Report. In order to ensure the security of supply, Romania has to invest in renewable resources as it has a great potential in this area, on solar, wind, wave, and geothermal energy. It is also recommended the continuous improvement of the collaboration with other countries in this matter.
- b) Reducing greenhouse emissions – this issue needs to be addressed mainly by investing in low carbon technologies and by promoting the use of renewable energy resources.

- c) Promoting renewable resources – Romania already has in place a green certificate market offering documents which certify that an amount of 1MWh of electric energy is produced from renewable resources and suppliers are required to provide a specific quantity of electricity from renewable resources by buying these certificates. This needs to be further developed by encouraging small consumers to invest in renewable resources as well and to raise awareness on the importance of energy saving.
- d) Addressing the problem of outdated infrastructure that is generating high operating costs mostly by encouraging the investments in new infrastructure and technology.
- e) Improvement of market competitiveness by allowing permanently the access of participants without discrimination and by privatizing all the companies that are currently under the government's ownership.

As presented above, there are still lots of problems our country needs to address in order to meet the Energy 2020 project implemented by the European Union. These changes need time and high investments and cannot take place over night, but it is very important to follow our own strategy regarding the energy market policies.

CONCLUSIONS

The Romanian energy market is far from being fully liberalized. There are still lots of issues we need to address and processes we need to put in place for the market to function properly. We still have to privatize several companies that have an important role on the market, to invest in the modernization of the infrastructure in order to decrease the high transportation and distribution costs we are currently paying, to encourage the consumers to exercise their right to switch between suppliers so they can obtain a more advantageous offer and to avoid suppliers monopoly of the market.

One important step in the continuous development of the market is represented by the diversification of our energy sources. At the moment, the hydro resources are extremely important for our country as they account for most of the electricity produced in Romania and represent the cheapest electricity source. For this reason, the electricity coming from the hydro resources are mostly used to keep the regulated prices low and the company is often running on loss. It is important to introduce competition into the generation area as well so that consumers will benefit from competitive prices after the price liberalization that is currently taking place.

The biggest problem regarding the price liberalization the government is going to face is represented by the domestic consumers, which are vulnerable and are not going to be able to pay their utility invoices without the support of grants provided by the state. In this category fall almost 1.4 million consumers that have an income smaller than the minimum wage. At the moment, the state is subsidizing from 5% up to 95% of the value of their invoices. In the future, the government has assumed the responsibility to still protect those with disabilities, serious illnesses and elderly over 65 who live alone. The calendar of price liberalization was adopted in order to make the future increase of electricity and gas prices a little bit more bearable for domestic consumers.

Promoting the renewable resources is another challenge Romania has to face as part of the Europe 2020 project that refers to the way competitive, clean and secure energy can be provided. The clean environment that the European Union is currently promoting will translate into different taxes in order to support the development of this area. This will affect the consumers as well, as in the end they will be paying for these new technologies.

The energy market in Romania has a few advantages that we could exploit further, including the long tradition in the energy industry and the experience in electric and thermal electricity generation as well as in gas and oil exploitation. The national resources of primary energy, particularly coal, the reserves of oil and natural gas, the hydropower potential are allowing us to have a smaller dependency of energy imports than the European average. It is important to take advantage of these opportunities as the liberalization process is taking place.

REFERENCES

- Boita, C., Gheorghe, L. (2009) *Institute for Studies and Power Engineering*, accessed on October 2013 at <http://www.worldenergy.org/documents/congresspapers/boitac0904ys.pdf>
- Diaconu, O., Oprescu, G., Pitmann, R. (2007) *Electricity Reform in Romania*, Centre for Competition Policy, accessed on October 2013 at http://www.uea.ac.uk/polopoly_fs/1.104664!ccp08-11.pdf
- ****Benefits of an integrated European energy market*, (2013) Booz and Company Report, accessed on October 2013 at

http://ec.europa.eu/energy/infrastructure/studies/doc/20130902_energy_integration_benefits.pdf

****Energy 2020*, European Union, (2011) accessed online in October 2013 at http://ec.europa.eu/energy/publications/doc/2011_energy2020_en.pdf

****Overview of the Romanian Electricity Sector: Development and Investment Opportunities*, KPMG, March 2012, accessed online on October 2013 at http://www.kpmg.com/ro/en/issuesandinsights/articlespublications/factsheets/audit/pages/romanian_electricity_sector_development_opportunities.aspx

*** *Raport privind rezultatele monitorizarii pietei de energie electrica*, (2013) Autoritatea Nationala de Reglementare in domeniul Energiei, accesed on October 2013 at www.anre.ro/download.php?id=5973

****The Energy Structure in Romania. Present and Future*, Lificiu, P., (2012) ANRE Report, accessed on October 2013 at <http://www.econet-romania.com/files/documents/27April12/Vortrag%20ANRE.pdf>

***www.anre.ro

***<http://ec.europa.eu>

*** <http://www.electrica.ro/>

*** www.hidroelectrica.ro

*** www.opcom.ro