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Abstract: Poland's energy mix is dominated by indigenous coal, and since the country joined the European Union in 2004 it has been clear that it will do much to safeguard its domestic coal sector and resist pressures for ambitious harmonized decarbonization efforts. At the same time, Poland is meeting its renewable energy targets and its onshore wind capacity is growing at a significant pace. In 2015 and 2016, a new renewable energy policy mix has been put in place, relying on tenders for renewable energy volume in large scale RES and a micro-installations support scheme. In parallel, a capacity mechanism is still on the table, though its details are only being worked out. What explains this particular choice of instruments? In this article I focus on four explanatory factors: the influence of the European environment; domestic political and organizational fields and the material and structural constraints of the energy system and resource endowment. I provide a historical overview of renewable energy policy in Poland since the early 1990s, showing how policy evolved, new actors and coalitions emerged, and how the influence of the EU changed overtime. The preliminary findings suggest that the European environment has been crucial in pushing for stronger RES support policies, while the inherently instable domestic political field explains the soap opera of renewable energy policy legislation: drafts, new plans, amendments and legal instability. On the other hand, the choice of particular instruments, within the confines of options acceptable by the EU, is best explained by the stable and segmented organizational field, dominated by a professional logic of the centralized, engineer-lead coal sector, which in turn is linked to the importance of the country's resource endowment. In these conditions, the current renewable energy policy mix seems optimal for the actors dominating the organizational field, and a deep paradigm shift and overturning the political economy of the energy sector would be needed to change that.

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1 Introduction

Since joining the European Union (EU) in 2004, Poland has gradually become a major political player. One of the areas where the country's influence was most distinct is European energy and climate policy. In 2012, the Polish government defied EU political efforts twice, vetoing the 2050 energy roadmap (Szulecki, Ancygier 2015). In the European energy sector, Poland is certainly not seen as a renewable energy frontrunner. Critics have often dubbed it “Coal-land” – a country not only reliant on energy from coal but also arguing hard to safeguard the interests of the coal sector and against climate policy. It might be surprising to find that in absolute terms Poland has seen a significant increase in installed renewable energy capacity. Global Wind Energy Council Energy Statistics for 2015 position Poland 7th in the world in terms of new installed wind capacity and 12th globally in terms of overall installed wind capacity, which translates to the seventh largest wind-power capacity in the EU, after Germany, Spain, UK, France, Italy and Sweden. More costly and less mature renewables like PV are, however, still only marginal.

Yet looking at the way renewable energy support policies are designed, redesigned, changes and revoked – erasing any meaningful investment stability – one has to conclude, that the development of Polish renewables is actually happening against all rational odds. A journalist specializing in energy policy has pointed out that the foundational piece of legislation in Poland's energy policy – the 1997 Energy Law – has been novelized 60 times (so on average every four months), and grew ten-fold in length (Derski 2017). How can we account for this continuous provisional character of energy policy, leading to uncertainty but at the same time – remaining stable in some key elements that this paper will focus on.

This paper tries to explain why in 2015, after a lengthy political debate Poland selected auctioning (tenders) as its main RES support scheme, since 2016 combined with a “prosumer” in-kind payment and a strict 800 MW cap on new micro-installations. The chapter will also show the evolution of RES support, in an attempt to understand not only the final outcome but also the apparent instability of this policy area. The flip side of the RES coin is the proposed capacity mechanism and existing capacity adequacy measures aimed mostly at base-load coal and large hydro plants.

Although Polish climate and energy policy has received some visible attention in the English-language political science literature, there has to date been no analytical attempt at explaining the particular policy outcomes and tracing the influence of external (EU policy as well as techno-economic shifts) and domestic (political and organizational) factors. Many of the studies that look at the Europeanization of Polish renewable energy policy do it on the margins of broader climate policy analysis (Ancygier 2013b; Ceglaz, Ancygier 2015; Jankowska 2010, 2017). On the domestic level, Karolina Jankowska uses the concept of policy capture and advocacy coalition theory to explain the way Polish renewable energy policy developed until 2008 (Jankowska 2012). Complementing this bottom-up approach with a more top-down, Europeanization-focused narrative of transposing and implementing RE Directives 2001/77/EC and 2009/28/EC (Ancygier 2013a).

Horizontal Europeanization and policy diffusion (or lack thereof) have also been explored (Ancygier, Szulecki 2014a), (Szulecki et al. 2015a; Wedel 2016) hinting at the ways in which domestic political economy as well as beliefs can hinder learning and diffusion processes.

The presented analysis builds on these studies, but discusses the evolution of Polish RES policy until the end of 2016 and emphasizes the logics of Polish political and organizational fields which influence energy policy, combining political, institutional, economic and cultural explanatory factors, together with the nature of EU pressure. Whereas the focus of existing studies is on renewable energy in the electricity sector (RES-E) (Ceglaz, Ancygier 2015; Ancygier 2013a; Jankowska 2012), or together with the transport sector (biofuels, RES-T) (Jankowska, Ancygier 2017), I also look at capacity adequacy and state aid discussions, seeing them as inseparable from RE support schemes in shaping the energy sector.

2 Theoretical framework and expectations

In this paper, constituting a part of the REMIX project, we try to explain renewable energy policy outcomes with a combination of four explanatory factors: the influence of the European environment; domestic political and organizational fields (drawing on Boasson 2015), and the material and structural constraints of the energy system and resource endowment. I discuss Poland's coal monoculture and the structural conditions of the energy system in the background section (4.1), while the chronological analysis in Section 5 focuses on the interplay of the European environment and the domestic fields.

Although Poland joined the European Union only in 2004, it has been under the influence of EU legislation already before that date. While it can be expected that as European institutions (specifically: the Commission) gained more competence in the area of renewable energy policy (through different channels), the influence on this policy area will be growing. However, in the Polish case one can also expect a reversed dynamics – with the direct influence of the EU over Polish renewable energy policy decreasing over time, with accession conditionality gone after 2004 and Poland's increasing assertiveness in negotiations with the EU.

“Europeanization” does not boil down to the influence of European institutions, but also, in its “horizontal” form, to between-member-state policy diffusion and harmonization. Therefore it can be expected that Polish policy choices are to some extent shaped by broader policy trends in other MS.

An important explanatory complex is the interplay between the political and the organizational fields. The volatility of the Polish political field (see section 4.2) suggests that much of the legislative instability can be explained with the frequent and rapid changes in the government composition and ruling coalitions. At the same time, however, the level of politicization of energy policy in Poland seems stably low, and there is little political competition over those issues. Whether the policymakers' preferences also change, is, however, also a question about the independence of the political field from the organizational field. The organizational field consists of energy producers, utilities and industrial players, interest groups and business associations, as well as the civil servants working for the TSO, regulator and the relevant ministerial departments, together with think-tanks, energy institutes and climate/environmental NGOs. As we shall see in this chapter, the Polish organizational field in energy policy is dominated by the large, state-owned companies producing energy from coal. We can therefore expect all policy output to be strongly influenced by that institutional logic. But what can then explain the legislative instability? The continuous re-drafting of policy projects can be a sign of the competition between the dominant logics and the pro-renewable, environmental challenges, which although relatively weak domestically benefit from preference alignment with EU institutions and key member states (e.g. Germany). At the same time, the highly technical and non-politicized capacity and adequacy regulation can be expected to be an example of a policy area driven solely by the dominant institutional logics.

2.1 Method

To assess these hypotheses, this chapter draws on a preliminary desktop analysis of secondary literature, combined with an archival document analysis. In the latter, not only the actual legislation and policy documents, but (where available) drafts, and traces of communication between institutions, stakeholders and European actors are used. For contextualizing and understanding the preferences of policymakers a limited number of interviews has been conducted, supported by an analysis of public statements available in the media.

3 Background information

3.1 Understanding “coal-land”: Poland’s energy system

After World War II Poland, literally rising from the ashes, underwent a massive electrification program based mainly on hard coal and lignite power plants. With over 213 Mio tones extracted in 1980, Poland was the biggest producer of coal in Europe except for the Soviet Union. To limit the dependency on coal already in the early 1970s the communist authorities began to explore the possibility of gaining nuclear energy capacity. However, in the aftermath of the Chernobyl catastrophe and due to sustained civil society pressures, project’s abandonment and a moratorium on nuclear energy became one of the first decisions of the new democratic government in 1990 (Szulecki et al. 2015b).

Shortly after the transition from state-socialist planned economy to capitalism in 1989, almost 99% of power in Poland was generated in coal-fired power plants. The role of renewable sources of energy was minimal: slightly over 1%. The first wind power plant was installed in 1991, financed mostly by the Danish government, and had the nameplate capacity of 150 kW. At that time also some biogas power plants were built. But only after Poland joined the EU and introduced a support mechanism for renewables did these sources of energy start to play an increasingly important role in the Polish energy sector. In 2013 alone almost 900 MW of wind energy were installed in Poland. Total installed capacity by the end of that year reached 3 390 MW. Although by 2012 the share of power from renewable sources in the energy consumption increased to 9.6%, over 55% of that energy came from biomass co-firing and a further 14% from large hydro power plants. Between 2004 and 2013 the share of renewables in gross final energy consumption increased from 6.9% to 11.3%.

The power system is concentrated around large hard coal or lignite power plants, such as those in Bełchatów, Kozienice or Opole. “Bełchatów”, located in central Poland is the largest lignite power plant in Europe and one of 25 largest power plants in the world, supplying some 20% of electricity to the national system. “Kozienice” is the largest hard coal plant, alone providing 8% of electricity. Apart from “Górna Odra”, located near Szczecin in the north-west, all major plants are either in the south/south-west or the center of the country, leaving the north and the east particularly energy-poor.

Largely due to the high share of indigenous coal, Poland belongs to one of the least energy import dependent EU member states. In 2013 it imported 25.8% of energy resources (EU average – 53%). Despite increasing coal imports from Russia, in 2013 coal exports to Germany allowed Poland to remain a net exporter. However, the high costs of coal extraction in the country and decreasing coal prices at the global markets may lead to change in the coming years.

3.2 The political system, culture and participation

Poland’s experience with parliamentary democracy dates back to 1918, when the modern Polish state regained independence in the aftermath of World War I, however, major political parties had been established already earlier and represented the interests of Poles of different social classes in the imperial parliaments in Vienna, Petersburg and Berlin. After 1948 and the forged elections in which the Polish United Workers' Party (PZPR, communist) won a ruling majority, the party system became merely façade. The hegemonic PZPR was supported by two satellite parties: the United Peoples’ Party (ZSL, agrarian) and the Democratic Party (SD, center-left) which were elected into the parliament (Sejm) in cyclical, albeit ritual and uncompetitive elections. It is however important

to note that the continuation of this democratic ritual, with an elected Parliament that met and debated, worked on legislative projects, approved budgets, appointed the Council of Ministers, the Premier and the collegial “head-of-state” organ: the State Council – all became important in 1989. In June that year, in semi-free elections, the democratic opposition gathered around the “Solidarity” trade union won the entire 35% of the mandates contracted for “non-Party candidates”. After the formally independent SD and PSL (rebranded from ZSL) switched sides, they formed a ruling majority which appointed the first non-communist prime minister since 1947, Tadeusz Mazowiecki.

The government of the People’s Republic was divided into ministries, which maintained institutional continuity after 1989, although each new PM has the power of shaping the cabinet and delegating governance competences according to her or his political strategy. For example, a ministry of environment (under different names), has functioned continuously since 1975, while energy policy competences have been with the Ministry of Energy (1952-1988 and again since 2015), Ministry of Economy (1999-2015) and partly the Ministry of State Treasury, which oversees state-owned and co-owned companies, such as large energy producers.

It can therefore be said that, borrowing the metaphor from Dryzek and Holmes (Dryzek, Holmes 2002) much of the institutional “hardware” of Polish politics has been inherited from the state-socialist period, while cultural “software” is a hybrid of long-established “traditions” and globalization and Europeanization pressures of the early 1990s. The Polish political system after 1989 has been characterized by a multiplicity of political parties which, unlike before 1939 and in established democracies, do not boast a mass membership but seek support for their candidates in electoral campaigns – so their main source of legitimacy is the mandate received in elections. In the period under study (1993-2016) seventeen parties were voted into the Sejm. Eleven prime ministers formed fifteen cabinets. Between these, ministers could also be dismissed. This illustrates the inherent instability of the country’s governance where “leadership volatility, party volatility, and electoral volatility created whirlpools of continuing uncertainty” (Millard 2009). That said, one must note that since 2005 the core of political competition has been between the center-right Civic Platform (PO) and conservative-populist Law and Justice (PiS), and the two PO electoral terms only saw three cabinets with two prime ministers – Ewa Kopacz forming hers after the long-time prime minister Donald Tusk had been elected head of the European Council. In any case, governments without a stable parliamentary majority on their side are scarce, most legislation is voted in by coalitions, and so elections that bring change in power are also prone to bring change in policy – sometimes a complete reversal. This lack of a culture of dialogue and limited legitimacy for a plurality of competing interests is explained with historical and cultural factors, and has significant impact on the way legislation is drafted, discussed, adopted and implemented (cf. Cianciara, 2015, p. 74).

This last point, the nature of the policy process, is also linked to the poor tradition of public consultation and deliberation. After 1989, political representation has been emphasized as the core of democracy over political participation (cf. (Blokker 2009). In the early days of the newly democratizing 3rd Republic, this was seen as bringing the necessary stability for difficult and socio-economically painful reforms. Extra-parliamentary politics which were the core of the opposition to communist rule, were quickly seen as potentially dangerous for the transformation and so strikes, contentious politics, demonstrations – but also more direct forms of societal consultation – were tamed by the newly elected government since early 1990 (Kenney 2002).

That forced insulation of policymaking from societal inputs had deep repercussions. In terms of trust towards decision makers and political participation, at the moment of EU accession Poland was visibly standing out even in Central Europe – with only 13% of Poles trusting political parties, 23% declaring trust for the parliament, and 26% - for the government (Eurobarometer 2016). Electoral turnouts are significantly below EU average. “New member states”, Agnieszka Cianciara notes, “often complied with EU law better than expected, but their practice of democracy and governance was in some cases worse than expected”. This seems especially true for channels of interest representation and societal participation in policymaking where “the institutional and legal framework for lobbying has been Europeanized to a limited extent” (Cianciara 2015) p. 56-7. The

formalization of social consultations and lobbying came only in the aftermath of a large corruption scandal, in a 2005 law on “lobbying within the law making process” which also introduced the institution of a public hearing. However, due to a biased definition of “lobbying” most of government-business contacts still remained in the grey zone, and interest pressures on policymaking are difficult to assess. Impact assessment analysis has to be part of all new legislative projects since 2002, also allowing for public consultations but their scope and binding character is left undefined. Cianciara reported that by 2009 formal consultations were taking place, but the legislators often organized them at the latest possible stage to fulfill the formal requirement but limit societal impact (2015, p. 66). A more recent study, however, has found that by 2012 93% of governmental legislative projects were subject to consultations and 50% of these were consulted with more than 20 entities – which signals an increase in openness and transparency of the process during the second half of Civic Platform/PSL coalition rule (Kopińska et al. 2014). That said, most consultations were still at a late stage of policy development, were conducted in the thinnest possible form (internet publication of the project and invitation to send in comments), and societal stakeholders were given very little time to reflect. Furthermore, the Law and Justice parliamentary majority (since late 2015) has significantly increased the volume of legislation introduced to the Sejm as “parliamentary initiatives” (projects brought forth by a group of MPs, not the government) which do not require any form of consultation at all (Obywatelskie Forum Legislacji 2017).

3.3 Explanandum: Polish renewable energy mix at the end of 2016

As a result of the 2015 Renewable Energy Act and its 2016 Amendments, Poland’s main support scheme for large-scale renewables is an auctioning mechanism, based on cyclical tenders for capacity. The regulator sets reference prices for different technologies, and then tenders for particular volumes of renewable energy to be produced at prices close to the reference price are organized (the first ones were held in December 2016). In practice, this mechanism functions as tenders for volume restricted feed-in tariffs, in which the regulator and Ministry of Energy control the volume of energy that they will purchase, and bids are made only for the lowest delivery price which becomes a feed-in tariff.¹ This mechanism for large scale installations is coupled with micro-installations regulation. While the original 2015 Renewable Energy Act envisaged a sort of sliding, negative feed-in premium based on a percentage of previous year’s average wholesale energy price, the 2016 Amendment introduced an in-kind payment, which resembles “classic” net-metering and assures that prosumers can reclaim a certain volume of energy for the energy they feed into the grid (for 1kWh they received 0.35-0.7 kWh), which is meant as an incentive for self-consumption rather than turning micro-installations into an additional source of income for households.

¹ I would like to thank Tim Schittekatte, Leonardo Meeus, and Pradyumna Bhagwat for pointing this out.

4 Chronological story

4.1 Phase I – prior to 1999 – Emulating European modernity

With worsening air quality and the acute problem of acid rain caused by industrial and energy sector emissions, “alternative energy sources” were explored as an option in Poland already in the early 1990s, given that nuclear energy was out of the question in the aftermath of earlier societal protests (Szulecki et al. 2015b). Between 1993 and 1999 a *feed-in-tariff* existed, helping the nascent industry to take root, but providing very limited investment stability – too dubious to spark domestic R&D and component production (Jankowska 2012). Tariffs were set at ca. 30% above the energy market price. Although the system was similar to the one in Germany at that time, the tariffs were too low to attract investment and were announced only a year in advance by the Ministry of Finance, which made long-term planning by private companies difficult (Ancygier, 2013: 239).

Nevertheless, first renewable energy companies began to appear and form a nascent sector, while the main advocate of RES was the EC Baltic Renewable Energy Centre (EC BREC). Formed in 1994 by the European Commission, the institution became part of the Ministry of Agriculture in 1997, under the auspices of the Institute for Building, Mechanization and Electrification of Agriculture (IMBER). In 2001 its experts formed an independent non-governmental think-tank – the Institute for Renewable Energy (IEO) (IEO 2017). In 1997 the EC BREC/IMBER organized the country’s first large conference on the “Development of renewable energy in Poland”, where the stakeholders first issued demands for greater support of the new sector (Podrygala 2008) :72). EC BREC experts were also instrumental in the adoption of a parliamentary resolution on “the increase in use of energy from renewable sources” (Sejm 1999), where the Sejm (lower chamber) called on the government to prepare mid- and long-term goals of RE shares in the energy mix, adopt a strategy for the development of the RES sector, harmonize the new RE policy with the country’s energy and environmental policies and to create favorable legal and economic conditions for a growing and active participation of new private, civil society, cooperative and communal stakeholders in the expansion of dispersed energy production (EC BREC 2000).

The 1997 elections brought a victory of the center-right and a coalition government, headed by Jerzy Buzek, supported by a parliamentary majority of the Solidarity Electoral Action (AWS) and Freedom Union (UW), both rooted in the anti-communist “Solidarity” trade union movement. In an ordinance of the Minister of Economy from 1999 the support mechanism was reshaped to a Renewable Energy Obligation – a *quota scheme* (Jankowska 2010: 167). Energy distributors were obliged to buy all the renewable energy available in their distribution region at a price equal to the highest energy tariff of that company. As Jankowska and Ancygier note, the change in support mechanisms can be interpreted as the result of both horizontal and top-down Europeanization: at the time many EU member states (to which Poland aspired) adopted quota mechanisms, and additionally, since the 1995 White Paper on the European Energy Policy (European Commission 1995), the Commission visibly favored that mechanism as a means of policy harmonization (Jankowska, Ancygier 2017), although the later 1997 White Paper did not specify any particular favored instrument (European Commission 1997).

It is clear, however, that Polish energy policy debates were influenced by the European Union already before the accession. The European Commission’s White Paper from 1995 and Green Paper from 1997 set the tone of parliamentary discussions around the important 1997 Energy Law – the last comprehensive energy legislation in the country (all legislation discussed further in this chapter are either ministerial ordinances or amendments). Jerzy Buzek (later to become president of the

European Parliament and proponent of an “energy community”), and his government already displayed visible signs of the “Europeanization” of Poland’s energy policy (Ancygier, 2013: 240-1).

4.2 Phase II – 2000-2004 – Pre-accession conditionality

The quota mechanism was intended to help Poland achieve its ambitious RES development goals mentioned in the “Development Strategy of Renewable Energy Sector” of 2000 prepared by the Ministry of Environment in reaction to the 1999 parliamentary resolution. The strategy was also prepared with strong inputs from EC BREC, and suggested that a new support scheme, based on “certificates, bidding competitions or tenders” (Ministry of Environment 2000), was to be designed by the Ministry of Economy. The quota mechanism was reformed in December 2000 with an ordinance by the Ministry of Economy (Ministry of Economy 2000), setting targets for total RE share in the electricity market – initially at 2.4% in 2001, set to increase to 7.5% by 2010 and 14% in 2020 (the details were again redrawn in an ordinance of the Ministry of Economy, Labor and Social Policy in May 2003), signaling that the obligation will be annulled when Poland becomes a member of the EU (Ministry of Economy 2003; Green Energy Poland 2017). However, following negotiations between Poland and the relevant EU institutions in 2002/2003, the provisions of this document as well as the 7.5% target for gross electricity consumption from RES by 2010 were included in the EU Enlargement treaty as well as the Directive 2001/77/EC, making the legally binding for Poland – a fact that made the target a “key driving force for development of further legislation and for the increase in the amount of renewable electricity in Poland” (Wisniewski in Jankowska 2010, p. 167).

After the 2001 elections, won by the Democratic Left Alliance (SLD) together with Labor Union (UP), and the agrarian Polish People’s Party (PSL), the new coalition government lead by Leszek Miller had a different approach to developing RES than the one previously outlined in long term energy strategies. The coalition saw a visible tension between two interest groups: the coal mining sector close to SLD-UP and the farmers represented by PSL. Although investment in bioenergy was described as beneficial for the development of agricultural areas, the previously favored wind energy was considered to be detrimental for the Polish economy: not only had it to be developed on the basis of imported products, but it would also replace jobs created in the conventional energy sector.

Nevertheless, as a new EU member, joining in May 2004, Poland had to conform with the Renewable Energy Directive 2001/77/EC and align its renewables strategy with the Union’s emerging climate policy goals. Both the Buzek and Miller governments were clearly pro-European and eager to comply with EU regulations. It was also bound by emission reductions agreed in the Kyoto Protocol and the UNFCCC, which Poland ratified already in 1994. Under its provisions, Poland was to reduce its greenhouse gas emissions by 6% (compared to 1988 levels), while it was achieving a 30% decrease already at that time, due to massive structural changes in its economy and heavy industry (closing down plants). This meant that international climate policy was not really an incentive to reform the domestic energy system and expand renewables, even though Poland’s economy is one of the most GHG intensive in Europe (Jankowska 2010, p. 166).² The 2003 policy document “Poland’s Climate Policy” adopted by the Ministry of Environment helped streamline climate policy efforts, but did not contain any provisions for a move to low-carbon generation (REF).

One has to note, however, that the Polish public debate is characterized by a lack of awareness on climate issues (Jankowska 2010, p. 164). While climate policy is discussed, there is very little variation of positions between the political parties. Marcinkiewicz and Tosun (Marcinkiewicz, Tosun 2015), in a study of parliamentary speeches between 1997 and 2014, have importantly found that a general enthusiasm for climate protection has gradually given way to a wide skepticism to EU

² Carbon intensity of the Polish power sector (787 gCO₂/kWh) is the second highest in the EU and over twice as high as the EU’s on average (352 gCO₂/kWh). Despite significant improvements in the air quality in the 1990s, in 2012 Poland was the largest contributor to air pollution in the EU relative to its national economic output.

climate and energy regulation, and the views of all political parties seem to *converge* in a climate-sceptical stance.

Already in 2001 Miller's government commissioned EC BREC/IMBER with drafting an Renewable Energy Act, envisioned by the 2000 Strategy, and meant to implement the directive, with its efforts combined with discussions in the parliamentary committee for the environment, and later the Environment Ministry. The first full draft was produced in July 2003. RES sector organizations, industrial interest groups and NGOs commented on the draft which was returned to the Ministry for further proceeding. However, on 12 November 2003 the Department of Instruments for Environmental Protection sent the drafting team a completely new draft, changing the balance between RE technologies to be supported, visibly giving more competence to the transmission and distribution system operators and downplaying the role of local governments and dispersed energy producers. The new draft was subjected to a new round of consultations, but while these were ongoing, on 22 December the Department prepared yet another draft, asking the stakeholders to send in their comments within one day (Grużewski 2004). This was met with an outrage among the interest groups concerned, and after heated discussions in the Ministry, another amended draft was sent out for consultations – but renewable energy organizations and environmental groups were not included, while conventional energy industry companies were. At the time, the head of the Department was Wojciech Jaworski, formerly an employee of the national operator's (PSE) development office, an engineer linked to the conventional power sector since the early 1980s – and his role in Poland's energy governance and policymaking was described as a “personal union” between the energy industry and government (Grużewski 2004). The revised draft was, again, rejected after governmental reorganization – in May 2004 Miller's cabinet was replaced with a new one formed by Marek Belka, with a new Minister of Environment (Jankowska, Ancygier 2017), and the (debatable) transposition of 2001/77/EC was conducted through ordinances and amendments (Ancygier, 2013: 246; compare (ClientEarth 2013) .

4.3 Phase III – 2005-2009 – Navigating EU waters

Parliamentary elections in September 2005 re-shuffled the political scene considerably, bringing an eclectic coalition of the conservative-right Law and Justice (PiS), nationalist League of Polish Families (LPR) and agrarian-populist Self-Defense of the Republic of Poland (SRP) into power, with a government headed by Kazimierz Marcinkiewicz of PiS (replaced after only 9 months by PiS chairman, Jaroslaw Kaczynski). The coalition lasted only two years, and in 2007 early elections were held, bringing the liberal-conservative Civic Platform (PO) and agrarian PSL into power, with Donald Tusk forming the new government.

Work on a new RE law, compliant with EU regulations, continued. With some delay, in October 2005, Sejm adopted a “Renewable Energy Act” – in fact an amendment of the 1997 Energy Law and the 2001 Environmental Protection Law (Sejm 2005). The new policy document introduced a quota mechanism combined with tradable “green certificates”, which obliged producers of energy to generate a certain percentage of their power from renewable sources. Those companies that did not generate enough electricity from renewable sources were obliged to cover the difference by purchasing green certificates sold by the operators of renewable energy power plants or pay a “substitution fee” – which was transferred to a governmental pool used for investment in RE and EE projects. Thus investors in renewable sources benefitted from two sources of income: the sale of electricity and trade with green certificates (Ancygier, 2013, 280-291). The burden of the system was moved from energy distributors to producers (although ultimately it was still up to the consumers to pay the bill).

The major issue with this mechanism was equal treatment of all sources of energy without taking into consideration their environmental impact, upfront installation costs or development potential. The quota mechanism guaranteed an identical price for all renewable sources of energy. This led to windfall profit for those investing in the cheapest sources of energy and practically no chance for more expensive energy from photovoltaic panels to develop.

Most important was however an earlier decision (already in 2004) to treat biomass co-firing in coal plants as a renewable energy source – which is in line with EU regulations. Under the “green certificates”, energy coming from biomass burnt in old coal-fired power plants and decades-old large hydro-power plants was rewarded in the same way as wind and solar energy. Since there was no differentiation depending on the source of energy and the size of the production unit, smaller installations, such as PV plants or wind energy had no or little chance to develop.

Poland’s “pet renewable” – biogas – usually identified as the most stable and locally beneficial technology boosting both employment and the country’s large agricultural production, also turned out to be a loser in the new system. In 2009 the Tusk government (with agrarian PSL’s Waldemar Pawlak as deputy prime minister and minister of economy) proposed an initiative dubbed “a biogas plant in every commune” (*gmina*), which was to result in a 0.7-3 MW biogas power and/or heat production plant in every locality by 2020. The main goal of this policy initiative was increased energy independence at the local level, contributing to the country’s climate policy obligations and grass-root economic development. While local governments were very favorable of RES (Ancygier, Szulecki 2014b) the project was impeded by the lack of strategic thinking, weak commitment on the side of the government and unfavorable support mechanisms. In a country of some 2500 local communities, by late 2015 there were only 57 biogas plants (Golonko 2015).

The system was also inherently unstable, as income for investors depended both on the price of electricity and the price of green certificates (operating like equity with a price set by the energy exchange – TGE S.A.), both of which could fall dramatically. The price (in PLN per MWh) fluctuated between almost 300 in early 2012 down to an all-time-low of 100 in mid-2013, back to 150 in 2014 and again down to 100 in 2015 – with particular volatility in 2013. Price drops were linked to an oversupply of certificates (reaching 18 TWh in 2015) – with increasing RE capacity and increasing volumes of co-firing. Additionally, other types of certificates (red and yellow for high-efficiency cogeneration) influenced the price of green certificates, until they were withdrawn in late 2013.³ The “substitution fee” – which was fixed by the national regulator each year – added to the general business instability, because under low prices it was cheaper and simpler for producers to pay the fee to the regulator than buy certificates, meaning that some of the funds that would otherwise end up in RE investor’s pockets went to the governmental fund. This overall high risk made investment possible only at a higher rate of return, which made the quota system more expensive per unit of invested capacity than a system based on the feed-in tariffs.

The design of the support mechanism for renewables in Poland determined the main winners and losers of the shifts in the energy sector. Incumbent energy companies received “green certificates” for energy produced in their decades old hydro-power plants and for burning biomass in coal-fired power plants, and so they constituted the main beneficiaries of the support mechanism. Importantly, the new system coincided with a fundamental shift in the Polish energy market. Due to EU pressures, Poland was encouraged to consolidate its existing energy producers – until then usually single power plants running as semi-public companies – into large industrial energy consortia. That was the push which in 2006-2007 led to the formation of the “big four”: Polska Grupa Energetyczna (PGE), Tauron, Enea and Energa. This consolidation had tremendous impact on the political economy and organizational field of the Polish energy sector.

4.4 Phase IV – 2010-2016 – Domestic struggle and EU assertiveness

In the early 2000s the Ministry of Environment was instrumental in setting ambitious renewable energy targets for 2010 and 2020, however due to the opposition of the Ministry of Economy the instruments necessary to achieve these targets have never been implemented. Difference of opinions between the Minister of Environment, Maciej Nowicki, who called biomass co-firing “technological and economic nonsense”, and Prime Minister Tusk, led to Nowicki’s resignation and ultimate

³ In April 2017 the price of certificates hit rock bottom, with 25 PLN per GWh. Numerous renewable energy producers, whose mortgage calculations assumed an average price around 180 PLN, were at that time facing bankruptcy.

transfer of competences to deal with renewable energy policy to the Ministry of Economy. The opposition against limiting support for biomass co-firing came mainly from the Ministry of Treasury, which managed the state-owned energy companies: the Polish Energy Group (PGE S.A.), Tauron Polish Energy (Tauron), ENEA and ENERGA. As pointed out by IEO's head Grzegorz Wiśniewski, „due to the lack of meaningful actors, national energy companies became the most important beneficiary of the energy policy” and “influential actors representing the interests of the energy groups intermingle with state’s administration and over the years influence national policy and regulations. [...] One could have the impression, that the national “champions” do not defend national interests, but rather that the state defends their interests” (Wiśniewski 2013).

While the national debate seemed gridlocked, discussions around the new EU RE Directive were also very limited, as most resources of the government focused on the ETS Directive (Jankowska, Ancygier 2017). Faced with the RE Directive 2009/28/EC already in place, the government’s strategy was only to water down its provisions in national legislation, avoiding the alternation of the existing system for as long as possible. With mounting pressure from different lobbies to reform the system, a National Action Plan for energy from renewable sources was submitted to the European Commission in December 2010, half a year after the deadline (Ministry of Economy 2010). The Plan proposed that Poland achieved its RES target with wind energy development, biomass co-firing and a new 100MW hydro power plant, clearly intended for large industrial players to contribute (Jankowska 2012). It also stated that regulations concerning development of renewable sources of energy “will be included in the bill on energy from renewable sources that is going to be adopted in 2011” (Ministry of Economy, 2010, p. 37).

At that time, the ETS debate helped to establish a clear link between energy and climate policy, but also meant that the dominant skeptical attitude of the energy industry has spilled over to renewable regulation. The government began relying on own experts or a narrow group of trusted consultancies – most importantly EnergSys, an apparently independent think-tank established by energy engineers with a background in the conventional energy sector, which, however, by 2013 gained the status of the governments first-choice reporting body. While its expertise was continuously challenged by RE stakeholders and environmental NGOs, the role of a bridge between policymakers and industrial interests gave it unprecedented agenda setting power.⁴

Work on a comprehensive Renewable Energy Act restarted in 2011, with the aim of fully transposing the new RE Directive 2009/28/EC and streamlining the rules and regulations for the growing RE sector. This was meant to be part of a larger “Energy Three-Pack” – a joint and coordinated reform of all energy related legislation, including a long belated update of the 1997 Energy Law, the Gas Act and the RE Act (plus some separate, but significant regulation on infrastructure corridors and critical infrastructure, related to transmission grids). A direct push to revise the existing legislation came from the European Commission, which threatened Poland with a proceeding before the European Court of Justice for non-implementing the Directive.

In December 2011 a draft of the Renewable Energy Law that included radical changes to the existing support mechanism was introduced. In March 2012 a special Renewable Energy Department was created in the Ministry of Economy to deal with the implementation of the European renewable energy legislation in Poland. After a strong critique of the 2011 proposal, another, significantly changed draft of the RE Act was presented in July 2012. After public consultation, a proposal to introduce feed-in tariffs for smaller installations (under 200 kW) and significantly reduce and ultimately completely abolish support for hydro power plants and biomass co-firing, was presented by the Director of the Department, and confirmed by the Minister (IEO 2016). The IEO was asked to provide an analysis of the economic consequences of the proposed FiT, and the conclusions were included in two further versions of the draft Act, in October 2012.

Meanwhile, due to the mounting pressures from the Commission, a parliamentary project of a “small three-pack”- a provisional set of temporary amendments to the Energy Law, was introduced

⁴ In 2016 the main expert of EnergSys, Boleslaw Jankowski, became the vice-president of the state-controlled PGE energy company.

in the Sejm, moving the attention away from the draft Renewable Energy Act evolving within the Ministry of Economy/ The “small three-pack” was adopted by the parliament as a novelization in July 2013 (IEO 2016). It dropped feed-in tariffs and opted for the continued support for biomass co-firing and large hydro power plants, even if at a lower level. The assumption was that the “green certificate” system is functional, but needs adjustments – and these were to be achieved through technologically specific values of “green certificates”: e.g. for each MWh produced in cheap co-firing only 0.5 certificate would be granted, compared to 2.0 for the same amount of energy coming from PV. The ideas were received with some support by the different renewable energy lobbies. However, think-tanks and industrial institutes like IEO and confederation of employers “Lewiatan” noted that there are barriers for small-scale RE investment on the market which are not going to be overcome by the quota system.

Legislative and economic insecurity was matched with bleak perspectives for renewable development painted by the government. In March 2013 Tusk stated that Poland would search for a path „safest and cheapest for the citizens” and aims at fulfilling the 15% target for 2020 – „nothing beyond that” (PAP 2013). This statement is very important, as it not only underlines that that EU obligations are the only real driver of RE support in Poland, but also that the renewable energy policy mix to emerge should give the government control over energy price and constrain the expansion of renewables. That further discouraged investors from constructing production facilities in Poland. Therefore most of the wind turbines and PV panels are still coming from imports, leaving the domestic RE industry weak. Because of the complicated support mechanism, discrimination against prosumers and lack of any preferences for cooperatives, private, smaller investors could not benefit from RES development. At the same time there was a strong willingness to invest in renewables at the local level. According to a survey conducted among local authorities for 69% of them investment in renewables means “chance for development” whereas for 61% renewables are associated with the “investment in the future” (Szulecki and Ancygier, 2014). A somewhat darker-toned interpretation points to many reported cases of local level corruption, in which permits for wind farms were obtained despite local resistance and through murky links between developers and local authorities. Often the location of new turbines was the land owned by the local politicians or their family members – as a report from the independent national High Control Chamber pointed out (NIK, 2014).

While the debate in Poland lasted, and all signals seemed to suggest that some sort of a compromise is going to be reached, the policy climate in the EU was also changing – moving away from direct state aid and towards “market based” mechanisms, however fuzzy the concept would turn out in practice. In November 2013 a completely new version of the draft Renewable Energy Act was presented by the Ministry of Economy, erasing two years of drafting and consultations. The project was prepared by a different body within the government – a team in the Chancellery of the Prime Minister, headed by former premier Jan Krzysztof Bielecki, chief economic advisor to Donald Tusk. The draft was strongly influenced by the Polish Committee on Electric Energy, representing the interests of national energy companies (IEO 2016). It replaced the quota mechanism with *auctioning*, without differentiating between “old” and “new” renewables. The Ministry refused to conduct a new round of consultations, claiming that these were already held, albeit regarding a very different draft Act. Between January and April 2014 the government works internally on a series of additional amendments to the draft, while RE sector organizations point out that the new draft does not constitute a transposition of the 2009 Directive. The government (Council of Ministers) confirmed the draft in April and in May sent it to the European Commission, launching a notification procedure – which is soon discontinued. In July the draft Act is received by the Sejm, where at meeting of the Extraordinary Commission for energy and energy resources, the opposition (PiS) MPs demand a public hearing on the draft, claiming that public consultations to date were “fictitious” and the project is “written by lobbyists” (PAP 2014b). The public hearing was held in September 2014, with a record of 129 participants (Sejm 2014), and it has been praised by legislative process experts as the only consultation process to date with a correctly formulated goal (Kopińska et al. 2014).

In January 2015 the long awaited Renewable Energy Act was finally voted in the Sejm. First auctions were scheduled for January 2016. The Act was criticized for its complexity (144 pages of detailed regulations) and high upfront costs necessary to participate in the auction, which makes it difficult for new actors, such as municipalities and cooperatives, to participate. The law also included fixed feed-in tariffs for installations below 10 kW. Installations that can benefit from these tariffs are limited to the first 800 MW connected to the grid, but the tariff provided by the bill were quite generous – 0.75 PLN/kWh for <3kW and 0.65 for between 3 and 10 kW installations (with the average price in 2015 at 0.56 PLN).

Also because of that tariff, discussions soon re-ignited around the shape of prosumer regulations. The tariff was not part of the governmental draft, it was introduced by an amendment proposed by PSL's MP Artur Bramora, supported by unprecedented media campaign by NGOs and RE industry actors. The amendment was adopted against the will of the ruling party – Civic Platform – with an ad hoc majority formed around the issue including the coalition junior partner PSL and the opposition. The government and PO tried to topple the amendment in the Senate, which proposed its own, watered down prosumers amendment, but in a second vote in February 2015 the Sejm adopted the Renewable Energy Act including the prosumer tariff.

The initial FiT was replaced with a guaranteed price at the level of the average whole-sale price from the preceding year. This “tariff” – or rather a simple market access guarantee – combined with preferential credit offered through the public Environmental Protection Bank (BOŚ) and National Economy Bank (BGK) was enough to attract wide interest due to the falling prices of PV installations.

Presidential and parliamentary elections of June and October 2015 respectively brought a new political situation, putting the long-term opposition party, the conservative PiS in full control of the state administration at the national and regional level. A new Ministry of Energy took over energy governance competences from the Ministry of Economy (which was dismantled) as well as some competences from the Ministry of Environment and Min. of Treasury. Understaffed, the new ministry was unable to continue legislative work on RES policy. On March 8. 2016 the longtime director of the Renewable Energy Department, Janusz Pilitowski, was dismissed.

Already in December 2015 a new amendment to the Renewable Energy Act passed through the parliament. It extended the “green certificate” system and postponed auctions until 1 July 2016. Further, it confirmed that micro-installations capacity would be capped at 800 MW, but that this was still subject to change if the Minister decided that the growth of new sources was too quick.

This extended the systemic instability for larger investors and left the angry prosumers in a limbo. Those who invested or took mortgage on their home PV's were further worrying, because PiS – initially seen as supportive for prosumers (cf. Szulecki and Ancygier, 2015), began sending some quite negative signals in leaked drafts and interviews. New ideas for a revised FiT included changing it to a peculiar “negative premium” – in which the prosumer would receive not a fixed tariff or last-year's average price, but only 70-80% of that price, and that this could be adjusted annually by the regulator.

In June 2016 a new amendment was adopted by the Sejm, solely with the votes of the PiS majority. The legislation was submitted as a “deputy initiative” by a group of PiS MPs – a format that allows to bypass all public consultations, as it assumes that MPs are by definition elected representatives of their constituencies. Compared to Donald Tusk's second term, the number of these MP initiatives has quadrupled. Only two public hearings were held over the first year.⁵ The draft amendment further claimed that major stakeholders and NGOs were consulted – which was not true.

Under the new regulations, micro-installations are subject to a net-metering mechanism, receiving no payment at all; rather for each 1 kWh delivered to the grid could get 0.35-0.7 kWh back. This “in

⁵ Furthermore, the projects are proceeded in parliamentary commissions and plenary hearings in a special urgent mode, which speeds up the process, so that on average during the first year of PiS rule, the time between submitting a project and voting in the legislation was only 38 days (Obywatelskie Forum Legislacji 2017)

kind” payment was justified by the services that the distribution grid provides to the prosumers. Also the auctioning systems was changed. Co-firing was not only included, but the biomass-to-coal ratio needed to qualify as “renewable energy” was changed from 30/70 to 20/80%. As to the tenders, the government is to decide what kind of RES will be required each year through an ordinance, defining the amount of energy to be bought in an auction and the technology. This leaves no incentive for new investments, since the horizon is only 1 year.

In a separate bill, dubbed the “windmill act”, the PiS majority (known for its open hostility towards onshore wind investments) introduced the “10H principle” – setting the distance from the nearest household (or natural conservation area) to the windmill at ten times the base and rotor height (meaning 1.5-2 km). A higher real estate tax for wind farms and a stricter control and permitting regime was also introduced, sparking concerns over the future of the entire onshore wind sector. ClientEarth noted that this regulation is harsher than for coal-fired plants (WNP 7.03.2016). The Polish Wind Energy Association (PSEW) points out those such drastic measures are unique in the world. The industry feared that the “Windmill act’s” distance provisions would be used retroactively and necessitate dismantling of existing wind farms – which does not seem to be the case though.

The first auctioning ordinance was published in November 2016. The government did not reach the maximum allowed level of percentage of RES in energy mix defined in the legislation. The auctions will cover 20.4% of energy mix whereas it was possible to reach 26 % according to the new legislation (Redakcja 2016). In October the Ministry of Energy published a list of reference prices per MWh of energy (basis for auctioning), distinguishing 21 RES categories based on technology and size. In January 2017 these prices for 2017 were corrected – the price for biogas, biomass co-firing was increased, while large wind-farms and PV installations were to receive less for the power they produce.

4.5 Capacity mechanisms and generation adequacy, 2013-2016

Poland’s electricity market is energy only, however, due to problems with adequacy and reliability of the system, as well as investment instability, there has been a discussion about introducing some additional capacity payments already since 2009 (Sadowska 2015). Capacity measures introduced in 2013-14 by the national TSO include the “cold reserve” (aka *cold intervention reserve*) where the TSO pays selected energy producers to keep their capacity ready for use in case of a sudden shift in the system. In 2014 a contract was signed with the hydro plant “Dolna Odra” owner PGE for a “cold reserve” of 454 MW to be made available in 2016 and 2017 (PAP 2014a). Also in 2014 an *operating capacity reserve* was introduced, and its “budget” was set at 450 mln PLN in 2014 and up to 500 mln in 2016. In 2014 the TSO has also started organizing *demand side response* tenders (Sadowska 2015).

An independent energy think tank pointed out that this “reserve”, which pays an additional premium to plants which also participate in the regular and balancing markets, is in fact a form of Capacity Remuneration Mechanism (CRM), and does not seem to be playing the role prescribed to it – but rather provides additional income to the major energy companies (Chojnacki 2016). However, continuously dropping wholesale energy prices, inevitably increasing RE capacity, ageing infrastructure and strict EU industrial emissions regulations are all cited as reasons for introducing an explicit capacity market, which would support the conventional baseload generation with additional funding. This is linked to the falling profits from “green certificates” – soon to be discontinued (although auctions for co-firing area also set to be organized).

While it was the TSO that initiated the debate, improved prognoses on capacity adequacy have decreased the urgency of such measures (Sadowska 2015). Unsurprisingly, however, it has been picked up by the industry itself. The energy sector lobby has been pushing for a capacity market already since 2014, but the PO government resisted these postulates, fearing a hike in energy prices.

With the Commission already looking at European capacity mechanisms, and inquiring into the Polish “operational reserve”, government’s representatives suggested that the capacity market could be called a “decarbonization reserve” to frame it in climate-friendly terms – even though the main goal would be to keep coal plants online and support vertically integrated mining/energy conglomerates should they be created (Zasuń 2015).

The industry commissioned E&Y consultancy to develop a proposal for a capacity market, which was submitted to the Ministry of Economy and the regulator in November 2014. The proposal shows awareness of the constraints imposed by 2014 EU state aid guidelines, and so it develops two options, drawing on existing capacity measures in Europe: the UK centralized model and the French decentralized model (Sadowska 2015).

In 2016, the new Ministry of Energy proposed a framework for a market-wide capacity mechanism. A full draft was sent out for consultations in December 2016, proposing that all capacity over 2MW would be subject to certification and allowed to take part in capacity auctions (Zasuń, Derski 2016). The TSO will then project the capacity needed in a given year, the Minister of Energy would design the tenders while a “capacity fee” to finance the mechanism would be set by the national regulator and added to electricity bills of final consumer – industrial and household. The project was not, however, consulted with the Commission, and omitted two important guidelines. In November 2016 the Commission proposed that in future capacity measures, most carbon intensive generation (above 550 kg/MWh) should be excluded, which effectively bans coal plants from capacity mechanisms (Neslen 2016). The Polish project also does not envision capacity in neighboring countries and interconnectors to be part of the system – an important requirement for the Commission which seeks to support regional solutions, harmonization and cross-border generation adequacy measures.

5 Assessment

The initial renewable policy, based on a general FiT, had relatively little impact on the system in absolute capacity volume. Replaced by an RE obligation, the policy became clearly focused on meeting EU energy targets for 2020. Until 2005 the administrative push on new RE deployment was technologically neutral, but focused the obligations and burdens on the energy distributors. In that way, the state-owned energy companies were not directly benefitting from support, and market access was at least in theory equal for all players. The quota system and “green certificates” introduced in 2005 provided a market-based solution, in which the government had no control over certificate prices (and no way of reducing their volatility) nor the technological choices and capacities delivered by the market participants. The only limit for RE capacity was based on the permits granted by the TSO. In 2014 the operator announced that no new permits for onshore wind would be issued.

The 2015 RE Act introduced important changes in the system, giving the regulator and the ministries much closer control over both the price and the capacity. For micro-installations, this means an in-kind payment, keeping new capacity at well below the 800 MW threshold in the foreseeable future. In principle, however, the capacity depends on the market actors and the ministry could increase the cap if necessary. For large-scale RE the state has full control over (or actually – also the volume of renewable energy in MWh), for which it organizes tenders according to the perceived need, and can count on the lowest available price, which also means that cheaper technologies, including biomass co-firing, will be preferred over more expensive ones.

As the chronological discussion has shown, European influence in different forms played a vital role in shaping Poland’s RE policy. It is probably not an exaggeration to say that without the EU, Poland might not have had RE support at all. The following section discusses the role of the European environment in giving a push for RE support and shaping the available policy choices, while domestic level factors – the political and organizational field – are discussed as explanatory factors accounting for the solutions adopted in the end.

a) European environment

Without external EU pressure, Jankowska argues, “there would not have been an energy and climate policy in Poland even half as ambitious as it is now” (Jankowska 2010, p. 168; also Ceglaz and Ancygier 2015, p. 137). In other words, EU influence explains the very fact that Poland has had renewable support in the first place. In the first phase (until 1999), renewable energy still seemed rather a distant, futuristic idea, which was associated with modernization. At the time of political, social and economic transition from communism, “the West”, epitomized by the EU, was perceived as a role model, and so the dominant diffusion mechanism was emulation (Ancygier, Szulecki 2014a). As Poland’s EU membership moved from a distant possibility to negotiable reality, EU conditionality and the necessity to comply with *acquis communautaire* became a necessity, and Europeanization, understood as harmonization of domestic policy with EU norms and expectations accelerated. After accession, the carrot and stick of membership and conditionality disappeared, but learning to navigate the new halls of power in Brussels took time. As we have seen in the chronological story, before 2010 Poland was still building up expertise and ability in energy policy making and negotiations, with most attention paid to the ETS. Finally, experience and a growing sense of political importance gave the government in Warsaw assertiveness which on the EU arena led to two vetoes in energy and climate policy negotiations, while domestically – to understanding which kind of actions might cause a reaction from the European Commission (and ultimately the European Court of Justice) and those with which a member state can easily get away.

We can therefore argue that the European environment has been a fundamentally important factor leading to the establishment of RE support in Poland, and pushing the country to adopt a relatively ambitious renewable energy target. The fact that this target is met with very conservative means – mostly with biomass co-firing – is also the result of EU regulations which allow that practice to be counted as renewable energy generation. Finally, both vertical and horizontal Europeanization are shaping the “menu” of available support schemes, and adding pressure on the Polish authorities not to stand out from the rest of member states. When quotas/green certificates were perceived as the optimal and preferred support scheme in many EU member states, Poland too adopted that policy. When cost-efficiency discussions dominated the agenda (with Poland’s important input) and state aid guidelines became an important factor limiting the available choice on the “menu”, auctioning was the new policy adopted in 2015. It is, however, important to bear in mind that these general labels can vary greatly in the way they are organized, implemented and changed overtime. However, given the overlap between organizational and political fields, and the apparent closure of the policy process, the fact that the Polish system has in fact seen change and plenty of instability – around proposed, though not implemented renewable support mechanisms – can be explained with the continuous impact of EU institutions and regulation.

One cannot overlook EU influence in other areas, which had repercussions for the Polish renewable energy mix. While EU unbundling and electricity market regulation has had a positive effect on the nascent RE industry, one cannot help noticing, that the creation of the state-energy-industrial complex is also the result of EU pressures on horizontal and vertical consolidation (cf. Jankowska and Ancygier 2017). Furthermore, EU insistence on societal consultations (especially in areas linked to environmental politics), is a major factor in the involvement of a wider set of stakeholders in drafting and evaluating policy proposals (cf. Cianciara 2015).

b) Political field

It seems quite clear that prior to the 2011-2013 debate and the 2014/2015 legislation, renewable energy in Poland was de-politicized, and the main governing method was ministerial. This is supported by strong evidence – between 1997 and 2014 (with the exclusion of the 2005 RE Act), most regulation was conducted through ministerial ordinances. The debate opened in 2011 and gained salience in 2013. This seems to have moved the governing mode to legislative – since the 2014 amendment and the 2015 RE Act all new regulation is conducted as amendments and amendments to amendments, passed through the parliament. The 2011-2014 phase can be seen as a time of increasing politicization. However, with the single-party majority rule after October 2015 “legislative” becomes a problematic concept. It could actually be argued that what we are witnessing now is a move from legislative to ministerial governing.

The political struggle immediately leading to the adoption of the 2015 Renewable Energy Act, with an ad hoc coalition forming around the so called prosumer amendment, suggests that politicization of RE policy is uneven. While there is indeed a growing public awareness, strengthened by the experience of neighboring Germany (and its external Energiewende promotion initiatives), that prosumer regulation can be beneficial for new energy stakeholder groups (farmers, individual house owners, communities, cooperatives), large scale RE development and support receive less attention. In fact, as the “wind mill act” has shown, the NIMBY attitude and lack of public acceptance for more controversial renewable generation (mostly wind and biogas), separates micro and large scale generation as two different issues (Ancygier, Szulecki 2014b)

While there is a lot of chaotic drafting and legislative action between 2011 and 2016, which resembles a lengthy soap opera with a lot of emotional moves but little real action, in reality there is relatively little political competition in the classic sense. Political party programs reveal weak focus on renewable energy. Throughout that period, the ephemeral Palikot Movement (in parliament between 2011 and 2015) was the strongest advocate of renewable generation. The agrarian PSL has visibly supported biogas as an ideal choice for the farmers, while the position of Law and justice is very difficult to pinpoint – struggling between strong prosumer attitudes to a very anti prosumer legislative change in 2016.

c) Organizational field

The organizational field continues to be segmented – there is one dominant professional logic of a centralized and state-steered system based on conventional (coal) baseload generation. This can be replaced by nuclear, but renewables seem to be out of the question (at least as a foundation of the system) for all the major sectoral players. The organizational field thus has strong policy impact, as the process of policymaking is characterized by regulatory capture – the ministries and legislators are designing policies that benefit the four incumbent state-owned energy companies. This is not surprising, since they are all strategic national companies that either bring significant profits to the Treasury or can be charged with strategic missions such as saving the Polish coal sector.

The priority of the organizational field over the political field, which is especially visible in energy policy, is set on both structural and institutional-cultural dimensions. Structurally, the existence of the “big four” energy companies, their degree of market domination and importance for the state Treasury, creates an important material constraint. That, however, is also linked to concentration of information and the way communication functions in the policy process. Jankowska and Ancygier (2017) refer to this phenomenon as a “policy monopoly” – a situation in which “a definable institutional structure is responsible for policymaking, and that structure limits access of other actors to the policy process” (Baumgartner, Jones 2009) – an element that we have clearly observed in the way consultations over most draft legislative changes were designed to limit participation to only the semi-public industrial players. Furthermore, a particular “issue definition or a belief system is associated with the institution” (Baumgartner and Jones 2009, *ibidem*). To express this in the language of political/organizational field theory, there is a significant overlap between the organizational and the political field, and the dominant institutional logics of the organizational “conquers” the political. This is additionally reinforced through the eyebrow raising ease with which individuals cross the frontier between political posts (parliamentarians, political ministerial officials) and organizational roles (leadership and supervisory positions in state-owned and private companies), without raising alerts about a conflict of interests. This ease of passing through the proverbial revolving door is not seen as a conflict of interest, not a problem (or indeed – is not seen to exist) simply because the interest of the large energy industry players is equated to the interest of the state.⁷ That last argument can be explained in purely rational terms, drawing on the way the political economy of the Polish energy sector is organized. If (partly) state owned energy companies generate income that can be used by the state budget, the state has an incentive to design policy protecting their business model, safeguarding them from external threats (like EU climate policy) and maximizing budgetary profits. A switch to dispersed renewables would require a complete paradigm change – and so the challenging of the existing hegemonic professional logic with the one currently associated with the nascent prosumer lobby and green NGOs. Alternatively, large scale industrial RE can be integrated into the centralized model, a move that seems inevitable given the technological and economic macro-processes as well as the post-Paris direction of global climate policy.

A telling story of just how the organizational field is constraining is related to the former president of one of the “big four” companies – PGE’s Marek Woszczyk. As the head of the national regulator (URE), Woszczyk was “a strong proponent of innovation, prosumerism, smart grids”. He regretted the cumbersome process of connecting small installations to the grid. “I believe the obstacle is a particular mental barrier – resistance from the incumbent companies who keep functioning according to the same traditional model of centralized energy production for years” – he said in an interview (Zasuń 2016). When he actually became the head of one of those incumbents, it turned out that institutional inertia and the organizational field’s “mental barrier” were too difficult to overcome. Faced with economic impossibility of delivering profits for the Treasury, constructing the massive Opole coal plant and bailing-out the coal mine sector he stepped down in March 2016.

There are few signs indicating that any change is likely in the organizational field. Most importantly – changes in government do not seem to bring about any changes in the overall approach to energy

⁷ Interview with head of the IEO, 16 March 2016, Warsaw.

policy. Even the otherwise drastic political rupture when the Civic Platform liberal-conservative government was, after 8 years in power, replaced by the conservative-nationalist Law and Justice, is an example of continuity in energy and climate policy. As a “destructive” opposition, PiS opposed most PO policies – with the important exemption of a climate-sceptic stance on EU energy and climate and coal-sector bail outs. Attitudes towards climate change are a unifying epistemic element in Polish politics (see: Marcinkiewicz and Tosun, 2015), but that is only one component of the cognitive context for RE policy. At the same time, critics point out that the governance model in Polish energy, comprising both the epistemic paradigm, the organizational structure and management procedures, is rooted “in a 19th century model” (Chojnacki 2015).

This situation is linked to yet another feature, this time of the intersection of the political and organizational field. Using a compatible approach – systems theory – Dudzińska has conducted a wide study of the policy process in Poland, and concluded that it is an “operationally closed system which ... does not accept stimuli from the external environment. Its outputs are generated through processing information which comes almost exclusively from internal circulation” (Dudzińska 2015). In our case, this means that political contestation is limited by the concentration of preference-shaping information, which is limited to the expertise of friendly (i.e. governmental and accredited) stakeholders.

6 Conclusion

According to a survey conducted in eight countries 22% of Poles considered climate change as “definitely not” or “probably not” a severe threat to mankind: the highest level for all the participating countries. Unlike in neighboring Germany, in Poland until relatively recently there was no strong bottom-up movement promoting development of renewables. On their part, representatives of the government repeatedly underlined, that renewables development is necessary due to Poland’s membership in the EU, and not for the sake of climate policy. “Poland dismisses decarbonization” – energy minister Krzysztof Tchórzewski said in an interview in May 2016 – “we will follow our own path” (Tchórzewski 2016).

My preliminary findings suggest that the European environment has been crucial in pushing for stronger RES support policies, while the inherently instable domestic political field explains the soap opera of renewable energy policy legislation: drafts, new plans, amendments and legal instability. On the other hand, the choice of particular instruments, within the confines of options acceptable by the EU, is best explained by the stable and segmented organizational field, dominated by a professional logic of the centralized, engineer-lead coal sector, which in turn is linked to the importance of the country’s resource endowment.

In these conditions, the current renewable energy policy mix seems optimal for the actors dominating the organizational field, and a deep paradigm shift and overturning the political economy of the energy sector would be needed to change that. The strong position of the state-owned energy companies in shaping Poland’s energy policy has led to a situation, in which support mechanisms for renewables have been designed in a way, which would not create additional competition for the four biggest energy companies. This has a negative impact on the prospects of democratization of the power system in Poland, but the current choice of instruments in the renewable energy policy mix appears perfectly rational from the point of view of policymakers and the utilities alike.

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