

THE CURRENT POLICY REGARDING COMPLETION OF ROMANIA'S NATIONAL FUTURE ENERGY STRATEGY

Maria POPESCU

Free International University of Moldova, MD-2012 Moldova
blondin42003@yahoo.com

Abstract

The paper is an analysis of the importance and the approach of a new energy strategy for Romania in the context where energy has become a strategic factor in global politics, a vital component of a cost factor for economic development and progress of society as a whole. The author addresses the European Union's energy policy, which is a basic element in achieving national energy strategies, each country including Romania, acting in the energy sector so as to meet EU targets global and sustainable energy policy. Romania considers energy strategy as part of the defense strategy and campaigning to promote a common energy security policy at EU and national energy identity linking domestic politics with its obligations to the European level.

Romania is trying to find the right model in terms of configuration and market energy system internally and should benefit from the development of interconnection networks gas and north-south and building an energy community to support national regulators and energy transmission system energy. For the future, the future energy strategy must provide consumers with a secure, sustainable, competitive and affordable by fundamental transformation of the energy system of Europe, where member states to make that depend on each other for the security of energy supply their citizens, based on trust and solidarity real and energetic creation of a union to speak in one voice in the world.

Keywords: *energy efficiency, energy package, energy markets, energy strategy, the European Union.*

JEL Classification: *Q21, Q47, Q48.*

I. INTRODUCTION

In response to the great challenges geopolitical produced by the emergence of terrorism in connection with transnational organized crime, inequalities of development of states, overlapping effects of the international financial crisis and the EU's dependence on imports, now it requires a new strategy energy security, focusing on diversification of external supply, modernization of energy infrastructure, completion of the EU internal energy market and energy savings. The most important challenges for the European Union relates to how we can ensure energy security and clean energy competitive considering limiting climate change, global high demand for energy and the uncertain future access to energy resources. Energy remains a major factor in the evolution of international relations and energy security, a strategic goal of states in competition for resources and geopolitical and geostrategic own objectives. Energy security concerns three dimensions: provision of alternative sources of supply, identification of alternative energy routes and securing existing sources and transport routes. Current realities demonstrates that large consumers should renounce utopia total energy independence and to accept energy interdependence.

The EU is developing an ambitious energy policy that covers all energy sources from fossil fuels (oil, gas and coal) to nuclear and renewable energy (solar, wind, geothermal, hydroelectric, etc.), in an attempt to trigger a new industrial revolution, leading to an economy with low power consumption and mitigating climate change by ensuring that the energy we consume will be cleaner, safer, more competitive and sustainable. (Vladu, 2015) Energy security is a challenge and a major objective of the European Union in this respect, the review of energy policy has led to the development of a European Community Treaty Energy, a new facility for rapid response to crises energy points basis for new approaches to energy security issues.

Romania's geographical position privileged in South East Europe, the Black Sea region, where it can play an important opportunity to grow stronger with highly stability and economic development based on local resources, energy, diversified hydropower, oil, gas, renewables, coal and nuclear power. This energy mix, it should also lead to a more active negotiation with foreign partners in the future and to become producers and exporters of energy, not only consumers or transit country.

Romania supports the creation of a Union energy based on five dimensions proposed by the European Commission: energy security, internal market, energy efficiency, environmental protection and research, innovation and competitiveness in the field. Romania's strategic position, that holds significant reserves of

natural gas are reasons supporting the idea that our country must become an active participant in projects planned under the Third Energy Package launched and coordinated by the European Union. Romania considers energy strategy as part of the defense strategy and campaigning to promote a common energy security policy at EU and national energy identity linking domestic politics with its obligations to the European level.

II. ENERGY SECURITY CONSIDERATIONS OF THE EUROPEAN UNION

Energy security continues to occupy an important place in the agenda of Europe, as it turned energy security and sustainable package presented by the Commission in February 2016. Some EU countries must show solidarity with the less privileged members of the union, the equal control of commercial contracts and intergovernmental and non-binding instruments, to continue negotiations based on a cooperative model less rigorous. This leads us directly to competitiveness, ensure a functioning internal market, without fragmentation, encouraging fairer competition. Commission determined that 17 intergovernmental agreements were not compliant with EU legislation, represents about a third of the most relevant offers that were analyzed, namely those related to infrastructure projects or energy supply, and the Commission has decided not to launch an infringement proceeding against any of the Member States concerned, as proved to be difficult for political and legal disrupt the functioning of the common market and its competitiveness. Commission managed to block South Stream - the most controversial agreement of this kind that would have threatened efforts to diversify Europe, including the Southern Gas Corridor and would have forced potential suppliers other than Russia, although based on the results, they created a difficult situation for the parties involved, since they have already been signed and has already started some investments.

This is another argument for greater transparency in the negotiation of energy that, if applied by all Member States, would eliminate investment risks and direct funds to projects fully comply with EU legislation and energy security objectives. Energy is one of the areas where the EU's potential has remained largely untapped. This can be changed by applying the basic principles on which it was founded integration project, namely solidarity and trust between Member States on the future of European energy efforts. The package will test the unit block in light of the challenges of energy security to the developing countries, most notably the Nord Stream 2. (europarl.europa.eu)

Europe is in the midst of an ambitious set of initiatives to transform its energy sector under the banner of building a Union of Energy, which provides a mechanism to manage the dimensions of foreign policy, energy and climate issues. However, the current EU approach to energy security and infrastructure focuses excessively on natural gas. This includes prioritizing gas development strategy and providing EU funds to support both new pipelines and liquefied natural gas capacity. However, EU gas demand peaked in 2010 and decreased from 23%, calling into question the need for rapid expansion of capacity. As highlighted in a new report by Chatham House, senior researcher in the Department of Energy, Environment and Resources, this approach is likely to avoid other responses to the challenge of energy security, resulting in the creation of "active stranded" if the future demand for natural gas that are made investments do not correspond to projects and could hinder the development of other dimensions of Energy Union.

A narrow focus on new gas infrastructure could also prevent the development of other dimensions of Energy Union. A prime example of this is the pipeline project Nord Stream2 - a partnership between Gazprom and a number of companies European energy - which would create a new gas pipeline under the Baltic Sea between Russia and Germany, despite sanctions collective agreed against Russia. There are differences in the EU between security of supply and human rights issues between the commercial interests can collide with the external policy objectives in importing natural gas from Azerbaijan, despite the repressive policies of the authoritarian regime in Baku. There are no trade-offs between short-term goals and long-term, visible in Hungary desire to seek preferential terms for Russian gas while sanctions remain in place against the Kremlin.

Climate agreement, signed in the COP in Paris in December 2015 set a new long-term goal to limit global temperature increase, which will require further action by the EU in fulfilling this objective. Changes on the world oil market are also extremely important to EU energy security, increase US exports to Saudi Arabia along with the desire to support the production and contribute to lower prices, but greater potential for volatility. These developments reinforce the rationale for Energy Union, for proper a European Union, more united and cohesive.

The EU should use the security benefits offered by energy with low carbon, compared to continuous exposure to fossil fuels, to rapidly expand the use of renewable energy should require additional funding for renewable energies and energy efficiency, falling prices for renewable energy sources will challenge traditional business models of utility energetică- costs of photovoltaic solar cells fell by 10-12% per year for the past five years. EU must help build markets for international liquid low carbon technologies to market access for new business models in the determination of future energy path. Union Energy provides a powerful tool to strengthen foreign policy in relation to energy and climate targets, rebalancing objectives through a framework of risk

management should fully recognize the benefits of the options reduced carbon could build a shared vision in create a more effective Union energy. (COP, 2015)

III. ROMANIA'S ENERGY SECURITY IN THE NEW GEOPOLITICAL CONTEXT

Energy security, along with the competitiveness and sustainable development, one of the pillars of Romania's energy strategy. Romania must proceed from a careful analysis of what has to propose a strategy by 2030, linking national investments with European and world. Romania is trying to find the right model in terms of configuration and market energy system internally and should benefit from the development of interconnection networks gas and north-south and building an energy community to support national regulators and energy transmission system energy. It is a measure of enhancing energy security of Romania and the Balkan countries in general area where they are heavily dependent on Russia as the sole energy supplier.

The idea of creating a regional distribution operator, in cooperation with Member States, would increase interconnection and allow easier flow of gas and north-south, east-west. In these circumstances, the EU invoked solidarity is practiced could reduce dependence on Russian gas. A clear benefit for Romania could result from attention to be given to EU liquefied natural gas (LNG), seen as a way to diversify energy. Romania asked the EU's financial support for the construction of an LNG terminal in Constanta, in partnership with Qatar Gas supplying country, thus becoming a country of distribution in the area. (mirceacomsa.files.wordpress.com)

Given its geographic location, Romania has a privileged role being able to use all renewable resources that can be used to produce electricity and heat, but also to export "clean energy" in countries that have targets very ambitious to accomplish this area. Romania's energy security can not be defined by a single, but through a mix of short-term solutions, medium and long term. Short-term solutions (1-2 years) are the projects on energy efficiency and interconnection with neighboring countries. Regarding medium-term projects, which involve a period of between three and five years achievement, highlight terminalulului operationalization of liquefied gas in Constanta, regional project with great impact. Regarding long-term projects, could be the answer AGRI project for Romania's energy security problems. (Comsa, 2016)

Romania has a strong energy system, the largest in the region, natural resources and has extensive experience in each of the individual sectors. In February 2016 it published diagnostic analysis of the energy system, entitled 'current state', which deal extensively sub Romania's energy: natural resources, demand and production of energy, infrastructure, markets and regulations, including strengths, weaknesses, opportunities and risks - Commitments accompanied by national and international inventory of Romania's energy. Among other things, the current state analysis provides a detailed description of the development of the Energy Strategy.

They are presented the fundamental strategic objectives (energy security, competitiveness of energy markets and economic competitiveness and environmental sustainability and climate change activities in energy), operational policy objectives (maintaining an energy mix diversified and balanced, decarbonise energy system through competitive market mechanisms; supporting investment in economic efficiency and decarbonise energy sector, interconnection and integration into regional energy markets, protection of vulnerable consumers and reducing energy poverty; improving governance of the energy sector, profiling Romania as a regional power pole, 2030). Then, between March 9 and April 14, 2016, held the stage of qualitative analysis of the Romanian energy sector - in fact, five working sessions attended by leading specialists from industry, academia and non-governmental sector. The themes of the five working sessions were: crude oil, petroleum products and natural gas; electricity; energy efficiency, heat and cogeneration; energy sector governance; and security and energy diplomacy. Reports drawn up after each work session were subject to public consultation and consultation with public comments and suggestions, underlying consolidated report, to which this discussion. (minind.ro)

Some clarifications are important about the nature and purposes of the Report. First, qualitative analysis showed openness and transparency of the process of developing the Strategy. Over 250 specialists participated in this vast and complex consultative exercise. Of course, the fundamental strategic objectives are defined and politically assumed, but beyond some aspects semantic generality makes them relatively uncontroversial. On the other hand, the operationalization of these objectives and, still further increasing, setting concrete targets, means of action and mechanisms of transposition of their policies can not be independent opinions and stakeholder preferences - to be eventually discovered imposed and assumed by "enlightened planner". On the contrary, since the fundamental strategic objectives can be achieved in various configurations of the operational objectives, these and the appropriate ways of action are subject to interpretation, debate and even controversy among stakeholders. As such, their formulation must be a democratic form of exercise, although one technical constraints placed strict economic, technological, ecological and geopolitical. (cursdeguvernare.ro)

The last step in developing energy strategy methodology is quantitative modeling of data from the Romanian energy sector. Ministry of Energy has completed the selection procedure by public auction of an international consultant of the first magnitude, which will develop three scenarios defined by distinct sets energy policy. For each scenario will be realized projections within the timeframe of the Strategy (2030 or 2050) for indigenous production of energy, the net import for primary use for final demand for total production of

electricity for final demand electricity for consumption of power to fuel demand for developments in energy intensity for the required investments for greenhouse gas emissions reductions and energy poverty for development. (*hotnews.ro*)

Finally, some elements of the nature and structure of the final document of the Strategy. The analysis of current status was announced that "public policy document, the Energy Strategy will be a text clear and accessible, designed to be an effective guide for decision makers in the public sector, investors and consumers of energy." Final Document of strategy will include, as integration modeling results, projections optimized energy mix options technological development to achieve strategic objectives fundamental to define the state's role in the energy sector, concrete measures to combat energy poverty, national targets for emissions of greenhouse gases and measures to protect the environment and biodiversity. They will set the priorities on scientific research, education and training in the energy sector. Finally, they will be specified actions to strengthen Romania's position in regional energy markets and increasing internal and external energy security.

May 31, 2016 at Snagov Palace near Bucharest, over 150 energy experts and decision makers in the Romanian Energy Strategy Summit attended in 2016, an event organized by *energynomics.ro*. The main objective of the Summit on Energy Strategy was to bring the latest contributions from businesses the draft national energy strategy, will be finalized achieving a brief report that we will ship officially Government's proposals on industry to be considered final elaboration of the national energy strategy. Romania has a strong energy system, the largest in the region, natural resources and has extensive experience in each of the individual sectors. From here started the debate organized by *energynomics.ro* on national energy strategy, attended as speakers more than 20 top representatives of the companies and the authorities in the energy industry where they were selected by author, 27 the essential ideas after Energy Strategy Summit on 3 June 2016. [9]

- Interconnectivity and technological advance. Romania must propose interconnectivity (physical interconnections, connecting markets, interconnection transatlantic) for a guarantee in terms of security and continuity of supply. Energy security means national security. Technological advance is a precondition that Romania is no longer a simple importer of turbines, panels or aggregates, but to develop an industry horizontally connected to the most effective technologies, technologies that gasification and clean coal could provide a answer for the future of fossil fuels, one of the most resilient that we have available and that Romania is used every winter when temperatures reach extreme levels.

- The costs of national security - the costs of investment in national security. It requires not only cost-defensive means to increase national security by investing in energy security but actually contribute in one way or another to strengthen national security. When we think of the cost of investment in the energy sector we should think of the costs beyond the tangible assets, namely the costs they involve assets that give competitive national energy sector. And this means costs in establishing a legal framework predictable and stable, but it also means the costs they assume that sometimes it's hard to accept: costs to encourage companies to come up with investment in the national energy sector and to retain sector investment national power, whether we are talking about charging system or other forms of investment promotion.

- Romania is now, at least for now, independent, mainly regarding natural gas. But Romania should not act as an island of energy, but must continue to work regionally and to continue working with countries that share the same values in Central and Eastern Europe and the Baltic region, which should really form at the political level, a power unit within the European Union, so what is needed for states in the region to reach greater regularly in Brussels.

- Identify each energy subsector, which are the specific interests of Romania and our strengths, to outline for each of them how we can promote those interests at the regional level.

- Nuclear energy has a great chance now to prove once again what possibly was not observed or retained over time, namely that produce energy affordable, sustainable, predictable, clean, carbon-free and can have a very big role in the future strategy of Romania.

- Transportation of liquid energy is currently at least as important as energy transport gas and electricity transmission. Until now it was true that a national carrier was sufficient without interconnect with neighboring systems. This I believe is no longer valid. Romania is a gateway to the European Union, including oil. But what if undesirably this gate locks if no longer operable Black Sea to transport oil with ships? A proper strategy can not ignore the three poles of transport: energy transmission fluid, gaseous energy transportation and transmission of electricity.

- We must be interconnected with neighbors through Undercrossing Danube relationship with Bulgaria and BRUA project. In September 2016, the national operator Transgaz obtained by European grant approximately 180 million euros to finance the project BRUA (Corridor gas Bulgaria-Romania-Hungary-Austria), but the company will have to provide the remaining funding for a project with a worth about 600 million euros. Official cost of the project is 560 million, but industry experts see the *energynomics.ro* considers this amount as too low. But the real problem is the funding model. Natural gas transmission system operator in Romania and representatives of the European Commission signed an agreement last week for the BRUA by Transgaz receives 179.32 million euro grant to implement the project BRUA-Phase I. Another challenge is the Black Sea project,

everything that developments in offshore must find us ready. We must be interconnected with Moldova in order to provide an alternative source of gas for this country.

- We need an inter-institutional collaboration, even formalized between the legislative, executive and energy regulator.
- Should accede more serious between us define our objectives on energy map of Europe as a security provider. We should focus on defining the beneficiaries of energy security and security providers. With an intelligent energy mix, Romania can position itself as a provider of security and can negotiate favorable positions in the context of the Energy Union.
- Energy Union and design new EU energy market, must be more considered by Romania, and companies to engage in more coordinated representation of their interests.
- Romanian State has the burden that at least for the next decade to define the minimum required to generate lignite-based power system to ensure adequacy, on which negotiations have to go to Brussels.
- Producing a report that integrates all the information synthesized so far in the development of the Energy Strategy, which will follow the structure strategy report.
- Depends largely on us how onerous will be the Energy Strategy; ultimately, the strategy aims to act as guide investment, not as an instrument of obligation or prohibition. The document aims to provide options, more than anything.
- Note the reluctance of the Ministry of Environment to support exploration and exploitation activities in the oil sector. We try to change the Petroleum Law, the secondary legislation, but this process is very slow. Now, the only solution for Romania to become a major producer and exporter of oil and gas is exploring.
- As a country, if you want energy security, you need to produce energy yourself. There is an opinion that the oil and gas industry can bear a higher tax burden and should be taxed more. With all Romanian companies that entered into receivership and considerable job losses, I hope that the Energy Strategy will look closely at the health sector oil and gas from Romania to get a true picture of the situation.
- The three reasons why a discovery does not reach the production stage are technological challenges, regulatory hurdles and high investment risk. Unfortunately, in the Black Sea, all three of these reasons is a challenge at this time.
- When the state needs to balance the budget, based on the amount that needs there and start and calculate additional taxes for an industry that always pays on time. Our recommendation for the government was always in favor of not applying additional duty for petroleum activities. Any additional burden decreases life marginal deposits, thousands of wells with low production but high operating costs.
- Association ROPEPCA with RBSTA (Black Sea Trade association - n.r.) act to amend and harmonize legislation to no longer exists oil discrepancies. The second main line is constant dialogue to negotiate new tax regime.
- Sustainability is very much linked to informing the consumer so that it may enter into contracts with the best sources of energy and natural gas.
- All measures a regulator shall take must target the final price; it must be transparent and properly established.
- It is our duty to establish the functionality of the gas market model of operation of the electricity market, a mature market with positive experiences. Regional markets, ie Ukraine calls for collaboration with ANRE access practices here.
- It is important to look at the environmental conditionalities of energy projects as an opportunity and not as cost issues. In energy efficiency, there are large opportunities. From the Ministry of Environment, energy efficiency is seen as an opportunity to reduce the use of fossil fuels.
- If we are talking about energy strategy, it is important to note in Romania and the EU increased use of number of electric cars and charging infrastructure. Also, Casa Verde program run by the AFM in recent years, will be relaunched as Casa Verde Plus, focused on energy efficiency, environmentally friendly insulation materials, green roofs and other solutions to optimize consumption.
- The existing situation today is almost exclusively the result of technological developments. They brought to market new resources (shale, offshore deep), but significantly influenced the production of electricity, affecting the abundance of energy tendered. Equally, new technologies have dramatically influenced also energy demand, decoupling it from economic growth.
- Electricity and gas market can not operate without competition and lately we have noticed increased competition even among members ACUE (distributors and suppliers of last resort electricity and gas) what is for the benefit of the customer.
- Whether it is residential or industrial customers, the authority should be greater focus on the rights they should have, regardless of vendor. Considering the definition of Universal Service, we believe that supply is not a simple but a right that must accompany any client regardless of vendor.
- Across the world, not only in Romania or Germany, energy poverty is a current topic and must be addressed. It starts with support for costumers in need, and this should be taken into account by the officials.

- Energy efficiency measures should be taken; encourage energy savings with new technologies that can control the production and consumption; for them, there must be incentives because the account does not yet have an appropriate return.
- Smart Technologies have jointly labeled as connectivity and infrastructure sharing. We see traditional players who are thinking to start new businesses in telecom, supply, ESCO services. The impact of technological oblige these companies to do more than what traditional business model allows.
- Trying to produce our own energy we consume as a company (Romstal - n.r.), we hit a very complicated legislation; after a year and a half, we managed to put into operation none of the projects started, 12 in number. Theoretical idea based on the idea of energy independence could not be implemented now because the existing legislation.
- Biomass is an advantage for Romania country, should therefore be supported production of electricity and heat using this resource. The Parliament is currently working on a new law on the promotion of energy from biomass
- Decarbonisation energy sector is the main objective of Romania. However, for 2030 we must not, at the state level, a very big effort to reduce the level of carbon compared to 1990. Solar, wind and hydro, with over 10% higher in the first seven months of the year 17/09/2016. Consumption increased by nine percent, and energy-queen were solar (almost 15% increase), wind and hydro, which registered record increase during the period January to July 2016, according to the National Statistics Institute (INS). Thus, production of hydropower was 12575.1 million KWh increasing with 1432.7 million kWh (+ 12.9%), the counterweight to that of nuclear power, which was 6251.8 million KWh - in decreasing by 314.9 million kWh (-4.8%) in the first seven months of this year. Production of wind power stations in the same period was 3.658 million KWh, up 10% (or 368.4 million KWh) compared to the same period last year, while in photovoltaic solar energy produced in this period was 1195.1 million KWh, up nearly 14.7% (or 175.4 million KWh) compared to the corresponding period of 2015. final consumption of electricity was 32181.7 million kWh, 9.2% higher higher than the corresponding period of 2015; public lighting decreased by 1.3% and population consumption increased by 1.5%. (Tudorache, 2016)

IV. CONCLUSIONS

Romania is currently the largest gas producer in Central and Eastern Europe, according to a document recently showed American investors. Despite Europe's dependence on Russian oil and gas, Romania is the only country in Southeast Europe that has real chance to become independent of its production last year covering over 85% of domestic gas consumption. Romania's energy security can be ensured in the coming years, the need for domestic production, therefore there is a real chance for our country to become energy independent state second in Europe after Denmark. Energy sector development means creating new jobs, collecting more additional fees to the state budget and the best possible prices for consumers. Strengthening energy security is in all our interests, both of Romania, as all EU Member States.

After COP, in Paris, I do not think we have the luxury to exclude an entire sector for the simple reason that we are not able to find creative and intelligent methods to attract investment in this sector. And this undoubtedly is not only a matter of how to develop this sector, but with the way that we are able to do so energy system to attract investment, to become stronger, more resilient to cope pressure renewables sector.

A serious discussion about what resources we have for Romania to be part of these new developments, these new technological trends at the European and Euro-Atlantic level. The simple technology import in Romania in the national energy sector is not sufficient or, ultimately, is not a measure of professional dignity of Romania. I think we are capable and, unfortunately, we have to put more heads in contribution to connect us to those projects which the EU provides energy sector by SetPlan or transatlantic projects that can be attracted.

Last but not least, I think the national energy strategy should be more rigorous in terms of how the Romanian state can propose investments in the social energy in ways that energy efficiency, access to vulnerable consumers to energy sources can be sustained.

V. REFERENCES

1. Bogdan Tudorache, (September 13, 2016), Bucharest, Electricity, Hydro, Nuclear, Renewables, Solar, Wind
2. Mircea Comsa, (2016), EU's energy security in the new geopolitical context
3. Vladu, Marius-Romania can become a power pole in Eastern Europe, 2015 vladumarius.blogspot.com
4. ***COP, Paris, 30 November-12 December 2015
5. ***Energy Strategy Summit, Bucharest, June 3, 2016
6. <https://www.cursdeguvernare.ro/document-strategia-energetica-a-romaniei-2015-2035>
7. <https://www.europarl.europa.eu/ May 30, 2016>
8. <https://www.hotnews.ro/stiri-opinii-21182034-despre-strategia-energetica>
9. <https://www.minind.ro/energie/strategia-energetica-actualizata>
10. <https://mirceacomsa.files.wordpress.com.asigurarea-securitatii-energetice-a-ue>