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**ENERGY GOVERNANCE AND COMPLIANCE WITH THE EU REGULATIONS
IN POLAND PRIOR TO THE ADOPTION OF
THE 2030 ENERGY AND CLIMATE FRAMEWORK**

Abstract

The article analyses the most important problems related to governance of the Polish energy sector prior to the adoption of the 2030 EU Climate and Energy Policy Framework. The document was to introduce major changes in the Polish energy mix due to restrictions placed upon the emissions of the CO₂ and requirements related to the renewable sources of energy. The paper argues that in fact this overshadowed the pre-existing management problems of the Polish energy sector, in many aspects more serious than the provisions of the Framework itself.

Keywords: *Poland, governance, energy policy, energy security, EU*

Introduction

On 23 October 2014, the new EU Climate and Energy Policy Framework was adopted. It started a serious discussion in Poland about its possible consequences to the Polish energy sector. Majority of them was actually related to the future of the Polish energy mix and the possibility of using coal power plants as a baseload for the electricity generation. This immediately led to questions about energy security and chances to maintain relative self-sufficiency in that respect.

However, this article proposes a different approach to the problem. Regardless of the energy mix issues, it is tempting to analyze how the governance issues and compliance with the EU regulations actually affected energy policy and energy security. The paper is divided into two parts: the first one presents the general regulatory structure of energy policy and energy security policy in Poland. The second one is a collection of a micro case-studies showing how in practice the governance and implementation issues worked. The most important materials and sources included legal acts (both Polish and European), news from the most prominent Polish media covering the energy issues (Wirtualny Nowy Przemysł, Centrum Informacji o Rynku Energii CIRE) and other main daily newspapers (“Gazeta Wyborcza”, “Wprost”). The theoretical and methodological framework of the paper was based upon a paper on case study information analysis in energy policy by Dominik Smyrgała (Smyrgała 2013), as the case studies are the best research method allowing for analysis of social phenomena in their environment and context. Due to the limited size of the article, the case studies focused on the period 2012-2014, thus immediately prior to the adoption of the 2030 Framework.

An important factor defining the background for the case studies was the development of the shale gas exploration in Poland. This also became a major issue of the Polish policy within the EU, as there emerged concerns about the alleged environmental challenges related to horizontal drilling and hydraulic fracturing procedures indispensable in shale gas production (e.g. AEA 2012).

The diversification of imports of energy resources was also a major issue. Prior to 2009 there were some initiatives launched that were suppose to change the existing patterns of energy trade, including the project of constructing the LNG terminal in Świnoujście and an alternative route for oil imports from Azerbaijan by Odessa-Brody-Plock pipeline (PAP 2013c).

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Legal Framework and the EU Regulations

National law and the compliance with the EU regulations have probably been the most important question of the Polish energy policy in the recent years. One thing that has to be noted here is the Polish definition of energy security as defined in the Act of 10 April 1997 The Energy Law. As the documents states it, energy security is “a state of economy allowing for full coverage of the current and perspective fuel and energy demand of consumers in a way that is technically and economically justified, with the respect for environmental protection regulations” (Ustawa z 10 kwietnia 1997 r. Prawo energetyczne 1997, art. 3, position 16).

This definition, very complete and focused on macroeconomic issues, clearly impacted the energy policies of Poland by shaping them to serve the purposes of economy as a whole. Another important legal act is Geological and Mining Law (Ustawa z 9 czerwca 2011 r. Prawo geologiczne i górnicze 2011) which sets the framework for any mining activity in Poland as well as concessioning and exploration.

This legal context of energy policies in Poland was also strongly determined by the European legislation, especially that related to building a common EU energy market and preventing the climate change. The set of liberalization policies (the 3rd liberalization package) set forth a chain of events that have been aiming at converging and integrating the Polish energy market with the neighbouring EU markets. The issues related to the energy-climate package were mostly focused around the question of the CO₂ emissions (including the greenhouse gas allowance trading scheme) of the strongly coal-based power and heat generation in Poland, as well as around increasing the share of renewables in energy mix and increasing energy efficiency. Further complications may result from the planned deepening of obligations related to the CO₂ emissions as stated in the EU Energy Roadmap 2050 by up to 80-95% (*Energy Roadmap 2050* 2011). Although it was vetoed by Poland due to the reasons already stated (Nielsen and Simon 2012), it cannot be excluded that the issue will return in the future (*Roadmap for moving to a low-carbon economy in 2050* 2014).

In such an environment, the most important goals of the Polish energy policy, as stated in the document *Energy Policy of Poland until 2030* (*Energy Policy of Poland until 2030* 2009, pp. 6-22) included:

- improving energy efficiency in order to reduce energy intensity and achieve the zero-energy economic growth;
- enhancing security of fuels and energy supplies by ensuring efficient management of coal deposits, and diversifying imports of both natural gas and crude oil, as well as increasing storage capacities;
- diversification of electricity generation by introducing nuclear energy;
- development of renewable energy and biofuels, notably by ensuring the 15% share of renewable energy production by 2020, 10% share of biofuels in transportation, while reducing the share of biomass in order to protect forests;
- development of competitive fuel and energy markets in order to ensure undisturbed and predictable operations of the energy markets;
- reducing the environmental impact of energy industry by reducing the CO₂, SO₂, NO and dust emissions, protecting ground and surface waters and minimizing the waste dump.

The document also defined a set of general means through which the state was to achieve the goals mentioned above. They include the following (*ibidem*, pp. 4-5):

- legal regulations setting for the fuel and power sector, and defining technical standards;
- use of owner's supervision by the State Treasury within its competence;
- regulatory activities of the President of the Energy Regulatory Office (Polish abbreviation: URE);
- supporting primary objectives of energy policy which are currently not commercially profitable
- (e.g. the certificate market, tax benefits and exemptions);
- monitoring of the situation on fuel and energy markets by the President of
- the Office of Competition and Consumer Protection (Polish abbreviation: UOKiK)
- and the President of the Energy Regulatory Office and intervention measures within
- their competence;
- activity within the structures of the European Union aiming at considering the nature of the Polish power sector;

- active membership in international organisations, such as the International Energy Agency;
- activity of local government bodies, also through public-private partnerships (PPP);
- hierarchic spatial planning ensuring the implementation of energy policy priorities;
- information activities;
- supporting energy projects significant to Poland (e.g. investment projects, research and development) with public funds, including European funds.

However, the document as such has always been a subject of criticism. Professor Antoni Tajduś (2013) from the University of Science and Technology in Cracow estimated that the goals and plans set by the Energy Policy were too ambitious and costly, thus difficult to be fulfilled in reality. It is hard not to agree with this opinion. The Energy Policy does not set ahead a main goal but rather describes desired steps in implementing the EU legal frameworks. Under present circumstances, the necessary investments in simultaneous development of renewable energy, energy efficiency, clean coal technologies, unconventional hydrocarbons, nuclear energy and modernization of power grid by far exceed the financial capabilities of both the government and business in Poland. Moreover, setting so many goals ahead will probably effect in coordination deficiencies, as there is no clear hierarchy of them. As it is going to be presented below, the organizational structure of governance of the Polish energy sector did not make a situation easier.

In 2014, two new important developments took place in terms of defining the new goals of the Polish energy policy. On 15 April 2014 a new strategy was adopted by the government (*Strategia Bezpieczeństwo Energetyczne i Środowisko* or Energy Security and Environmental Strategy, henceforth SBEiS) which set more specific goals in shorter time frame (until 2020) than the Energy Policy, although it is not considered to be a part of it (*Uchwała Nr 58 Rady Ministrów z 15 kwietnia 2014 r. w sprawie przyjęcia Strategii Bezpieczeństwo Energetyczne i Środowisko – perspektywa do 2020 r.* 2014). Though the document is dedicated to many environmental issues, not only those related to energy, the latter plays a vital role throughout the document. The main priorities of it include:

- development of lignite and shale gas production;
- development of combined power and heat generation;
- decrease of emissions and increase of energy efficiency.

On the other hand, on 14 August 2014 the Ministry of Economy presented to further consultations the project of new energy policy until 2050 which includes new scenarios of changes in the future energy mix of Poland (*Projekt Polityki energetycznej Polski do 2050 roku* 2014). There are the three most prominent ones: balanced one (balanced mix of all resources), and two alternative – ones based upon nuclear power generation and based upon shale gas and renewable energy. As of June 2016, the final version has not yet been published, it is difficult to say what its provisions will be. Still, the vision of what is going to happen remains unclear, hence the competitive scenarios of development.

But before October 2014, the situation was complicated for even more reasons. On the level of central government, there existed many bodies that were responsible for energy security (Ustawa z 10 kwietnia 1997 r. Prawo energetyczne 1997). They included Ministry of Economy (economic policy), Ministry of State Treasury (ownership of state-owned companies or government shares in private companies), Ministry of Environment (licenses and concessions), Energy Regulatory Office (Polish abbreviation: URE; pricing and other regulations), Office of Competition and Consumer Protection (Polish abbreviation: UOKiK) and Ministry of Foreign Affairs (external factors).

The work of four ministries and two central offices was not coordinated in practical sense. Theoretically, they were subordinate Prime Minister and his Chancellery, yet this form of management was very inefficient. Since 2010, there existed Międzyresortowy Zespół do spraw Realizacji Polityki energetycznej Polski do 2030 roku (Interministerial Team for implementation of Energy Policy of Poland until 2030), created in accordance to Resolution No. 40 of the Prime Minister but it was not a constitutional body and it had a fairly weak legal basis (resolution of the Prime Minister, not a Parliamentary Act) and its very name assumed equality of all entities involved.

Seemingly, the elites of power realized that the situation were awkward, as there repeatedly appeared news in the media about the necessity of establishing a new body that would coordinate works of all the actors of energy policy (e.g. see: PAP 2013a, PAP 2013b). The ideas varied from establishing the new Ministry of Energy that would combine the competences of the existing ministries in the field of energy policy (most notably: Ministry of State Treasury and Ministry of Economy) or calling into being special commissioner on energy within the government. In 2015 this materialized by establishing the new Ministry of Energy upon the Regulation of the Council of Ministers of 7 December 2015 (Rozporządzenie Rady Ministrów z 7 grudnia 2015 r.).

Successes, shortcomings and challenges: micro case-studies

Listed below are some of the most important and most interesting events and processes related to the energy policy.

Opole power plant

By October 2014, the electricity market did not reach the state guaranteeing maintaining energy security in the future, although the EU directives were generally implemented. The Polish Power Exchange (PolPX; the Polish abbreviation TGE), created back in 1999, in 2005 started to register the certificates of origin for electrical power generated from renewables. In 2007 the same was applied to combined heat and power generation. In 2006 a spot market for the CO₂ emissions was inaugurated. In 2008 the trade of electrical power futures began, and in 2012 – natural gas also became a part of a trade. It may be concluded then that the liberalization principles resulting from the directives 2009/72/EC and 2009/73/EC were implemented.

However, this did not solve the technical problems of the Polish power generation sector, and from a certain perspective turned out to be counterproductive. The market mechanism led to the decrease of electricity prices to such a level that energy producers postponed indispensable investments program due to their unprofitability. In the same time, the decapitalization of the infrastructure threatens the system with major power shortages in the near future, including the possibility of blackouts. It became even more probable as the new environmental restrictions are going to become more and more demanding whereas the costs of replacing the obsolete power generation units with new ones and modernizing the power grid will increase (Gabryś 2012, pp. 139-141). And the first shortages of power supplies due to persistent drought already occurred in the Summer of 2015 (Bęben 2015).

A good example of perturbances related to governance in the Polish energy policy is the case of enlarging of the power plant in Opole (Elektrownia Opole) by building two new coal-based power blocs. The company that owns the plant (PGE) was reluctant to finance the investment as with the liberalization of energy market the prices decreased significantly making it uneconomic. In the same time, the power plant played an important role in planning energy security according to the *Energy Policy 2030* but the

government was as reluctant as the PGE when it came to financing the blocs. Eventually, the construction started in February 2014 owing to a major financial engineering that allowed for stepping in a foreign company (Majczyk 2014).

Gas contract with Russia and attempts at diversification

Natural gas sector experienced many turbulences in the analyzed period. The crucial issue was the gas contract with Russia from 2009/2010 that sparked controversies even before it was signed. Its conditions are highly unfavorable to Poland and they even were a reason for intervention of the European Commission as their initial version violated the liberalization directives. Still, the natural gas prices in Poland were the highest in the EU, and some of the conditions of the contract were a subject of arbitration between the Russian Gazprom and PGNiG (Zawisza 2011, pp. 62-76; Talarowski 2012, Kublik 2012).

Another controversy arose around the control over the natural gas transmissions through the Yamal pipeline and its possible enlargement. This led to a major conflict between the Ministry of State Treasury and management of PGNiG and EuroPolGaz in April 2013, when it turned out that there were some serious miscommunications related to the memorandum of understanding about possible construction of the Yamal 2 pipeline that led to a serious harm of international perception of Poland (Smyrgała 2013).

On the other hand, Gaz-System began serious expansion of transmission capacities that allowed for diminishing the dependence on gas imports from the East. The most important ones included interconnections with the gas transmission systems of Germany and the Czech Republic, the LNG terminal in Świnoujście (under construction), possible connection with Slovakia and Lithuania or the infrastructure allowing for physical reverse of gas flow through the Yamal pipeline. Possible North-South Gas Corridor connecting the LNG terminals in Świnoujście and Omišalj (Croatia) and thus changing the logic of the existent gas trade in Central Eastern Europe was also an interesting project. Combined together, these projects were soon to allow for a 100% diversification of natural gas imports to Poland breaking the dependence on Russia in that respect (Gaz-System 2013).

Shale gas production

By 2014 (and still now), Polish legislation was not ready to manage a large scale hydrocarbon production, therefore some serious reforms are still necessary to both energy

and geological regulations but also to taxation, public procurement, certification, information and environment protection (Černoch et al. 2012). Exploration works were proceeding at a slow pace, there frequently occurred problems with concessions and a lack of clear vision of how the state should participate in possible shale production. The relations between business and government were tense. The biggest discussion was related to the project of NOKE (Narodowy Operator Kopalin Energetycznych, National Operator of Energy Fossils) that was supposed to be a state-owned company which participation would be obligatory in all hydrocarbon activities. The project was eventually abandoned (PAP 2014b), although its fiscal provisions remained a part of the negotiated government project on hydrocarbon taxation (Rządowe Centrum Legislacyjne 2014). The recent Supreme Audit Office report (2014) shows some major negligences on behalf for the Ministry of Environment before 2012 that seriously slowed down the pace of exploration. There was also some pressure not to develop shale technologies coming from the external actors, although eventually active diplomatic actions helped to prevent further restrictions on unconventional hydrocarbon exploration and production in the European Union (Chojnacki, Ziarno 2014).

Renewables and energy efficiency

The issues mentioned above proved to be major problems in the Polish energy governance. The two key EU directives in that respect were adopted back in 2009, and they were supposed to be implemented into the legal system of member states by December 2010 and July 2012 respectively. None of them was harmonized with the Polish law on time and the works on that are prolonging. According to professor Jan Popczyk (2013), even this delayed process was conducted in a wrong way, as the project of the law on renewables presented by the government in November 2013 represented the interests of the big energy producers and distributors rather than that of prosumers (producers and consumers of their own energy). It was also a reason for tensions within the coalition parties, as the smaller partner (PSL) considered the nuclear energy (being the leitmotif of energy policy of the bigger one, PO) too expensive for Poland and opted for abandoning its development and focusing the energy production more on renewables (PAP 2014a). The system of certificates that was supposed to support the development of green energy also proved insufficient and experienced a major crisis in 2013 (Piszczatowska, Baca-Pogorzelska 2013).

Conclusions

The most important problems resulted from the lack of coordination of effective policies at the central level and internal deficiencies of the Energy Policy. The latter included improper definitions of main objectives and lack of focal issues, since it is difficult to determine the order of priorities of the strategy.

As for the objectives of the most important EU documents on energy policy created in the turn of the decades, the implementation brought mixed results. Considering the above, it has to be noticed that although the Polish energy policy within the EU was rather reactive and defensive, the examples of Energy Road Map 2050 veto or the Polish-British coalition on shale gas mentioned above show that it could be effective. However, in the long term the occasional activity in difficult situations was not enough to successfully pursue the objectives of energy policy. The future of the gas contracts remained unclear, despite the increasing diversification capacities resulting from the efforts of Gaz-System. The question of the shale gas production is suspended due to the low prices of hydrocarbons and uncertain perspectives of demand. However, it is the power generation that remained the most serious problem to be solved for the energy sector. The near-blackout in August 2015 is a good evidence of that.

In this context indeed, the 2030 Energy and Climate Framework and its adoption seriously questioned the energy strategies and policies adopted by the government. New reductions of the CO₂ emissions (43% and 37% for the ETS and non-ETS respectively) and the goals related to renewable energy made the existing documents obsolete. Moreover, such a change intensified the necessity of better coordination of the energy sector, as without it the new objectives were out of range (*2030 Climate and Energy Policy Framework* 2014). On the other hand however, the problems would have kept arising even without this document. Its role then should be considered more like a catalyst or a trigger of the discussions, not the reason itself.

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