THE ROLE OF NORTHERN OLTENIA REGION INTO THE NATIONAL ENERGY MARKET

DORU CÎRNU,
Professor PhD, "CONSTANTIN BRÂNCUŞI", UNIVERSITY OF TG JIU
doru.cirnu@yahoo.com

VICTOR BANȚA,
Eng. ec. PhD, CONPET SA PLOIEȘTI – WEST DIVISION
victor_bantza@yahoo.com

Abstract
The paper starts from the reality that "energy" is the engine of growth and economic development of the country in general and especially North Oltenia region, bringing a constant real value that can be likened to the "flywheel" for storage and energy conservation. The region that we consider a model of the subject of research and I called it generic, "Northern Oltenia" has the best possible conditions in order to become a real and major regional power pole, providing most of energy in the national energy system in conditions of maximum security, which can be at the same time achieved an export surplus value generator. In these circumstances, local communities with a tradition of energetic in Romania, in Northern Oltenia Basin will receive the attention it deserves by promoting regional development projects of scale, and a retraining and professional reorientation of skilled human resource. Romanian energy industry has significant resource potential of all categories of expertise supported by the best specialists in the field, Romanian and foreign, as well as significant opportunities for the recovery of the national economy, making a significant contribution to strengthening Romania's position as a major regional pole among EU states.

Keywords: energy, energy market, region, development, security pol.

1. Introduction

The central idea of this communication is that "Energy is the real engine of economic growth [1]" in general in Romania, especially in North Oltenia region. Also, as shown in the development strategies designed for the three counties components (Gorj, Vâlcea and Mehedinti County), it follows that this region will be a major regional power pole being the most consistent parts supplier power delivered throughout the country**.**

The energy sector must play a vital role in any country's economic recovery. Based on the international context, marked by prolonged economic crisis and from the internal ground of political confrontations, note that the Romanian energy sector has great potential, great resources, expertise confirmed by experts in the field, and important opportunities for Romanian economic recovery, and may also contribute to strengthening the position of our country among the EU states.

2. The values

Achieving an energy strategy of a region requires defining a set of values that are based on strategic thinking in any field. We propose in this respect the following set of values [2]:

1. **Customer focus.** We introduced conceived citizen - client to treat every citizen as a customer - the customer of public administration. According to this principle, they should meet customer requirements and strive to exceed their expectations.
2. **Leadership.** Leaders lay down objectives and organizational policy. They must create and maintain the internal environment is required for all staff employed to be able to become fully involved in achieving the organization's objectives by applying its policy. Leadership should be involved in management and to be supported by all decision makers because only in this way, all strategic concepts can be implemented and. According to this principle, the Act of appointing of leaders, should comply with the principle of moral integrity, competence, but also to define the status of "leader" existing.
3. **Performance and well-trained human resources professional.** Is the essence of an organization's human resource and complete involvement in achieving the objectives set, allowing their skills and knowledge to be used to benefit the organization. Training programs should not miss either during construction or during strategy implementation. Process-based approach a desired outcome becomes effective when activities and related resources are managed as a process. Any set of activities that use the resources to process and transform inputs into outputs is a process. "In order for an organization to function effectively, it must lead

the activities and resources of the processes, to identify and to manage processes and relations between them. Identification and management of processes and interactions between them are process-based approach" [3].

4. **The management system approach.** Identifying, understanding and managing interrelated processes as a system of interrelated, contribute to enhancing the efficiency and effectiveness of the Organization in achieving its goals.
5. **The approach based on facts in decision-making.** Effective and efficient Decisions are based on analysis of data and information. Under this principle, the facts and extrapolating their past, will constitute the basic elements of the decision-making process. In addition to this aspect, participatory democracy constitutes an element of brainstorming in decision-making.
6. **Continuous improvement of the performance of the Organization**. Regardless of the type, size and scope of activity, should be a permanent objective of the. According to this principle, the organization develops continuously, on the basis of constant concern to all its members for finding such so-called up-grade solutions.
7. **Mutually beneficial relationships with suppliers.** An organization and its suppliers are in a relationship of interdependence, and if this relationship is mutually beneficial, then it increases the ability to create value.
8. **Teamwork and total commitment in the workplace.** Teamwork is the key to success in any activity. The idea of force is "we work together. When one of us succeeds, we all, and when one fails, the failure belongs to all. "Teamwork Features related to motivation and self-motivation and are as follows:
    - **a.** ability and willingness to work collaboratively;
    - **b.** ability to take part of a team
    - **c.** supporting team efforts to achieve common goals;
    - **d.** Active contribution to building team spirit.

3. Causality – favourability

The region possesses favourable conditions but not missing any critical issues.

Seeking the cause-effect and correlating causality with triad, subject-object system, we reveal in the Centre of this system, as the main convergent problem of all other existing issues and identified in the field of energy in the region, we find that failure to comply with the European Energy Charter is the main reason that causes harmful effects in this area economically very important, the energy is. We present below some aspects regarding the definition and observance of the "Energy Charter".

3.1 The Treaty and the Energy Charter Protocol

Commission decision 98/181/EC of the Council and the Commission of 23 September 1997 establishes the conclusion by the European Communities of the Energy Charter Treaty and the Energy Charter Protocol on energy efficiency and related environmental aspects. Among the terms of the Treaty are: investment, trade in energy materials and products, energy transit and energy products and settlement of disputes.

In terms of investment, "the Contracting Parties shall encourage and create stability conditions, and transparent to foreign investors and to apply the principle of most-favoured-nation or treatment provided to their investors, according to the most favourable regime." [4]

From the point of view of the trade in energy materials and products between Contracting Parties shall apply the rules of the General Agreement on tariffs and trade (General Agreement for Tariffs and Trade, GATT). According to this principle, all parties to the Treaty are obliged to apply the GATT rules in the case of trade in energy products.

As regards the transit, the necessary steps for an easy transit of energy materials and products shall be taken by each Contracting Party pursuant to the freedom of movement and without distinction as regards the origin, destination or ownership of such materials and products, and not discriminate on price fixing and without the imposition of any fees or unjustified restrictions.

"In the case of a dispute relating to the conditions of transit, it is forbidden to interrupt or reduce the existing flow of energy materials and products prior to the conclusion of the dispute resolution procedures laid down for such cases. On the other hand, the Treaty lays down specific procedures for settling disputes between States and between private investors and the State in which the investment was made. If there is a dispute between a private investor and the State, private investor may have recourse to international arbitration for dispute. If there is any dispute between States then can constitute a Court of ad hoc arbitration unless a settlement is reached on the diplomatic path. The resolutions laid down by these mechanisms have a compulsory legal value. "[4]

In other news, the treaty contains provisions concerning the taxation, environment, competition, transparency and sovereignty as follows:

With regard to competition, it is envisaged that each Contracting Party shall take measures to combat market distortions and barriers to competition in the energy sector. To this end, each State devise a legislative environment which contains regulations to deal with anti-competitive attitudes of economic activities in the energy sector.

Also, for the correct operation of the investment programs, each Contracting Party shall ensure a real transparency. To this end, it is by each Contracting Party for information offices the requests for information on laws,

regulations, regulations, court decisions and administrative decisions by universally applicable for materials and energy products, they can be visible and easily accessed.

Sovereignty, is another requirement of the Energy Charter Treaty. According to this principle, each Contracting Party must be sovereign over its energy resources. Also, the rules of international law clearly specifies that each State should have the right to decide, both with respect to the exploration and exploitation, with regard to the geographical areas from its territory aimed at energy resources.

The exploration and exploitation of resources has led to a continued deterioration of the environment factors in relation to this aspect of the environment, has been integrated into the Treaty the principle that "the polluter pays". For compliance with this principle is necessary to promote a way of formation of prices based on the market, but which reflect the environmental costs required. Contracting Parties are required to reduce any harmful environmental impact caused by all the operations in the energy sector from inside or outside the territory, in compliance with the security rules.

Balanced taxation is another requirement of the Treaty in that it does not have created new tax obligations or duties, and direct taxation must be governed by the national legislation of each country or the applicable bilateral conventions. State-owned enterprises and/or other privileged entities to whom a contracting part has granted exclusive or special privileges must be obliged to comply with the obligations incumbent on the contracting part.

Preferential treatment is another clause provided for in the Treaty, as a protection clause to maintain preferential treatment arising from the treaties establishing the European Communities.

With the signing of the Charter, was completed and the Energy Charter protocol on energy efficiency and related environmental aspects.

Energy Charter Protocol on energy efficiency and for environmental matters.

It was adopted as a requirement, and provision of the Treaty, in order to achieve the objectives of and compliance with the principles of the Charter. [5]

The objectives of the Protocol are:

- development of energy efficiency policies promotion compatible with sustainable development;
- creation of conditions that to encourage producers and consumers to use energy in the most economical, efficient and environmentally friendly way;
- encouraging cooperation in the field of energy efficiency.

So the Energy Charter Treaty and the Energy Charter Protocol on energy efficiency and related environmental aspects entered into force on 16 April 1998

3.2. The present situation

The Treaty on the European Energy Charter, as set out in Commission decision 98/181/EC of the Council and the Commission of 23 September 1997 on the conclusion by the European Communities of the Energy Charter Treaty and the Energy Charter Protocol on energy efficiency and related environmental aspects "[6], establishes a legal framework for international co-operation between the Member States of the European Union and other industrialised countries. The purpose of this Treaty is, on the one hand to develop the energy potential of the countries of Central and Eastern Europe and, on the other hand, to ensure the energy security of the European Union as a whole.

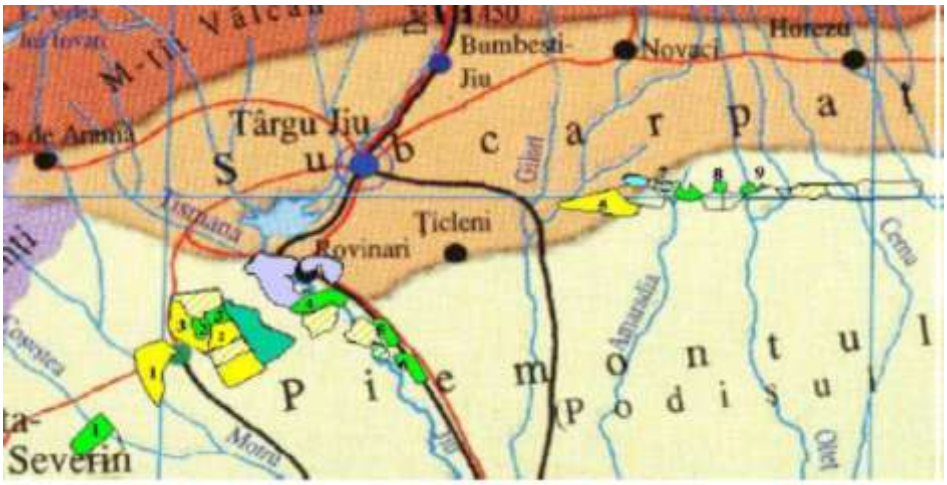
Although since 2003 Romania has drafted "roadmap for power sector", and after the integration of Romania into the European Union, in place to align the principles laid down in the European Energy Charter "," it appears that all counties in Romania, generating energy, it removes from the principles set out in the energy field. Although "the Romanian energy strategy for 2007-2020 have been set out directions for action in the field of energy in accordance with membership of the European Union, starting in 2009, the European Commission launched against Romania infringement procedures for failure to comply with the Community acquis concerning the internal market in electricity and natural gas.

3.3. Potential energy resources

Counties of Gorj, Vâlcea and Mehedinți with a wide variety of primary energy sources: oil, natural gas, coal and rich potential of renewable resources, arranged geographically under the map in Figure 1.

Crude oil reserves were depleted, so that the level of reserves and exploitable is only nine million tonnes. As regards the current reserves of natural gas, exploitable only in Gorj County are estimated at about thirty billion cubic meters, taking into account the last deposit recently discovered gas in the perimeter of the Fireflies - Hurezani Gorj County, the largest in Europe.

Fig. 1 Resources of lignite coal basin of Gorj are estimated at 1.190 million tons, of which 345 million tonnes of exploitable.



The theoretical potential of renewable energy resources is presented in table 1.

Table 1

The potential of renewable energy resources [7]

Source of energy	Annual potential	Application
Solar energy	60 PJ, 1.2 TWh	Thermal and electric energy
Wind energy	23 TWh	Electric energy
Hydro energy	40 TWh	Electric energy
Biomass and biogas	318 PJ	Thermal and electric energy
Geothermal energy	7 PJ	Electric energy

Source: ICEMENERG

Because of a lack of technologies, renewable resource potential is only partially sub-loan at this time. However, much of the electricity in those three counties is produced from renewable sources, mostly from large hydropower capacity. For these reasons, the economic potential of exploitable, must be reassessed annually, due to rapidly evolving technologies, decreasing costs, in order to be able to quickly correlate with the production of energy from other classical sources of energy.

As analytical methods proposed energy strategy we used two instruments classic problem tree and SWOT analysis.

4. SWOT Analysis

4.1 Strong points

- Romania has one of the lowest degree of dependency of the European Union, States in relation to the import of energy resources;
- lignite of Oltenia is a resource of the Romanian energy sector;
- lignite mining activity taking place within the perimeters of the three counties: Mehedinți, Gorj and Vâlcea;
- modern and sufficient technical equipment with extraction machines;
- the handles in the notoriously difficult perimeters of Oltenia, the lignite reserves are a total of 719 million tonnes of lignite energy, of which:-82% in Gorj, Mehedinti-10%, in Vâlcea-8%;
- Degree of assurance of lignite energy resources is at least 50 years old; the electricity produced on the basis of lignite is about. 1/3 of the energy in the shopping cart total national production of electricity.

4.2 Weak points

- High costs of production because of the means of production of energy;
- Wear and tear of more than 70% of the energy production equipment;
- The average time function exceeded most of the equipment;
- The transfer of energy from producers to consumers is made with large energy losses;
- Systems of centralized heat supply, outdated and unprofitable;
- Failure to comply with environmental legislation with regard to the emission of pollutants;

- After 01. 01. 2013, production costs much higher, due to the "green certificates" that should be acquired by the polluter;
- Conclusion of bilateral contracts in preferential system and client;
- Structural inefficiency in the access tools in the field of energy;.

4.3 Opportunities

- production units can reduce energy costs;
- surreptitious subsidising energy sector is almost completely eliminated;
- ensuring a future for coal industry;
- replacing the existing thermo-electric plants with efficient cogeneration systems;
- Northern Oltenia Region has a tradition in this area;
- the existence of energy resources of oil, natural gas and coal;
- the existence of electricity transmission grids, natural gas, petroleum products, as well as a rich system of conveyor belts of lignite;
- the capacity of interconnection of transmission systems of petroleum products and electricity;
- a high potential of system services at the regional level;
- Favourable geographical position.

4.4 Risks

- much of the equipment for transmission and distribution of electricity, as well as those of production are not automated, are old and worn out physically and morally;
- the means of production used for exploiting moral and physical waste lignite;
- operating time exceeded for 70% of the means of production;
- import of natural gas is growing steadily;
- during the energy production chain-transport-distribution-consumption is ineffective;
- arrears of State-owned companies in the energy sector roll over the debts of private companies;
- investment programmes for technological development and environmental protection are meaningless tax efficient tools;
- suspension of the right to emissions trading of greenhouse gases;
- management of large power units politicization;
- the implementation of a programme of work by the gradual closing of obsolete capacity;
- The European Council is about to develop a new directive in the effective energy.

5. Conclusions

From the analysis presented for the chosen model "Oltenia region of the North", it is found that it has a mix of energy resources that may allow them to become the main producer and supplier of electricity in the country is stable under conditions of maximum security.

Implementation of this strategy requires implementation of the following priority projects*:*

1. The establishment of the company has produce energy at Complex Oltenia S.A, (CEO) administered in two-tier system. [8]
2. Consideration for environmental investments and retrofitting through listing on the stock exchange and issuance of bonds.
3. An efficient hydropower resources of Northern Oltenia Region through completion of the hydropower engineering started (Jiu, Olt, Lotru and San Roque), 4. Heavy water produced at RAAN Autonomous activities-directed by Nuclear Drobeta Turnu – Severin, will be produced at competitive prices.
4. Correlation of energy production from renewable energy resources with the non-renewable resources.

5.1. The principles on which the renewable energy

The principles on which the renewable energy are:

a. Predictability,

b. The cost of the technology related to production.

To increase the production of energy from renewable resources will take the measures:

- reporting and evaluation costs specific to Mw per type of technology;
- assess and establish renewable sources that will capitalize on the existing technologies;

- The correlation of energy production from renewable resources with renewable resources in the.

The field of energy included in the Northern Oltenia region, currently about 30. 000 jobs, both vertically and horizontally. They must be as stable and better paid.

Through this strategy, we will obtain the:

- the creation of new jobs in the energy sector;
- perpetuating the professions in terms of energy efficiency

Local communities with a long tradition in Romanian Oltenia Basin energy, will enjoy special attention through the promotion of regional development projects, large scale but also on a professional reorientation and retraining of the workforce restructured. Strategic management promoted through this strategy will allow the implementation of a programme adapted to the modern mining industry and energetics.

To achieve the objectives set out in the proposed energy strategy requires a significant volume of investments, estimated by 2020 from over 30 billion euro. An important role lies with the private sector, which has not only financial resources but also the advance technological and know-how needed. Engaging and stimulating large-scale private investment requires a number of new responsibilities on the part of the authorities:

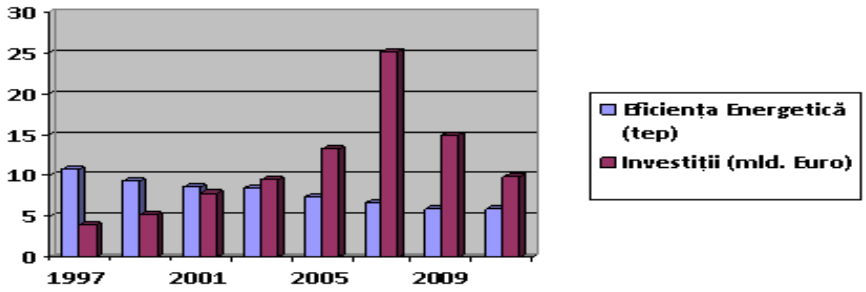
- providing a stable and predictable legal framework,
- honouring of all legal obligations and commercial commitments,
- elimination of biases and the gradual liberalisation of the energy markets, bureaucratic barriers
- remove authorizations

5.2. The macroeconomic indicators to measure competitiveness.

One of macroeconomic indicators that measure the competitiveness of an economy's energy intensity, defined as the amount of energy consumed to produce a unit of GDP. "From this point of view, although Romania has made progress in recent years, we are still far behind developed countries. Thus, if in 2000 Romania consumed 9.13 toe (tons of oil equivalent) to produce a GDP of $ 10,000 in 2008 have reached a consumption of 6.15 toe. However, at present, the energy intensity of approx. 5.85 toe Romania is over 3 times higher than EU average.

Figure 1 presents graphically the evolution of Romania's energy intensity between 1997 to 2012. In 2020, Romania must meet targets to reduce energy intensity by an average of 3.7% annually. [9]

Figure 1 Energy intensity Romania between 1997 – 2012 [9]



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