

ENERGY SECURITY OF THE EUROPEAN UNION IN CONDITIONS OF VULNERABILITY AND ECONOMIC INSTABILITY

The aim of the research is to determine the theoretical and practical framework of the European Union's energy policy, to identify the objectives and the main ways to achieve them in the field of energy, to provide an overview of the potential of certain energy sources as an adaptation tool to the challenges of globalization under conditions of global economic vulnerability and instability. The investigative methodology aims at exposing the European Union's energy security to economic instability using the empirical analysis of short-term statistical data, general and specific approaches to the trade analysis and energy security framework that may be affected by economic growth if the vulnerability is not reduced at the level of the European Union.

The substantial growth of developing countries economies and the recent financial crisis have destabilized both developed and developing economies. Diversification of external sources of supply, modernization of energy infrastructure, completion of the EU's internal energy market, ways of reducing the EU's energy dependency and assessing progress in the field of energy and achieving energy savings in the context of climate change are among the main objectives of the energy strategy Europe. The establishment of the Energy Union will stimulate economic growth in the EU, improve energy security in Europe and combat climate change. The objective of the EU's energy security package is to ensure affordable, safe and sustainable energy for both the EU and its citizens, energy efficiency seen as a contribution to moderating energy demand, decarbonising the economy, developing research, innovation and increased competitiveness, to be at the forefront of smart grid and smart technology, clean transport, clean fossil fuels and the world's safest nuclear power production.

The prospects of ensuring the EU's energy security in conditions of vulnerability and economic instability are analyzed in terms of the importance of energy for society, of the main energy-related concepts, such as energy security, the evolution of the global energy mix, the technical and economic description of the main sources the energy balance and the way they relate, the analysis of the energy balance in relation to the produced economic and financial effects, the importance of the energy factor in the economic growth, analyzes the EU policy on energy security in the field of renewable energy and the climate at its level, set to be achieved in 2030 at the level of energy security.

The EU needs to think about the fundamental change in how it produces, transports, distributes and consumes energy in order to have sustainable, safe energy at affordable prices, given that its energy policy has been geared in recent years, constantly towards affordable, competitive and sustainable markets, respecting environmental laws. An internal market for well-integrated energy is the main requirement for achieving these goals as efficiently as possible to control costs permanently.

The main objectives of the EU, which have the power and tools to implement an energy policy aimed at, are: to guarantee energy supply, protect the environment, ensure that energy prices are not such as to hinder competitiveness, and in particular, to fight climate change, to develop energy networks, where states can choose the sources of energy they want to develop, but must take into account the European targets for renewable sources.

A high value of energy resource prices has a negative impact on the entire world economy and important social effects that lead to the economic recession and inflation through its effect on the costs of other goods and products. Because it has low energy reserves, Europe has to import more than half of its energy needs, which it has to buy and pay. In order to reduce energy bills, the solution is to act on quantity as efficiently as possible in order to avoid CO₂ emissions, reduce dependence on energy imports, create jobs locally and export know-how, stimulating European countries to prevent waste of electricity in industry, transport and construction.

At least in the short to medium term, EU will not be able to compete on energy prices with its largest trading partner - the US, due to a difference in the natural resources that can be exploited being a net energy importer, it is crucial that its strategy for a secure, competitive and sustainable energy system follows a broad approach based on energy efficiency, the creation of competitive markets based on smart infrastructures, diversification of fuels and supply routes, the exploitation of conventional and unconventional energy sources, and innovation. Achieving the EU objective of improving energy efficiency by 20% by 2020 requires savings equivalent to the production of 1000 coal-fired power stations or 500,000 wind turbines. Energy efficiency reduces energy demand, reduces energy imports, reduces pollution, provides a long-term solution to the problem of fuel shortages and high energy prices, the crucial role of energy efficiency in reducing demand, and its economic potential is exploited only in a small part[1].

There is „little doubt that the good functioning of the cross-border energy market is the only realistic and effective instrument for maintaining a healthy and efficient energy sector in the EU in the future, the net economic benefits of completing the internal market can be estimated at about 16 -40 billion a year”[2].

Renewable energy is a „no regrets” option, but there have been some concerns about „costs and impacts on the functioning of the internal market, reducing the cost of technology, many renewable energy sources are becoming more and more competitive and ready to join market (for example, terrestrial wind energy) and their macro-level integration will require smarter energy distribution networks and new energy storage solutions. It may also be necessary to take into account capacity-building mechanisms at regional level”[3].

Good functioning of markets can further promote and reward flexibility and energy efficiency. If prices reflect the balance between supply and demand, and consumers benefit from the opportunity to adjust their consumption patterns to price signals, the total cost of securing supplies can be reduced while reducing demand during peak load time production and network capacity are costly. Currently, the energy situation of the countries of the Energy Community is becoming increasingly complex as to be guaranteed first access on the upper major sources of energy, ensuring the best price, in compliance with the standards of environmental protection, maintenance of gas with low greenhouse effect, and potential

investors „to show them a clear direction, to be provided with a predictable and predictable regulatory framework”[4].

The challenges of this period, in the long run, can only be met by a European integration where the decisions of a Member State have important consequences for all EU members, the financial stakes on the modernization of the energy system and the development of new technological solutions are enormous, EU-level collaboration on public funds should be geared towards investing in the technologies of the future, the energy priority is to effectively manage the activities in the field through a common energy policy decision.

Given the current political situation in the EU and increasing dependence on imports, a new strategy needs to be adopted by modernizing the current energy infrastructure, completing the internal energy market, diversifying external sources of supply, permanently coordinating energy policy decisions at national level and the adoption of a unified vision in the negotiations with external partners.

The Commission proposes five priorities for the energy sector: achieving an energy-efficient UE, building a true pan-European energy market, enhancing consumer power and achieving the highest level of safety and security, expanding Europe's leadership position energy technologies and innovation, strengthening the external dimension of the EU energy market. Romania is in favor of the priority areas of action of the strategy and acknowledges the need to improve the shortcomings highlighted in the Commission document, such as those related to the implementation of energy policies, better public awareness, focusing on sectors with a high potential for reducing energy consumption. In terms of innovation and development of new energy technologies, Romania is among the countries that have anticipated the importance of energy research and has increased three times the funds allocated to this area for the period 2007-2013 compared to the period 1999-2006.

Currently, there are already a number of energy technologies based on renewable resources, alternatives to the burning of fossil fuels, such as nuclear, solar, wind, geothermal, hydraulic, hydropower[5].

The completion of the internal energy market has been developed at Community level in order to guarantee users a real choice of freedom at fair and competitive prices, the existence of an efficient internal energy market remains a major objective, but the prospects for the internal energy market and the survey on the state of competition in different energy sectors, shows that „there are still obstacles to this and European users do not fully benefit from the liberalization of energy markets”[6].

The fundamental objectives of energy policy (security of supply, competitiveness and sustainability) are stipulated in the Treaty of Lisbon, setting out clear expectations regarding European energy policy. With all the progress in the field, the European energy systems keep a slow rate of adaptation, in contrast to the accelerated scale of the challenges. The EU is on track to achieve only half the 20% target, „we will pave the way for policies for a longer period to reach a resource-efficient, decarbonised, 2050 economy and capable of bringing the EU a leading place in the innovation hierarchy”[7].

To counter these problems, the European Commission adopted a plan for saving energy by using more concrete measures, because „energy efficiency is considered a fundamental tool for strengthening European competitiveness and reducing energy dependence, while contributing also to the reduction of CO₂ emissions”[8].

The European Council of 26-27 June 2014 reviewed the progress made in terms of increasing EU energy security, both on the Climate and Energy Framework for 2030 and on effective measures to reduce dependence on Russia's energy imports. Moreover, „the lack of adequate measures to ensure energy security can gradually lead to insecurity regarding the constant supply and supply of hydrocarbons to economic activities”.[9]

The European Energy Security Strategy presents an inventory of the current energy balance and projections for 2030 and explores the range of measures available in Europe to improve Europe's energy security. Continuing European cooperation on the development and diversification of the energy mix at national level will be an important means of reducing the risks of energy security. Except for short-term measures to counteract a possible gas supply crisis in Russia, the idea of solidarity, extremely generous, conceptually seems to remain, without practical applicability, in the circumstances of some countries continued to conclude preferential agreements with Russia, defying the common interest. Another element of novelty is „the introduction of a prioritization criterion in response to the current geopolitical crisis, in which energy security becomes a more important element: in the Commission's view, projects targeting the most vulnerable countries to a supplier unique. These projects are proposed in an annex, 33 projects (27 on gas and 6 on electricity) with an estimated cost of 17 billion euros [10].

The security strategy insists on completing the integration of the energy market, increasing domestic energy production and on the diversification of supply. The strategy concludes that the single European market will not be achieved as long as there is a single regulated market of 28 regulators in 28 Member States.

Although the Strategy considers that „climate change and energy policies that have boosted energy efficiency and the development of renewable energy will improve Europe's energy security”, the forecasts based on the baseline scenario lead to the conclusion that „even under the conditions of the energy policy for 2030, and rigorous climate and energy policies, the trend of increasing EU import dependency will continue to offset the decline in domestic production despite the decline in energy demand”. The only changes that may occur, however, are to reduce the volume of net imports, which, combined with projected increases in fossil fuel prices, could lead to increased energy efficiency improvements [11].

Changes on the Global Energy Map also provide an opportunity to strengthen global energy cooperation and governance, approaches based on EU principles of rule of law, competitive and transparent markets and sustainable development. EU energy security is inseparable from the 2030 climate and energy framework. The transition to a competitive, low-carbon economy will reduce the use of imported fossil fuels by reducing energy demand and capitalizing on indigenous renewable sources and other types of energy, including shale gas. The European Energy Security Strategy should be managed in full compatibility with the climate change and energy policy framework 2030, Member States are collectively preparing to implement long term plans for competitive, safe and sustainable energy. In the context of globalization, the EU is the only right solution to drive the Energy Policy, which can no longer be treated as an internal policy, but rather in the field of international relations, affecting the environment, security, transport, health and social policy, foreign policy , the energy sector being a highly politicized field, which can have clear and immediate effects on the citizens' daily, and hence the tendency of political actors to turn energy communication

into electoral arguments. Even if European leaders place Energy Policy at the center of the EU, and the idea of an energy policy project is highlighted, local political actors are the ones who play the most important role in developing and implementing it.

It is necessary for the EU to have an integrated approach, for everyone's sake, covering all aspects of the Energy Policy, to become the new EU political project, to focus on more integration and solidarity, and the first objective to be pursued in this respect is the completion of the common energy market. Energy policy must become a viable project with real benefits, major changes and clear messages in motivating citizens to get involved in a sustainable European Union and closer to them. The EU's energy policy needs an integrated vision that regroups different objectives, areas and actors. The integrated approach would not only facilitate the communication of direct benefits to citizens but would demonstrate that Energy Policy can become the political project that the EU now needs to regain the trust of citizens. At present, there are already a number of energy technologies based on renewable resources, alternatives to the burning of fossil fuels such as nuclear, solar, wind, geothermal, hydraulic, hydropower [12].

The European energy policy has constantly adapted to new geo-political, geo-economic and geostrategic realities in recent years, and has sought to provide more integrated energy supply at affordable prices, adherence to market mechanisms, promotion of energy efficiency and environmental protection. However, we believe that a comprehensive energy strategy is needed that clearly identifies the major vulnerabilities and risks, concretely set out achievable strategic objectives and how to meet them, and especially the medium and long-term action lines ensure a higher level of energy security.

References:

1. *European Commission, Europe 2020. Brussels, 2016. <http://ec.europa.eu/europe2020>*
2. *Booz & Company, Benefits of an Integrated European Energy Market. Amsterdam, 2 sept. 2013. <http://eur-lex.europa.eu/legal-content/RO/TXT/?uri=celex:52014DC0634>*
3. *The Commission Communication on "Delivering the internal electricity market and making the most of public intervention". Brussels, 2013. https://ec.europa.eu/energy/sites/ener/files/com_2013_public_intervention_en.pdf*
4. *Popescu M. Stability, economic growth and prosperity in the European space. Cost-price report in the energy security of the European Union. USEM - Cazani Moldova, 26-27 March 2015, ISBN 978-9975-3041-4-6.*
5. *Simileanu V. Geopolitics of energy resources. In the journal Geopolitica, year V, number 23. Bucharest, 2007.*
6. *Communication from the Commission to the European Parliament. Brussels, 2011. <http://eur-lex.europa.eu/legalcontent>*
7. *The Global Energy Efficiency Forum, Commissioner Günter Öttinger's speech. Brussels, 12 April 2011.*
8. *Information under number 101 plan for energy efficiency, 2011. http://www.cdep.ro/afaceri_europene/afeur/2011/fi_819.pdf*

9. Yergin D. „Energy Security and Markets”, in Jan H. Kalicki and David L. Goldwyn (eds.), *Energy and Security: Toward a New Foreign Policy Strategy*, Woodrow Wilson Press, Johns Hopkins University Press, 2005.

10. Popescu M., Gribincea C. *The consolidation of partnerships for sustainable, competitive and secure energy*, 2014.

11. Parliament of Europe, *Energy Security Strategy* 02.07.2014.
www.europarl.europa.eu

12. European Parliament resolution of 15 December 2015 on "Towards a European Union for Energy" .www.europarl.europa.eu/sides