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# Is energy policy a public issue? Nuclear power in Poland and implications for energy transitions in Central and East Europe

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### ABSTRACT

In this article we assess public communication on nuclear energy in Poland against four theoretical ideal types of the public sphere in modern democracies. We investigate law, media discourse, and civil society as dimensions of the public sphere, and use the analysis to draw out broader implications for energy transitions. We conclude that although in the legal and civil society realms there are some elements of the participatory liberal type, the current functioning of the public sphere is rather aligned with the representative liberal type and does not further energy transition. The representative liberal type is supported by mainstream media, focused mainly on economic and political elites. This is why initiatives of grassroots movements are not reflected in public discourse, neither in traditional media nor on the Internet. Even if they appear, their impact is limited because of weak exposition. Our research offers reflections on how energy transition may be furthered via the public sphere. The article brings a sociological and socio-legal analysis of the public sphere to energy policy research. By presenting the unique case of potential new nuclear power plant build in Poland, we contribute an integrative view of energy policy as a public governance issue in contemporary Central and East European democracies.

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## 1. Introduction

Energy issues are undoubtedly among the most important contemporary global challenges. Europe must respond to increasing energy needs of its economies in conditions of growing uncertainty [30]. According to Szulecki and Wesphal [70], the European Union (EU) lacks common governance, and divergent policies of individual countries often make common action impossible. Enlarged with Central East European (CEE) members, the EU is comprised of states with significant diversity of energy systems. This diversity stems from factors including energy resources, climate, political goals, level of economic development, business culture, as well as social aspects like historical backgrounds, lifestyles, and social integration [46].

Debate on energy transition has been strongly economized recently because of economic crisis. The vision of an energy future based on the triangle “economy–energy security–sustainable development,” first dominated by the economic dimension, has been

recently affected by the question of energy security [70]. The latter is understood mainly in geopolitical terms as a result of the Ukrainian–Russian conflict. As a consequence, emphasis on sustainable development is weakening. Policy goals tend to be defined in shorter-term perspectives rather longer-term visions of complex development. Thus, there is a need to revisit the European debate on a common energy future and energy transition.

Energy transition refers not only to technological-economic transformation, but also to the sphere of social thinking about energy and individual practices. The character of public discourse is therefore crucial, as the expression of interests, demands, values, and needs of various social actors. We focus on discursive practices to investigate “the meaning-making [...] processes involved in: (1) the creation and elaboration of new laws and policy decisions; (2) the action of mediating systems [...] such as the media or environmental NGOs; and (3) the reception of legal innovations by individuals, groups, and communities who are required to change everyday ideas and practices” (Castro and Mouro [75], p. 363, in [9]). Thus we treat the public sphere not just as a normative ideal but as “an observable set of practices of how citizens organize and communicate values into political decisions” ([22]:88).

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In this article we investigate law, media discourse, and civil society as three dimensions of the public sphere.<sup>1</sup> Our main aim is to assess the Polish nuclear debate vis-à-vis ideal types of the public sphere in modern democracy, in order to draw out broader implications for energy transitions. We bring a sociological and socio-legal analysis of the public sphere to energy policy research, and, by presenting the unique case of potential new nuclear build in Poland, contribute an integrative view of energy policy as a public governance issue in contemporary CEE democracies.

The article proceeds as follows. First we discuss how nuclear power enters the debate on energy transitions. After providing some context about Poland within the European energy landscape, we explain our notion of the public sphere, which largely follows the theoretical types of the public sphere in modern democracies elaborated and operationalized by Ferree Marx et al. [23]. We briefly describe our methods, then move into the results of our analysis of socio-legal, media discourse, and civil society dimensions as spaces for deliberation. We conclude that although in the legal and civil society realms there are some elements of the participatory liberal type, the current functioning the public sphere is rather aligned with the representative liberal democracy type and explain why this does not further energy transition. On the basis of our research, we offer reflections on how energy transition may be furthered via the public sphere.

## 2. Polish nuclear debate and European energy transition

Araújo ([1]:112) defines an energy transition as “a shift in the nature or pattern of how energy is utilized within a system,” which can include changes at any level, that is relevant for societal practices and preferences, infrastructure and oversight. Changes can be associated with fuel type, access, sourcing, delivery, reliability, end use, as well as overall orientation of the system. Miller et al. [43] propose a more expansive conceptual framework to be used in energy policy conversations, “socio-energy systems.” This framework recognizes that the conceptualization and design of energy systems is simultaneously a conceptualization and design of societal arrangements. It moves us away from framing energy transitions too narrowly, for example as a shift in fuels source for energy production.

Therefore “energy transitions” refer to significant transformations in socio-energy systems. Through this lens, fuel and technology, absent a concomitant attention to societal systems, become less diagnostic of energy transitions, even if mainstream policy discussions about energy suggest otherwise. As those authors show, technology and fuel source may remain the same, and yet shifting from a purchase to lease model may transform the socio-energy regime, because large numbers of energy consumers become producers. Likewise, replacing a coal-fired power plant with a nuclear-fired equivalent may have little impact on the socio-energy regime, which may remain a centralized electrical utility operating as a regulated monopoly energy producer and distribu-

<sup>1</sup> The notion of public sphere, and of civil society as well, despite numerous attempts to define it, remains one of the most difficult concepts in the social sciences to operationalize [29]. Benhabib [3] offers some reflection on the mutual relations between the concept of public sphere, law, and civil society in different theoretical traditions. Usually, law is located somewhere between the public and private sphere [2] or between system and life world [34], something which secures their independence but simultaneously enables mutual connections. In our conception, the public sphere is a space for deliberation, and three dimensions of it have different functionalities: law is a space where formal conditions for deliberation are shaped and possible positions of its participants (as well as relations among them) are negotiated and defined, civil society is a space of actions and deliberations raised by citizens, which are not political in the narrow sense, but still public [29]. Media discourse is the space of deliberation where communications, demands, and positions become visible on a mass scale.

tor. The framework challenges intuitive notions that a shift in fuel source necessarily “counts” as an energy transition.

In an approach which also focuses on the relationship between energy systems and social orders, Stirling notes that “ostensibly novel ‘transitions’ may readily end up concealing what are in actuality deeper realignments with existing structures” ([67]:84). Stirling argues that real energy transition requires transformation in incumbent patterns of power and privilege themselves, for these patterns constitute social, economic, and technical knowledge, consequently shaping social understandings of how energy regimes should be scrutinized and what comprises realistic directions for technological change.

The socio-energy framework and Stirling’s contribution are useful in the examination of energy policy debates as they play out in the public sphere in Poland and other CEE countries, countries with particular energy and societal structures as well as relatively recent changes in formal political-economic systems. Analysis of the Polish nuclear power debate through a socio-energy system lens provides purchase on the question of what kind of societal goals are being pursued through this debate. As Polish policy makers attempt to incorporate nuclear into the energy system, what kind of public sphere is being enacted? What sorts of positions, knowledge, and voices become legitimated or marginalized in this public sphere?

Scholars have noted that policy-making in the area of nuclear energy—particularly in the realm of radioactive waste management—has taken a “participative” or “deliberative” turn [6,41]. This turn is characterized by (at least nominally) a move away from a top-down, technocratic approach to nuclear policy-making and governance, and toward a more integrative, “social” approach, in which ideas of partnership, voluntary action, and locality underpin the process of finding sites and solutions for radioactive waste management [6]. Motivations for this move, however, include the need to gain local acceptance for disposal sites in the face of potential citizen resistance.

Opinion management, also called the instrumental function of participation, has been identified as the leading motivation for both industry and government authorities in embracing participation procedures in controversial projects [41,18]. Participation thus becomes a tool for governments or companies to gain information about local opinions in order to adjust their strategy, add legitimacy for policy agendas or decisions already taken, and, perhaps most troubling, to misuse conclusions from one set of participation processes in new political contexts. Ultimately use of participation in this instrumental way may be counterproductive to government objectives to build public trust in state institutions [12]. An important contribution to the participatory approach is work which attempts to overcome the distinction between technical and social [5]. Such work points out that strong opposition between technical and social leads to dominance of professional politicians and marginalization of the most affected stakeholder groups. The unprivileged position of these stakeholders in public communication often leads to expression in protests and demonstrations, making them visible, perhaps, in the public sphere, yet their demands are not necessarily considered.

Radioactive waste management, however, has been treated separately from nuclear energy production, despite being merely the back-end of the nuclear power cycle. Success stories about public participation in radioactive waste management, then, should be treated with caution, not only because they discourage holistic, life-cycle thinking about nuclear power production. In addition, such programs have been used by nuclear industry and government representatives to legitimate nuclear new build (and creation of more wastes), after which commitment to participation wanes and reversion to elitist, technocratic approaches ensues [6,18].

Transition, as conceptualized above, is possible only with the activity of various formal and informal social groups, NGOs, social movements, business institutions, innovators, and so on; otherwise there is little chance of overcoming the strong orientation by lobbying groups who defend the status quo. This means the public sphere should be open for various social actors, who may generate new ideas. It is not sufficient for such actors to be active in the civil society sphere. Their activity should be secured by and present within the legal realm as well as visible in the media space. Subsequently, these actors' ideas, even if they do not come from hegemonic economic or political interests, can be publicly discussed.

### 3. Poland in the European energy landscape

Some historical factors and consequences of Poland's economic development make it similar to other CEE countries. Like other post-communist countries, Poland has had to go through deep structural transformation. An important aspect of this remains transformation of energy systems, which, after the period of Soviet domination, were inefficient, centralized, highly polluting and dependent on Russia [8]. The set of reforms implemented by governments after 1989 were generally supported by new democratic media, and the general direction of transformation was "transformation by imitation," catching up with economically developed Western countries. Despite differences in energy systems among these countries,<sup>2</sup> strong geopolitical and economic orientations can be observed in debates about their energy futures.

The Polish energy system is based primarily on coal. In 2014, over 56% of consumed energy came from coal (24% petroleum 15% gas, 5% renewable energy sources, RES). Over 82% of energy produced came from coal or lignite, and despite an increasing share, RES remain under 10%. The prognosis of increased energy needs along with European climate policy obligate Poland to make changes to its energy system, the most controversial of which is resigning from coal as a main resource.

According to recent research, Poland has a centralized energy system with a high level of paternalism in decision-making [71]. The coal mining industry after 1989 was characterized by clientelism and corruption [28]. Polish dialogue on energy issues, despite many public consultation processes, has been based mainly on the elitist model [66,73,68] privileging positions of experts, politicians, and government. The discourse is strongly economized, and the perspective of sustainable development is hardly present. Additionally, discourse around CO<sub>2</sub> emissions is built on binary oppositions, most often the national interest versus unfairly imposed EU obligations. The process of creating energy policy tends to be paternalistic as well. The government takes the most important decisions during closed meetings. The results are published thereafter, legitimized by various experts, and only then subjected to public consultation.

The Polish Energy Policy from 2005 asserted the goal of "creating conditions for stable and sustainable development of the energy sector that support national economic development, energy state security and meet the needs of enterprises and private households." The main operational goals were: state energy security, increasing competitiveness and energy efficiency of the national economy within the European energy market, and limiting the energy system's environmental impact. The Energy Policy till 2030 defines three main directions: growth of energy and fossil fuel security; diversification of the structure of energy production by implement-

ing nuclear energy (NE); development of RES. The announcement of implementing NE in the document is, next to shale gas, a significant proposed change to Poland's existing energy production and long-term energy policy.

### 4. The notion of public sphere

We consider energy transition in reference to the concept of public sphere as that which focuses on "the role of public communication in facilitating or hindering accountability and responsiveness in the decision-making process" ([23];289). The deliberative turn in theories of democracy makes the notion of citizen participation a central concept with normative connotations. It is understood as a core of democracy, going back to its ancient roots, and as a factor in the quality of politics. The notion of participation is gradable. It can refer to representatives chosen by citizens or to direct participation of all citizens in decision-making processes. The four traditions of public sphere operationalized into normative criteria by Ferree Marx et al. [23]—representative liberal theory, participatory liberal theory, deliberative theory and constructivism—provide a basis upon which to examine the NE debate in Poland. Operationalization is achieved through four main criteria: who participates, what is the form and content of contributions, how do actors communicate, and what is the expected or desired outcome of the process. We briefly characterize each ideal type according to these criteria; then in Section 6 we use this criteria to evaluate the Polish NE debate.

In the representative liberal democracy tradition, political and socio-economic elites play an active role in public discourse [23]. Politicians, media, and industry representatives are supported by experts, whose task is to advise governmental elites to take wise decisions. Citizens are not obligated to participate in political decisions, nor are they expected to, since they are perceived in the majority as not sufficiently informed or interested. Their activity is limited to voting and choosing the best representatives. According to this ideal type, a topic can be discussed in the public sphere only if it is assumed to be important. Key actors define what is important according to the rule of proportionality, which means that organizations representing the most numerous citizens are privileged to express their opinion in media space. Media should operate according to the rule of transparency: inform people what is going on and explain why. A rational manner of communication is preferable, while an emotional one is often presented as contradicting "cool reason" and hence treated less seriously. The expected outcome is to take a political decision, which is a moment of closing the discussion, after which media should move on to other issues. The main risk here seems to be an exclusive public sphere and resistance to change in contradiction to hegemonic elite interests.

In the liberal participatory democracy tradition, the role of mass media is different: it is mainly to encourage, mobilize, and empower citizens to participate. Media are expected to facilitate the inclusion of diverse speakers and interests. There is less focus on elites and more on grassroots movements', membership organizations', and individuals' perspectives. Experts play a different role than in the previous model; they serve publics by delivering expert knowledge, presented as one of many types of knowledge taken into account in decision-making processes. Citizens are important participants in such a debate, next to experts, journalists, and politicians. Any issue important to citizens can be taken up in public discourse. Civil society plays an important role, because social movements have real influence on alternative frames of debates in the public sphere. A wide range of communication styles are acceptable within this tradition; communication can be more emotional, even polemic, because of its engaging power. In this tradition, taking a decision

<sup>2</sup> The Czech Republic and Slovakia represent hybrid energy systems based on energy mixes of coal, gas, nuclear energy and RES. Latvia represents a type of sustainable energy system based on a high degree of RES. Belarus, Russia, Romania and Ukraine can be described as gas energy types Łucki et al. [46].



does not necessarily mean closing the discussion, as participation is an active, ongoing process. Thus a risk is premature closure.

Discursive theory puts consensus in the center. Deliberation is not necessary all the time, but if issues “are novel or normatively significant,” they should be deliberated by the community [23]:300). Deliberation is based on mutual respect and readiness for dialogue. Dialogue means each participant is willing to be convinced by others if they use better (more reasonable) arguments. It is not a negotiation of interests. Mass media and grassroots organizations support readiness for dialogue and mutual respect among actors taking different positions. As with the liberal participatory democracy tradition, risks include premature closure, dispersed responsibility for a decision, domination and degradation of the deliberation space by competing interests, false consensus, and instrumental use of peripheral actors to particular ideological aims (e.g. claims to representativeness of certain communities or constituents).

Constructionist theory is focused on inequalities hidden behind arguments and categories used in the public sphere. “While the liberal participatory tradition wants grassroots actors to mobilize and speak to media on media’s terms, the constructionist tradition wants the media to step out of its routines for dealing with the powerful and actively seek out other perspectives at the grassroots” ([23]:310). Media should investigate forms of dominance or manipulation and serve social inclusion. The most characteristic rules are inclusion, recognition of distinctive points of view, and creativity, understood as the delivery of new ideas. The risk here is a chaotic public sphere rife with misunderstanding and limited possibilities for consensus-building.

In all four models, the public sphere is distinguished from the political system; however, the constructivist model undermines this distinction. Also in all models the following categories fulfill different roles in the public sphere: media, grassroots organizations or social movements, and so called “ordinary citizens.” In our analysis, we go beyond understanding them only as actors or actants, but propose understanding them as functional spaces for deliberation, in which issues become “public.” Therefore we add one more category, law.

To define law, we draw on the work of socio-legal scholars (see [63]), particularly those who have theorized legal mobilization [42,61]. The legal mobilization model provides a framework for understanding law as social practice, with a pluralistic and contingent character. The model shifts the focus of legal analysis away from the initiative of state officials and to the initiative of citizens. Legal discourses are understood as constitutive of interactions among various social actors, and they “provide relatively malleable resources that are routinely reconstructed as citizens seek to advance their interests and designs in everyday life” ([42]:7). The model, recognizing long developing power relations, seeks to “analyze the role of legal rights both as strategic resource and as a constraint for collective efforts to transform or ‘reconstitute’ relationships among social groups” [42]. Such a conception of law rests on several assumptions which are significant to inclusion of it as a dimension of the public sphere: that legal practices are not limited to formal state forums, that the legal order is pluralistic rather than monolithic, and that both official and informal legal norms and practices make up one variable dimension in a complex mix of factors which structure societal understandings and actions. In short, law is more than merely an institution or a fixed, inherited medium of communication between various individuals and groups in society. It is a “potentially plastic” set of symbols, discourses, and practices that offer a means for various actors to work out the practical, material distribution of social burdens and benefits, as well as express certain aspirations and demands [42].

This dynamic, social definition of law developed in legal mobilization theory facilitates a conceptualization of it as part of the

public sphere. Studied alongside the media and civil society, law included as an element of the public sphere can increase our understanding of whether, how, and why energy transitions take place. How social actors shape their role in public sphere and how they understand participation in decisions on NE in Poland are most important for our analysis.

## 5. Aims and methods

The study aimed to investigate three features of the public sphere: the socio-legal, media discourse, and civil society dimensions. Based upon the operationalization presented above, our analysis is framed by four questions:

- Who participates?
- What is the form and content of the contributions?
- How do actors communicate?
- What are the desired or expected outcomes?

We adopted a multi-method approach, which combined emic (inside perspective of ethnographers) and etic (outside perspective of comparative researchers) perspectives, in order to avoid reproduction of expert, outside perspectives Morris et al. [44]. Accordingly, analyses of the socio-legal dimension and media discourse were designed in structured way, with closed coding procedures based on theoretical categories, while the third dimension, civil society, was based on ethnographic participatory-observation, including unstructured interviews with activists, and preparation by members of informal organizations of brochures and unpublished letters. This part of the approach serves to reflect perspectives from “inside” the marginalized space of citizens’ actions and is a result of direct experience and immersion.

Analysis of the socio-legal dimension of the public sphere is based upon data collected in 2013–2014, during which semi-structured interviews were conducted with about 20 respondents in Poland: social movement actors and members of environmental organizations.<sup>3</sup> The interviews consisted of the following main topics: what issues the person/organization worked on; strategies used, when, and why; if how and why legal strategies were used; key cases and why they were significant; if and how the group worked with other organizations; useful laws; access to justice in Poland; depiction of organization activity in the public discourse; main successes and failures.

Data were also collected by attending and observing relevant events in the same period, including: legal hearings, environmental actions, meetings, conferences (including at least two trainings on how to use the Polish administrative legal system, as well as one workshop about public participation in nuclear waste issues, all workshops run by Polish NGOs) and demonstrations. These events were attended by the general public, NGO members, scientific community, public administration, industry, and media representatives. Detailed field notes were taken during and after these events. Legal and policy texts from 2010–present, along with the official NE informational campaigns (2011 informational campaign launched by PGE and March 2012 informational campaign launched by the Polish Ministry of Economy) were also analyzed using qualitative content analysis. Data analysis followed the responsive interviewing model [59].

Media discourse analyses were conducted in 2007–2014. We report two phases, the first being qualitative and quantitative analyses of press articles published in three of the most popular Polish

<sup>3</sup> Of various types: registered as associations or foundations, more and less “professionalized,” more and less specialized in law/a particular issue area.

dailies<sup>4</sup> and three of the most popular Polish weeklies.<sup>5</sup> Two hundred and ninety articles were randomized from 990 total articles proportionally for each year. The main categories used in analyses were: exposition of nuclear energy, attitudes toward it, key individual and collective actors, their discursive roles, symbolic resources used in discourse, mechanisms of inclusion and exclusion, main topics and their contexts, language characteristics.

The second phase was sociological quality discourse analyses of all media content in chosen periods between April 2013 and April 2014. The criteria of qualifying texts, broadcasts and Internet content were any reference to nuclear energy. The last phase was most extensive; all types of informational media were monitored for a full 12 months.<sup>6</sup> Moments of most frequent coverage of nuclear topics were subsequently identified, and all publications within those moments were analyzed using situational discourse analysis [14]. This method allows for the reconstruction of social world visions and arenas via discursive maps which illustrate actors, positions, requisites, resources, symbols, other human and non-human elements of the discursive situation, and the mutual relations between them. All analyses were assisted by Provalis Research software (QDA Miner and WordStat).

The civil society dimension analysis results from ethnographic participatory observation by a representative of a citizens' monitoring organization between 2009 and 2013. Our operational definition of civil society is the set of non-governmental organizations, informal groups and social movements that comprise the bottom-up initiatives taken by people in order to realize collective actions. The analyzed material includes notes from closed and open meetings organized by social organizations, public hearings, thematic conferences, unstructured interviews with activists, and other events related to nuclear energy organized by social activists. It also includes brochures, letters, and other documents prepared to facilitate discussion of NE in the public sphere.

## 6. Results

### 6.1. Who participates?

#### 6.1.1. Socio-legal dimension

The legal realm comprises a set of normative values shared by society. It is an arena where various societal actors express themselves, particularly if they have been excluded from doing so in other realms. Socio-legal scholars have made a convincing argument that legal rights mobilization can and should be conceptualized as political participation [74,11]. Through their role in allowing citizens who might otherwise be excluded from domestic political and legal systems to claim rights and enforce laws, courts and legal instruments should be included in the study of political participation, and more broadly, democratic governance [11,72]. In a more closed deliberative setting we may look to legal

mobilization<sup>7</sup> by civil society groups, for evidence of attempts by more minority positions to enter the nuclear discourse.

In the legal realm the actors—government/investor on the one hand and civil society on the other—are both using legal discourses and processes, but speaking past each other. Civil society asserts rights to participate, government (re) assures civil society it is taking responsible decisions. On the one hand are efforts taken by the government to put in place or update existing legal and institutional infrastructure to facilitate the development of nuclear power project in Poland. On the other hand are efforts taken by civil society actors to mobilize the law to contest the government's practices. A rather robust set of citizens' rights are supposed to allow for participation in the government's energy policy making process.<sup>8</sup> In practice, they serve as a tool to react to them once they have already been set into motion with much institutional and financial inertia. We see elements of the law (legal opportunity structures related to public participation) as mediators of public dialogue in accordance with liberal participatory theory [23]. However, these are trumped by the more formidable legal representation and activity on the part of the executive and the judicial. The executive sets the temporal and substantive scope of the conversation, and the judicial plays a gatekeeping role as to who may even enter the discursive space. These maintain a public sphere more in keeping with the liberal representative type.

#### 6.1.2. Media discourse

The public discourse on NE in Poland began in the 1980s. Despite political conditions which did not foster democratic debate and lack of societal trust in mass media, the manner of presenting NE influenced the ways in which the problem was discussed. Some older arguments have resurfaced today: the idea of civilizational progress which "frames the nuclear power issue in terms of society's commitment to technological development and economic growth" ([27]:4), in contrast to Chernobyl as a negative symbol. In 2009, the idea of building a nuclear plant was reintroduced with a Parliamentary Act committed to beginning work on the Polish Nuclear Energy Program (PNEP). The "Polish Energy Policy till 2025," approved by the Council of Ministers in 2005, includes building the first nuclear power plant in Poland. The site designation process is ongoing.

Comparing the 1980s and the period 2007–2012, the obvious differences are a result of historical, economic and political changes, but there are also many similarities. The position of nuclear experts is not as strong as previously, but they still have a significant role in communication. The decreasing role of experts, rather than in the sense used by Choi et al. [13], results from a change of the field where the discourse is rooted: the dominance of technology is replaced by dominance of economy. Economists are also a more available source for journalists than nuclear physicists, and the language of economics is not as difficult for readers as that of physics. Risk remains a keyword in energy discourse; albeit in a different way than previously. It remains in the field of technology; but no longer refers to human health; or even the natural environment; but rather to the risk of blackout. The most exposed risk is dependency on political support. The risk of drawing back from nuclear energy by the state (as in Germany) is an important barrier

<sup>4</sup> Gazeta Wyborcza, Rzeczpospolita, Fakt.

<sup>5</sup> Wprost, Polityka, Newsweek.

<sup>6</sup> TV: TVP1, TVP2, TVN, Polsat, TVP Szczecin, TVP Łódź, TVP Katowice, TVP Lublin, TVP Gdańsk, TVP Białystok, TVP Katowice, TVP Poznań; Radio: RMF, Radio ZET, PR1, PR3, local radio: Lublin, Gdańsk, Szczecin, Białystok, Katowice, Łódź, Poznań; Press: nationwide and local dailies GazetaWyborcza, Rzeczpospolita, Dziennik Polski, Polska—Głos Wielkopolski, Kurier Szczeciński—Zachodniopomorskie, Polska — Dziennik Bałtycki—Pomorskie, Gazeta Olsztyńska—Warmińsko-Mazurskie, Gazeta Współczesna—Podlaskie, Dziennik Wschodni—Lubelskie, Super Nowości—Podkarpackie, Dziennik Polski (Kraków)—Małopolskie, Echo Dnia—Świętokrzyskie, Polska—Dziennik Zachodni—Śląskie, Nowa Trybuna Opolska—Opolskie, Polska —Gazeta Wrocławska—Dolnośląskie, Gazeta Lubuska (Gorzów)—Lubuskie, Gazeta Pomorska (Bydgoszcz)—Kujawsko-Pomorskie, Polska—Dziennik Łódzki—Łódzkie, Economic press: Parkiet, Puls Biznesu; Weeklies: Wprost, Polityka, Newsweek, Gość Niedzielny; Internet: 50 most popular websites, social media.

<sup>7</sup> Defined as the process by which claims are made about rights. Demands may be made in some institutional site in order to advance certain interests and/or to transform or "reconstitute" social relationships. This definition is drawn from ([42], pp. 5–12); it establishes a definition relevant to analyze the ways in which organized movements seek broad social change, and it focuses on the initiative of citizens.

<sup>8</sup> Anchored in domestic law and augmented by EU and international law: Polish law on access to information on the environment, EU Directive 2001/42/EC, Aarhus Convention, UN Espoo Convention, Kyiv Protocol on Strategic Environmental Assessment.

for investors who cannot calculate costs and profits. Furthermore; cost-effective analyses point out that security mechanisms; which are obligatory in power plants after the Fukushima disaster; make nuclear power plant construction very expensive.

After political transition, politics became more visible in media discourse. Experts supported such discourses, continuing to use words of civilizational progress and economic development. As the landscape of attitudes toward nuclear became more differentiated in media, new elements can be noted: strong opposition between development of the domestic economy and hostility toward EU climate policy goals. Often NE is presented as the only way to secure economic growth and CO<sub>2</sub> emissions reductions.

NGOs, think tanks, and informal organizations, mainly ecological, can be added to the map of social actors. Their presence in media discourse was, however, very poor in comparison to dominant governmental actors or politicians. The media space for citizens or local communities was marginal. As values shifted, quality of life and sustainability were absent. Representatives of local communities were sometimes described in media, but rarely in a way that gave them a possibility to express themselves. Usually knowledge (or ignorance) and interests were ascribed to them by other actors. Sometimes media gave them space for expression, especially when their actions created controversies, but opportunities for them to present their viewpoint were limited.

The weakening position of nuclear scientific experts was also observed in the third period of analysis, 2013–2014. Their media exposition decreased, and their opinions were more differentiated. Expertise only manifested itself in brief comments. However, it still cannot be described as having been treated equally with citizens' opinions. The dominant category of actor remained politicians: governmental and parties' representatives. In the analyzed period, investors and business representatives became more visible.

### 6.2.3. Civil society

A handful of groups in Poland follow the topic of nuclear energy. Almost all of those which are engaged and truly grassroots oppose NE, and their arguments are grounded in the knowledge accumulated by the global anti-atomic movement in recent decades. Most of the groups are environmental NGOs, but a few small groups focused strictly on nuclear energy have emerged, too. They have decent outreach and some impact. Solidarity against the introduction of NE in Poland was expressed in a collective position of about 70 environmental organizations from all over Poland adopted at a meeting held in 2010.<sup>9</sup>

## 6.2. What is the form and content of communication, and how do actors communicate?

### 6.2.1. Socio-legal dimension<sup>10</sup>

In the legal dimension of the public sphere, incumbent socio-energy systems are largely defended, and the field for deliberation is subsequently narrowed. At the same time, however, law creates possibilities for members of the public to voice concerns over or contest government policies. This can open the field for deliberation by inviting questioning of perspectives perceived as obvious or natural. The public sphere in law is constructed "from the top" by the government's executive and legislative activity, yet attempts

have also been made to re-construct it "from below" using administrative legal action tied to broader anti-nuclear mobilization at various sites and jurisdictional levels.

A draft Polish Nuclear Energy Program (PNEP) was developed by the Polish Ministry of Economy dated January 2011 and was approved by the Polish Council of Ministers January 2014 PMoE, 2014 [54]. The draft was made available on the Ministry of Economy's website and used in public consultations. The Atomic Law<sup>11</sup> provides the legislative framework to support the development of the nuclear power program. It identifies the National Atomic Energy Agency (NAEA)<sup>12</sup> as the main nuclear regulatory body. Many implementing regulations have been issued between 2011 and 2013. Over 30 regulations were issued by the Council of Ministers and other Ministries in this time period, largely related to nuclear and radiological safety. The regulations established legal and institutional frameworks largely based on these institutions: the Ministry of Economy, the NAEA, the investors/operators of the plant, and the Radioactive Waste Management Unit. The Strategic Environmental Impact Assessment for the national radioactive waste and spent nuclear fuel plan [55] was being consulted at the time of this writing. A cascade of related initiatives included support for higher education/technical university studies and expansion of R&D infrastructure for nuclear power and fuel. Work around the PNEP also foresaw a two year informational-educational campaign, launched by the Ministry of Economy in 2012, which was supposed to guarantee societal acceptance of the construction of a nuclear plant at the moment of site determination (PMoE [56]). Another informational-educational campaign, run by PGE, the main investor, began in 2011.

State actors repurposed the history surrounding the proposed but never completed nuclear power plant (NPP) in Żarnowiec, downplaying strong opposition stemming from the Chernobyl disaster and economic failures. Instead Żarnowiec is held up as a basis of already existing infrastructure and experience upon which to develop nuclear power. Internationally embedded nuclear institutions provide external validation for the Polish government [39]. Similarly, a slew of legislative activity is devoted to nuclear safety, perpetuating dominant ideas about responsibility and expertise which ultimately shield the government and nuclear investor/operator/industry from more fundamental critique. As Ottinger [47] shows, societal campaigns can be undermined and scientists' or engineers' authority over scientific, health and environmental concerns can be re-established by defining expertise not necessarily as infallibility, but as responsibility. As long as the development of the technology is done by experts responsibly, government and industry claims may be shielded from critique, thereby undermining grassroots movements and environmental activism.

In April 2014, Greenpeace Poland lodged a complaint to the Polish Prime Minister about the nuclear program [31]. Greenpeace claimed that the way the program was prepared violated Polish and international law, and that key aspects of the environmental impact assessment (EIS) were omitted. The complaint pointed out the lack of comparative analysis with alternative energy policy directions, in particular related to energy efficiency and development of renewables. Also according to the complaint, the Ministry of Economy did not conduct a systematic analysis of environmental, societal, and economic impacts of various energy options; the program did not take into account the possibility of any serious accidents occurring in nuclear plants; and the program did not sufficiently describe how spent nuclear fuel and other radioactive wastes will be stored [31]. The group demanded that the government declare the nuclear

<sup>9</sup> "Position of environmental NGOs on the government's plan to introduce nuclear energy in Poland," 15 May 2010 <<http://www.atomstop.pl/koalicjantyatomowa.php>> accessed 27 October 2015.

<sup>10</sup> This section touches upon the Polish government's attempts in the past decade to introduce nuclear power into Poland's energy mix. An exhaustive list of the institutional and legislative activities is beyond this paper's scope (but see Polish Ministry of Economy 2014; [45]; we focus on legal processes surrounding PNEP adoption and the power plant site selection process.

<sup>11</sup> As amended in 2011.

<sup>12</sup> In Polish: Państwowa Agencja Atomistyki, PAA.



program invalid and prepare a new EIS complete with omitted analyses and full public participation. Subsequently, in August 2014 Greenpeace lodged a case in the Provincial Administrative Court in Warsaw. As in the earlier complaint, the organization asserted the government violated international, EU, and domestic laws. It called on the court to render the decision issued by the Council of Ministers invalid and asked for a new EIS for the PNEP to be prepared.

These data show how the public sphere is constructed by the government and what attempts were made for it to be reconstructed “from below,” through legal processes.<sup>13</sup> This is also the case in the siting decision process. In terms of a wider societal discussion on energy policy, this process was already significantly narrowed by the executive/investor—the question was not whether to introduce nuclear power, but where.

Alongside the PNEP, the Ministry of Economy worked on selecting potential locations for the nuclear power plant. To this end, the Ministry accepted suggestions from local government marshalls and other societal actors (mostly personnel of energy firms or existing power plants), and added locations that had been under consideration in the 1980s. Twenty seven potential locations were ranked according to 17 categories [52]. Żarnowiec and Warta-Klempicz, two of the highest ranking sites, were given extra points because of localization studies conducted in the 1980s.

State-affiliated actors emphasized the agreement of the ranking process with international recommendations. External validation and legitimacy were assigned to decision-making processes which occurred largely behind closed doors. During announcement of the site rankings, a consulting firm's board president assured that locations were evaluated according to international criteria. One criterion was the attitude of the local community to NE. He explained that Żarnowiec and Warta-Klempicz received additional points because “residents there already know this issue” [57]. The siting decision process was entirely concentrated in the executive and later in the investor. Local communities and civil society were ascribed homogenous and static viewpoints on nuclear power.

Half a year later, PGE presented its own list of three potential locations for the first Polish nuclear plant. It included a new site which had not figured into the Ministry's ranking and had not previously been considered: [49]. In response, the local government in Mielno gmina unanimously passed a resolution opposing the siting of a nuclear power plant there (December 2011). Residents held a referendum in February 2012, with 57 percent of those eligible taking part. Ninety-four percent of those who voted (2237 people) responded “no.” The group who organized the referendum characterized the issue not only as a local one affecting the Baltic Sea tourism industry upon which Mielno relies, but as one with national and international implications [40]. They also pointed out the lack of public dialogue in making a decision to develop NE in Poland at all, much less the siting.

Certain members of civil society perceived that a decision was made from the top, to be followed mechanically [40]. The referendum, and other attempts to mobilize the law by civil society groups (irrespective of whether they gain a formal win in state venues) can be understood as an attempt by those not included in the discussion at an earlier stage to register their arguments. Publicity and discussion arising from the legal actions can impact larger debate about nuclear power in Poland, beyond the narrow focus of the referendum or lawsuit, which deal with one site or permit decision. Legal mobilization is thus a potential link between micro and macro

deliberation, albeit with the dangers of the macro discursive sphere undermining citizen deliberation [41].

Besides holding a referendum, residents of Mielno gmina brought a complaint about the siting decision to the Provincial Administrative Court in Warsaw. They demanded that the decision be reversed.<sup>14</sup> The court did not accept the complaint, but the complainants appealed the decision to the Supreme Administrative Court. The hearing is pending at the time of writing. As with the referendum, the immediate goal of the lawsuit was to remove Gąski from the list of potential sites. Yet when those involved in the legal actions have an opportunity to speak, it becomes clear that the goals—even within the groups mobilizing the law—is not uniform. For some the goal is not necessarily to secure a formal legal victory, nor do they frame it as a purely local matter. This is in contrast to how the media paints these issues.

## 6.2.2. Media discourse

Following the types presented earlier, the Polish nuclear discourse is similar to the representative liberal type. It is based on elitist communication dominated by authorities, experts, and media (see Ref. [7]). It serves to inform citizens about the decision taken by their representatives rather than consult them. Polish journalists usually inform society about what is going on in the public sphere and secure transparency by uncovering cases of corruption and the like. However, media discourse is often developed after taking the decision, not before, as should be done in the ideal model of representative democracy.

The form of debate is more similar to a model of negotiating interests than to one of seeking consensus. Journalists are focused on investigating business and political affairs rather than on developing debate. Organizations are not presented in accordance with their social support, but rather in accordance with their power (business, political) or communication appeal. In some ways, media fail to deliver on the rules of transparency and proportionality.

The notion of risk is connected with the geopolitical situation and energy state security. In contrast to the 1980s, media discourse on security in recent years is no longer located in the technological field (although the problem of radioactive waste remains unresolved). Rather it is found in the intersection of politics and economics, connotes state independence and stability of energy prices and delivery. The reason is the geopolitically unstable situation near the eastern Polish border.

Generally the nuclear discourse in media is closed on the macro level—that is, it refers to the macro economy or state policy. The data reveal many binary oppositions, for example: coal vs. atom, ecology vs. economy, environmental protection vs. energy independence. The way of presenting it is abstract and separated from everyday experience. The citizen's “lifeworld” is represented in few situations, for example, social protest or increasing energy prices. Additionally, communication on a systemic level by reference mainly to macro-economic and political problems means that media discourse contains reference points for political or economic decisions, but it does not open discussion space for citizens.

At the same time, media do not take the role suggested by the paradigm of deliberative democracy, which is active inclusion of peripheral or excluded actors, and supporting deliberation by compelling actors coming from different fields (ecology–economy for example) to refer to each other's arguments. They neither meet the rules of the discursive approach nor constructivist theory: new ideas generated by peripheral actors are not exposed. Effort is not taken to identify distinctive points of view. Positions are presented

<sup>13</sup> For more in-depth analysis regarding the way environmental law is being mobilized in the period since entrance into the EU, including analysis of the salient Rospuda case and its implications, see Szulecka and Szulecki [69] and Grobelski [32].

<sup>14</sup> Siting decision issued June 2013 by Zachodniopomorskie Voivodship (Province); Administrative court decision IV SA/Wa 828/14 issued October 8, 2014.

by actors or ascribed to other actors without references to each other, which does not support social dialogue. Actors hardly refer to arguments put forward by others. More often they are mentioned, but subsequently opponents are deprecated or their position is undermined.

Communication style can also be a barrier for NGOs, think tanks, and informal organizations. Peripheral actors are often emotional in their expression. Being provocative or sensational helps them gain media attention. Yet in presenting their views, they mainly refer to values and use prescriptive language (what “should” or “ought to” be). They lose their argumentative power when confronted with economic and political arguments and language referring to actual plans or actions. Nuclear issues are discussed in the field of political and economic power secured by experts, while the peripheral actors’ visions lack enough power to open the field of communication and overcome hegemony by bringing new ideas to it. Marginalized in public discourse, they try to express their position through legal practices (described above) and through mobilizing people to act. They often refer to the European obligation of CO<sub>2</sub> emissions reduction and RES development, which are presented in discourse as restrictive and oppressive (Two press titles illustrating this are: “The goals of CO<sub>2</sub> reduction are a bone of contention” or “Poland is a coal underdog”).

### 6.2.3. Civil society

Some 20 environmental NGOs clustered within the “Climate Coalition” are involved in NE topics to varying degrees. Only a few groups are NE-focused and in opposition to it, examples being “AntiNuclear Initiative” or “EnergiaSynergia.” These were set up in 2009 and 2011, respectively, and they undertook informational and educational activities. They disseminated available knowledge not usually known to the Polish public about risks resulting from NE. Also, coalitions among local communities near proposed NPP locations and some of the above-described groups have been cemented, with the latter offering support (legal and media capacities) in order to add voices of sustainability interests, not only those of a given local community. Three pro-nuclear groups in Poland are nominatively civic; one of them is even grassroots. Probably the most well-known is called “Association of Environmentalists for Nuclear Energy” (SEREN). This relatively small group primarily brings together top nuclear scientists and experts as well as young engineers. These experts are often the same people who work at the nuclear and energy institutions and who prepare major documents for the Polish nuclear power program [62]. Another group is “Forum Atomowe,” a foundation whose activities are sponsored and funded by the Polish Ministry of Economy and some global nuclear companies [26]. They have a significant advantage over the groups opposed to NE and other parts of the public. Their independence is almost never questioned in the media, while anti-nuclear groups are rarely allowed to voice their arguments.

The 20-some NGOs within the Climate Coalition publish position papers on energy-related legal and policy document drafts, as well as organize public meetings on energy policy issues. This activity is not limited to officially announced public consultations. They also advocate positions and convey advice to public administration agencies. All of them argue against NE on various grounds, e.g. comparing benefits of energy efficiency (EE), renewable energy sources (RES) and urging for fast climate solutions. They consider EE and RES safer options which provide energy security for households. Their idea for society’s energy future is based on decentralized energy systems, large numbers of small capacity generators dispersed over local areas, regions, and eventually the whole country.

From the point of view of anti-nuclear groups, the entire process of deciding to implement NE in Poland has neither been transparent nor submitted to fair public scrutiny. Close relations between

the government, engineering, scientific, and business sectors are only the tip of the iceberg. Difficult access to the mainstream media and limited possibilities of expressing doubts color perceptions of official discourse on NE and further the sense that fairness has been neglected. In consequence, anti-nuclear groups have often perceived NE public consultation processes as a façade devoid of substance. They have even refused to take part in them in order not to legitimize false consensus.

Moreover, even if they use legal tools such as the right to information, they often have the impression of being ignored by authorities and media. An example of this is seen in interactions between NGO representatives and the government’s commissioner on NE, Hanna Trojanowska. When asked at a debate held at the Polish Parliament’s (Sejm) Commission on Energy in 2010 whether a portion of public money for nuclear promotion could also be spent on expressing doubts about its implementation, she responded that the funds were very limited, and it would be unwise and counter-productive to give a weapon against the nuclear power program to its enemies. In another instance, Trojanowska, questioned in mid-2012 about the participation of the Polish public in the decision on NPP construction, expressed that “the decision should pertain to the ruling elites, society at large should not be burdened with such decisions.”

### 6.3. Desired or expected outcomes

Attempts to mobilize the law by civil society groups, irrespective of whether they gain a formal victory in state venues, are an attempt to register arguments by those excluded from the discussion. Coalitions of people mobilizing the law, when provided the opportunity to communicate why they do so, reveal a diversity of views. Many who mobilize the law do not expect to “win” their cases. A member of the anti-nuclear coalition expresses wariness of official government channels of citizen participation, including administrative courts:

*... we expected this kind of turn of events. Some of us are convinced that, given the political climate favorable to nuclear proponents, no other court decision would have been possible. Which does not mean that we aren't going to emphasize every step of the way our clear and unwavering position that we are against nuclear" (quoted in Ref. [15]).*

This can be compared with the local government official’s stance, which expresses more confidence in legal institutions and their role in upholding accountability. If the higher court dismisses the case,

*...we will be left with the Constitutional Tribunal and if necessary then we will look there for justice and respect of the rights of direct democracy ...we are counting on the second option. We believe that, the Supreme Administrative Court, as a national court holding the activities of the public administration accountable, will recognize the legitimacy of our arguments" (Olga Roszak-Pezala, quoted in Ref. [15]).*

Ultimately, however, legal channels may build and reinforce the exclusions set up by governmental elites. According to the attorney representing the Mielno gmina,

*"...except the court only took legal regulations and the will of the investor into consideration. [The judges] completely were not interested in social considerations. ...the arguments put forth were identical with those which were presented by the Ministry of Infrastructure and Development. Even the language of argumentation was the same" (Sumińska, quoted in Ref. [58]).*



This assessment of the legal hearing draws attention to the crucial gatekeeping role judges and other state actors play in deciding who can participate in legal processes, who has the right to make claims in relationship to government action, which actions are open for scrutiny, and when.

Gaining entry into legal spaces provides the opportunity to protect other social or environmental spaces. In Poland, the legal opportunity structures are relatively open to citizen groups. However, as Benson [4] shows, “rules of engagement,” dictating when citizens can bring legal cases against the government, are dynamic processes that both expand and contract formal legal spaces. Court rulings about whether a citizen group has sufficiently met these can insulate the executive or government agencies from scrutiny at crucial decision-making or policy planning stages. The effect is to shield the executive branch from judicial review, limit citizens’ ability to challenge government conduct, and augment executive branch discretion. Legal accountability is thus lacking at policy planning stages, arguably the stage where course correction or scrutiny is most consequential. The legal focus gets shifted to particular sites or site-specific projects; as we see in this case of battles over siting, not over energy policy more broadly.

Executive and judicial actions have profound consequences for development of energy systems, even if there is a robust set of legal rights to participation for citizen groups “on paper.” This is why there is a danger in conceptualizing law as a variable in energy transitions too narrowly as a set of rules or court case results. It is important to examine the social context of law, the work being done by various actors to make meaning using the legal realm. Legal restrictions and exclusions from legal spaces like courts are discursive products of interpretation that are contested, even though they are based on seemingly neutral or technical legal doctrines ([4]:234). The legal actions taken in Poland somewhat apprehend the voices of “average citizens,” local communities and local governments—as opposed to national or provincial level executive power holders. There is a discursive dissonance between scales, but also the transnational, European anti-nuclear movement is part of so-called local conflicts. Legal mobilizations can be seen as indicating a push back against an “energy transition” so narrowly conceived by elites.

Both on the part of government and civil society, appeal to international level institutions is used to secure legitimacy. In this case, the internationally connected anti-nuclear movement, albeit with less resources at its disposal, also uses international legal norms for external validation, for example demanding that consultation meet Aarhus Convention criteria that the public must be consulted at an early stage, when all options are still open ([36]; p. 130).

An important question regarding media discourse outcomes is whether media are supporting social participation. Are media encouraging citizens to participate? There are some mechanisms of this, but they are limited. The “ordinary citizen” functions in media as a rhetorical figure. It is a notion used to make binary oppositions with other categories (experts, politicians, journalists, activists). Usually it is a matter of giving face to an issue without deeper analysis of reasons, results, consequences, and so on.

Media hardly ever inform about possibilities to participate nor educate about forms of participation. Our data do not support evidence of media activity toward empowerment, promoting participatory democracy. Even if media refer to the public discussion, these are usually scientific conferences or academic seminars, not public meetings. This does not mean such meetings do not take place, but that media do not report them.

Our results about economization of the discourse and lack of perspective on sustainable development is in accordance with observations of the European public discourse [70]. Such values as quality of life, intergenerational solidarity or social responsibilities in industry are not exposed in Polish nuclear discourse. Journalists

take on the role of witnesses describing what is occurring in the public sphere rather than active commentators. Sometimes, especially on television or the radio, a journalist moderates discussion, but usually this takes the form of contrasting positions, not stimulating dialogue. A positive result gleaned from the data is that media are creating a map of different discursive positions. Proponents and opponents are present; however, the map is rather simplified and static.

We can infer that existence of nuclear discourse is treated by authorities as a sufficient point of reference for the decision on implementing NE. Although decisions are taken behind closed doors, reporting some protests or contestation in the media makes the process transparent enough to claim there is a “nuclear debate.” The debate is in fact rather hermetic. On the one hand the decision to implement NE is presented in a neutral technological context of diversifying the energy mix (next to RES, coal, and gas). On the other, focusing on technological and economic dimensions ignores values and alternative visions to NE. The governmental position, which is pro-nuclear and focused on persuasion, influences the shape of the whole energy discourse. The nuclear topic has strong exposition in media compared to other energy types. It is, next to shale gas, the most often discussed one in recent years. Although media present opposing opinions, they locate them on the peripheries of the public sphere. They are presented in local context, as the problem of particular communities (as with the case of Gąski described above) or as a view limited to particular ecological groups.

For those active in the civil society realm, the model of representative liberal democracy is invalid and far from its analytical type, because of failure in each normative criterion suggested by the theory: transparency, proportionality, expertise, a free market place of ideas, detachment, civility, and closure.

Transparency, in the understanding of civil society actors, means credible information, not only about the decision already taken, but also about the plans and circumstances prior to adopting them, along with readiness on the part of authorities to debate on proposals. It means opening the “black box” of the political process. The media have limited possibilities to do this, and often they are fed by politics.

The second most controversial criterion is expertise. While the representative liberal model prefers this type of reasoning, not all types of expertise are respected. Very often expertise of activists is undermined in the name of lack of objectivity and lack of institutional affiliation. At the same time, numerous connections between dominant experts and business institutions are tolerated. Excluded actors interpret this as symbolic violence. Civility is often defined by powerful actors. The same arguments at times incorporated as within civility norms, other times are ignored as radical claims breaking those norms. An example of this can be seen with RES development: sometimes it is presented as a rational economic issue, and in a different context treated as the irrational vision of an “eco-fanatic.” Limited public consultation or public hearings on the part of the government is seen as pre-mature closure by social activists.

In consequence, social activists may be perceived by the larger public (particularly NE proponents) as treating law and media instrumentally. They, however, consider themselves equal entities having certain rights within the political system to voice their stances, rights won during the overthrow of the Soviet regime in 1989. Some of the anti-nuclear communities living near the NPP candidate sites do not expect dialogue or justice *in the short term* but rather the growth of visibility in society. Only thanks to this can they more effectively mobilize the rest of the population to debate over new investments or political decisions. Most of the NGOs and anti-nuclear groups take it more broadly: in their view, they have vast knowledge which enables them to present options for better

quality of life. With presence in media and legal processes, they build a base of arguments for retrieval by society at large. The arguments touch on the undemocratic character of centralized energy systems, and of NE in particular.

An important function of the NGOs and grassroots organizations is to call for inclusion of excluded actors in the public sphere. They promote citizen participation and encourage people to voice their positions on crucial issues. Thus civil society in Poland, however limited, operates with different models of the public sphere than law or media. It is akin to the set of characteristics described as liberal deliberative democracy. Social movements, NGOs, and grassroots organizations awaken citizen consciousness, and the deliberative turn in Western societies allows them to use these growing expectations for political purpose.

## 7. Conclusions

Deliberative democracy adopts elements of consensus decision-making and majority rule, placing authentic discussion and debate at the center of decision-making processes. Sincere deliberation, not mere voting, is a main source of legitimacy for laws and policies. Literature fine-tuning deliberative democratic theory has proliferated, but a core set of principles for deliberative democracy might be summarized using the following categories: process, maximum inclusiveness/diversity, informed and informative, conscientiousness, and political equality. This list is based on an intersection of deliberative thought: normative political theory on the one hand, and attempts to practically implement legitimate deliberative practice on the other [33,17,16,48,24,25,35].

Many of these theoretical ideal types are practically impossible to attain, not least because they may be grossly incompatible with established modes of policy making and societal structures. We present them not so much as an alternative mode of governance but as one of the many modes that co-exist with others; they provide a productive starting point for reflection on the relationship between models of the public sphere and governance of science and technology, as called for by Hagendijk and Irwin [35]. The presence or absence of these aspects within the Polish nuclear debate would indicate the relative distance of the debate from applying principles of deliberative democracy.

It is worth pointing out the distinction made between micro and macro theories of deliberative democracy; the former focusing more narrowly on deliberation in relatively small groups and the conditions under which the quality of deliberation might be maximized, and the latter focusing on the much larger, messier debate in the public sphere, characterized as the contestation of interrelated discourses and consisting of a broad range of institutions, sites, and practices including not only formal institutions of representative democracy but also the informal public sphere, and including social movements, networks, NGOs, activists, interest groups, corporations, the media, opinion leaders [41,17,37].

In contrast to micro theories of deliberative democracy, macro theories pay more attention to broader political structures and counter overly optimistic accounts of the ability of micro deliberation to overcome power inequalities in society. Participation fora which may be categorized as micro deliberative may only allow deliberation on relatively minor details and not on more fundamental policy [41,37]. In short, micro or macro deliberation have different potentials to influence policy.

The design of our analysis indicates that we see the “debate” set up by the government as only one limited discursive venue, formally initiated and framed by the state. As such it essentially fails to consider or bring together the much broader array of existing discursive venues. Ultimately micro deliberative mechanisms need to take into account and adequately link with their broader discursive

context; therefore our critique of the Polish nuclear debate is located in the interplay (or lack thereof) of the micro and macro spheres of deliberation. Insofar as these are not meaningfully connected, the extent to which we can credibly designate something a “public debate” is seriously limited.

In CEE democracies, trust in mass media, scientific knowledge and experts used as media figures is decreasing [19]. This may signal that the model of the public sphere proposed by representative liberal democracy has been exhausted. Energy transition seeks new paradigms. At the same time, the percentage of people in CEE countries who perceive NGOs and other organizations as able to influence political decisions on the national level is significantly lower than in Western democracies like Denmark, Sweden, Finland, or Luxemburg [20]. Residents of the Czech Republic and Slovakia more often sign petitions and take part in regional level public debates than people in Poland, Lithuania, or Hungary.<sup>15</sup>

Despite negative assessments of the development of civil society in post-communist countries in general [38,64] and environmental movements in particular [65], in our view the weakness of civil society is not a main barrier in the energy transition process. A significant barrier is the lack of link between the micro and macro deliberation. The weak visibility NGOs, grassroots organizations and social movements in the public sphere, and strong politicization and economization are typical not only for energy discourse in Poland, but also for other CEE countries. The current model of public communication is a barrier in the process of change. It needs openness for new solutions, creativity, and real possibilities for participation.

The model of public sphere arising from grassroots organizations and social movements seeks public space for expression, in its variegated manners and voices. The deliberative turn gives such actors a chance to gain exposure and be taken into account. The legal framework supports these aspirations, but what is needed is more openness in media space. It would allow an opening in the discursive field and perhaps change the taken-for-granted assumptions that now secure the status quo in the socio-energy system.

The discourse and practices we have analyzed in this article can lead to depoliticization which can normalize both uneven power dynamics and marginalization of alternative and oppositional perspectives [12]. Perhaps, then, a way forward in opening up the discursive field in energy governance is about public spheres that foreground, rather than obscure, power relations and the politics of knowledge production. This would mean that alternative understandings of the issue at hand are explicitly juxtaposed and explicated—supporting improvement of dialogue between different actors.

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<sup>15</sup> Hungry had the lowest results in measures of public participation. This is consistent with research on energy discourse in Hungary, which is alienated from the public *Sarlós* [60].

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