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THE GRASSROOTS ENERGY TRANSITION IN POLAND THROUGH A SOCIOLOGICAL LENS

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/// Introduction

In research work, we more often falsify the theses we put forward than find confirmation of them. We learn more often that something does not work or exist than the other way around. This means that researchers and scientists regularly fail, but they provide a kind of negative knowledge. This is the story of one of our research failures. It is also a story about the series of organisational and institutional failures that have accompanied the ongoing energy transition in Poland. The essence of science, however, is to learn as many lessons as possible from failures – not only to avoid mistakes in the future but also to learn something new about the world. Negative knowledge is also a useful kind of knowledge about reality. Sometimes we look for one thing and find something completely different and maybe even more interesting. And that is what happened with our failure. So what exactly was it about?

As part of the KlastER project, we were supposed to survey local, grassroots, and/or distributed forms of energy production and consumption

in Poland.[1] Our research, which was conducted in 2020–2021, involved a desk research study focused on selected energy systems (in the United States, the Scandinavian countries, Spain, and Germany), followed by desk research on energy developments in Poland and initiatives for renewable energy sources (RES). This research was supplemented by interviews with experts, then by field research conducted in selected energy clusters (including individual interviews, group interviews, and observations), and at the end by a scenario workshop. At the same time, we were involved with other team members in various conferences and expert discussions, which also gave us an idea of the "transition" processes. Our social research was part of a larger undertaking in the engineering sciences, and we had regular contact with representatives of these disciplines. Before undertaking the research, we thought long and hard about its proper theoretical embedding. We chose strategic action fields (SAF, see Fligstein & McAdam 2012). This framework combines elements of Pierre Bourdieu's (2005) field theory, new institutionalism, organisation theory, and social movement theory. Such a framework seemed appropriate in that it describes the mechanisms behind the formation of new economic and social fields, takes into account the dynamics of bottom-up processes and self-organisation, considers the interaction between different actors in the emerging fields, and allows the complex negotiation of the rules of the game within a field to be described. It offered everything we expected to find when studying grassroots and local energy; we considered energy clusters precisely in terms of an emerging field. It's fair to say that we adopted a fairly typical and safe research design. What went wrong?

It is not possible to show here the development trajectories of all the energy clusters that have been created in Poland in recent years. However, what emerges from our research is a picture of energy clusters as institutions whose development has been effectively blocked, mostly in the early stages of their existence. A good illustration of the process is the history of the energy cluster in Tomaszow Mazowiecki (Afeltowicz et al. 2024), which was established in 2018. Its core partners are the municipal commune,

[1] The conclusions we formulate in this article come from the research we conducted as part of the KlastER project. The "Development of Distributed Energy in Energy Clusters (KlastER)" project was co-financed by the National Centre for Research and Development under the auspices of the GOSPOSTRATEG programme. Project partners included the AGH University of Science and Technology and the National Centre for Nuclear Research; the partner on the government side was the Ministry of Energy, and, after its liquidation, the Ministry of Climate and Environment and the Ministry of Economic Development and Technology. We would like to thank all other members of the sociological part of the KlastER project for their contribution to the study: Jacek Gądecki, Katarzyna Leszczyńska, Katarzyna Skowronek, Marcin Zwierżdżyński, and Dorota Żuchowska-Skiba.

crucial municipal utilities (e.g., the water and sewage company, the heating plant, etc.), and the local sports association. Neighbouring communes of the city are also partners in the cluster, which was awarded a certificate of distinction from the Ministry of Energy in 2018. The local authorities have been the dominant actor in many local fields, including in the cluster. The Tomaszow Mazowiecki energy cluster is deeply rooted in the existing local structures of political and interpersonal connections, and therefore, it can be treated as a so-called local-government cluster (Stasik 2024). Despite the social and political capital of local politicians and the business people associated with them, as a consequence of the barriers posed by the local monopolist for the energy supply (PGE), lack of financing, and other barriers of a legal nature, it was not possible to create a full-fledged microgrid here. When we went to Tomaszow Mazowiecki to conduct interviews, we found many people there were eager to further develop the cluster but that there had been no achievements in this regard. The respondents were disappointed that there had been no benefits associated with obtaining energy cluster certification. We had the impression that they sought knowledge about what to do next from us, that is, from researchers. However, we were not able to help them.

We know from our interviews and field studies that the energy clusters certified under the ministerial programme mostly existed on paper. Some of them were not functioning at all. In some cases, several clusters were operated by one and the same person, who specialised in obtaining certificates, but not in developing genuine energy solutions. Some clusters were operating and achieving success, but, as our research indicated, this was happening independently of the ministerial programme. Some of the material collected even indicated that the cluster programme made it difficult for these organisations to function. Certification was not followed by any real financial, institutional, or legislative support. People associated with the clusters we reached often viewed the certification system as a kind of institutional fiction. In addition, the knowledge locally generated in the clusters was not disseminated, and feedback on what should be done to transform the energy sector in Poland was not taken into account by regulators and officials.

Energy clusters are just one of several phenomena in Poland's energy transition that we can try to plug into grassroots efforts: prosumption, cooperative initiatives, and energy self-sufficient municipalities. It is important that it was the creators of the idea of clusters who referred to grassroots categories. In our research we focused on initiatives developed before 2021;

we focused on clusters, but we also described other activities. By "grassroots energy," we mean the clusters at that time and single initiatives that had not been certified as clusters, such as the Krakow Social Power Plant. We do not consider individual consumption as grassroots energy, because such consumption does not require any vertical coordination of actions.

While grassroots energy initiatives in the national systems we analysed most often operated in a similar manner to social movements, this dimension proved to be absent in Poland – which is not to say that grassroots and/or local energy initiatives have not been attempted. However, in Poland, only one energy-independent municipality exists; energy cooperatives have not developed (according to the state of affairs on the day our research was completed). In general, it is difficult to talk about the field of social energy in Poland. Rather, we are dealing with a regionalised version of the energy monopolies existing from the socialist period. In practice, this means that energy operators and power plants can block the development of energy alternatives in various ways. And the regulators are aware that this is happening, yet little is being done about it. All this made the exploratory potential of SAF theory largely inapplicable: we were able to apply its ontology, but not the mechanisms it describes.

In the course of our study of grassroots and distributed energy in Poland, we discovered surprising parallels. What we saw was very reminiscent of processes that Polish sociology had been describing for decades in looking at the state of social institutions in the Polish People's Republic and during the political and economic transformation afterwards. What were the analogies?

Both transformations were implemented largely in the mode of mimetic isomorphism (DiMaggio & Powell 1983). Many of the organisations and institutions created in Poland during the transition era resembled what we glimpsed when looking at other systems. However, we often looked without seeing: we did not know what determined the essence of the solution. And the same can be applied to solutions imported from the West and transferred to the Polish energy sector. The concept of energy clusters is just one of many examples of concepts that have lost their original meaning in the translation process that accompanies imports (we have explained the process in detail in Afeltowicz et al. 2024). This brings us to the issue of the specific culture of institution-building in Poland. The way the Polish energy sector was designed is sometimes surprisingly similar to how capitalism and democracy were introduced in Poland. Although there are many transition models that can be applied in the case of Poland, no available

foreign model will be fully compatible. Whichever model we choose to build or copy will have unexpected side effects.

Sometimes it is difficult to see that we are dealing with mimetic isomorphisms due to the fact that organisations in Poland are adept at conducting "apparent actions" (Lutyński 2018). "Apparent actions" was a strategy for dealing with the absurd challenges people faced during the communist era. There are many indications that the propensity for such activities survived the period of socio-economic transformation. Many of the energy initiatives implemented in Poland bear the hallmarks of such activities.

An important category used to characterise Polish society of the socialist and transition era is that of the sociological vacuum (Nowak 1979). While today it is difficult to maintain the thesis of a general sociological vacuum, this phenomenon is being reproduced in the Polish energy sector. The system has been designed in such a way that it creates space for either micro and extremely individualistic solutions or top-down and macro solutions. The confluence of institutional and infrastructural factors means that there is no room for community-based initiatives at the meso level.

With all this in mind, we want to revise our original theoretical assumptions based on SAF theory ex post in this text using the ideas of a sociological vacuum in Poland and apparent actions. We will show how categories that were originally created to describe socio-economic change can be applied to describe the energy transition. We will try to demonstrate the constancy of certain social characteristics, patterns of actions, and practices despite the profound changes that have taken place in recent decades.

We want to emphasise that, in our opinion, it is definitely worthwhile to apply classical Polish sociological concepts and theories to the analysis of important contemporary social phenomena and processes, such as (but not limited to) the energy transition. Despite the change of the socio-political context, they still have considerable explanatory power.

/// A Sociological Vacuum and the Failure of the Energy-Cluster Programme in Poland

We want to explain the above-mentioned failure of the energy-cluster programme in Poland by referring to the sociological vacuum thesis (Nowak 1979). In the next section, we will identify the institutional mechanisms that are responsible for this failure and that sustain and deepen the state of the sociological vacuum in the Polish energy sector.

Stefan Nowak introduced the concept of a sociological vacuum to Polish sociology in the late 1970s. He used it in his diagnosis of the state of consciousness of Polish society in the Polish People's Republic. At that time, Poland had been within the Soviet Union's sphere of influence for more than thirty years, and this situation entailed restrictions on civil liberties and a socialist model of planned economy. Nowak's best-known and most frequently cited formulation of the vacuum thesis was in his paper "System wartości społeczeństwa polskiego" (Nowak 1979), published in *Studia Socjologiczne*. His aim was to determine which were the most significant objects, spheres of life, and areas of reality that triggered judgments and emotions, and, above all, produced a sense of identification and commitment in Poles of that period. He analysed such spheres as family life, friendship relations, democratic structures, national affairs, and religious identification. His most significant finding was that there were significant deficits in Poles' identification with social entities located at the meso level (between the level of primary groups, especially the family, and the level of the national community). He referred to this phenomenon as a sociological vacuum and described it in the following words:

> Thus, we see that between the level of primary groups and the level of the national community there is – from the point of view of people's identification and emotional involvement – a kind of sociological vacuum. If we wanted to sketch a giant "sociogram" based on people's sense of group bonding and identification, the social structure of our country thus conceived would appear as a "federation" of primary groups, of families and friendship-based groups, united in a national community, with other types of bonds between the two levels being very weak. (Nowak 1979: 160; own trans.)

In describing the sociological vacuum, Nowak stated that Poles lacked identification with meso-type structures. He did not claim the absence of such structures. Nor do we assume that there is a lack of such structures in the Polish energy sector. Attempts to institutionalise such creations as energy clusters or energy cooperatives indicate that there was an attempt to fill the vacuum at the meso level in the Polish energy field. However, questions remain as to why this has generally failed and what institutional mechanisms are responsible. Our analysis provides one answer to these questions. We assume that the sociological vacuum is a relatively constant parameter for describing Polish society in various dimensions of its

functioning. The existence of a sociological vacuum in the Polish energy sector is the result of the continued inertia of socialised energy developed at the meso-social level. As an exemplification of this thesis, we consider the history of the failure of implementing energy clusters in Poland.

There are at least two reasons to consider the situation in the Polish energy sector as an exemplification of the sociological-vacuum thesis. The first is the stagnation at the meso level of the energy sector. In describing the failure of the programme to establish energy clusters, we will assume that similar reasons lie behind the failure to establish other such structures (energy cooperatives, collective prosumers). The second reason is that the state put a strong emphasis on the development of micro levels of the energy sector. For the purposes of this article, we identify the micro sector with the development of individual prosumer energy.

More or less since 2015, when the Law on Renewable Energy Sources came into force, there has been a gradual expansion of offerings at the meso level of the Polish energy sector. These activities have aimed to accelerate the decarbonisation of the Polish economy. In official rhetoric, development was mainly aimed at lowering the cost of energy through its socialisation, that is, co-generation and balancing within local communities. The Polish state has put relatively the most effort into trying to institutionalise energy clusters. However, in spite of the several years that have passed since the programme began, only a few energy clusters had been successful by the time we concluded our study.

In the statutory sense, according to the RES Act (Art. 2, item 15a), an energy cluster is a civil law agreement that may include natural persons, legal entities, scientific entities, research institutes, or local government units, concerning the generation and balancing of demand, distribution, or trading of energy from RES or other sources or fuels, within a distribution network with a rated voltage of less than 110 kV, with the area of operation of this cluster not exceeding the borders of one county or five municipalities. The area of operation of an energy cluster is determined on the basis of the places of connection between the energy producers and the consumers who are members of this cluster. The purpose of energy clusters is to develop distributed energy for the needs of the regions concerned. They serve to improve local energy security in a way that ensures the achievement of economic efficiency and optimal organisational, legal, and financial conditions in an environmentally friendly manner. In 2018, the Ministry of Energy held two competitions for the Pilot Energy Cluster Certificate. As a result, sixty-six clusters from all over Poland were awarded such certificates.

Among other things, the certification was intended to help clusters apply for funds through the Operational Programme Infrastructure and Environment (Ministerstwo Aktywów Państwowych 2018). The research conducted under the KlastER project shows that currently only a few energy clusters in Poland are operating satisfactorily in the view of their members. A number of barriers faced by clusters have been identified, mainly of a legislative nature (Tyrała 2020). The vast majority of certified clusters have never actually started their activities and exist only on paper.

An interesting contrast to the failed attempts to promote socialised energy at the meso-community level is the way that individual householders have intensively taken to installing photovoltaic (PV) panels. We can define this as a process at the micro level because the energy produced by these installations is consumed by the people living in the household (families or single people). The rapid development of private PV installations is an unprecedented and Europe-wide success story. According to the Rynek Elektryczny portal (2024), as of November 2023, Poland had 1,382,446 PV installations with a total capacity of over 10.5 GW. This is one of the best results in Europe. We consider it to be another example of the validity of Stefan Nowak's thesis.

The rapid growth in the number of individual PV installations has been variously assessed. On the one hand, there are positive assessments, which emphasise the self-organisation and resourcefulness of Polish energy consumers. On the other hand, negative assessments have indicated that this development has been made necessary by the lack of systemic solutions – which should have been designed and provided by the state – to rising energy prices, the aging of coal-fired power plants and the constantly postponed need to modernise them, and the lack of nuclear power. In this view, the development of prosumer photovoltaics can be seen as an example of the externalisation of risk by the Polish state and the transfer of transition costs to citizens. In response, citizens are pursuing a privatisation-like strategy (Kuczyńska 2021). This process of privatising distributed energy production has been supported by the Polish state, which has subsidised it through several editions of the highly successful My Own Electricity project (Mój Prąd, a project launched in 2019 to subsidise home PV installations from 2 to 10 kW). Thus, we are dealing here with the state's real actions – rather than for show – in support of energy development. However, this is happening at the micro level, not the meso level.

Such a state of affairs corresponds to the diagnosis of "molecular development" made by Janusz Czapiński. Molecular development means

development based on activity and entrepreneurship in micro-structures, mainly among family and friends. According to Czapiński, this type of development has been taking place in Poland since 1990.

> We are in the phase of molecular development characteristic of underdeveloped countries – in opposition to the community development characteristic of highly developed countries. […] We live in a country of increasingly effective individuals and invariably ineffective community. (Czapiński 2013: 308; own trans.)

And this is exactly what we see in the case of the energy transition. While we have many entrepreneurial households, people have few opportunities to establish inter-household cooperation.

It is worth recalling Jerzy Hausner's thesis of Poland as a "soft country" in which the institutionalisation of non-responsibility is taking place (Hausner & Marody 2000). He used this term to describe the consolidation of citizens' lack of willingness to get involved in public affairs. The process is linked to the belief that these public institutions are ineffective and that the administrative apparatus is corrupt. Let's apply this to energy. The conviction that the state is not taking effective measures to provide energy security for citizens may prompt them to look after their own interests by securing themselves against an increase in energy prices. This could explain the surge in prosumption. A side effect is a lack of commitment to the development of socialised energy at the meso level, especially when such development is designed on the fly and by copying solutions from elsewhere without taking local conditions into account, as was the case with the implementation of the energy cluster programme in Poland. Nevertheless, appropriately designed programmes that consider the local context can successfully combine individual motivation with community action (e.g., see Walker & Devine-Wright 2008; Creamer et al. 2018).

An important mechanism that can play a role in the energy transition is the crowding-out effect on intrinsic motivation (see Frey & Jegen 2001). This phenomenon has been observed in countries such as Switzerland and the United States. Citizens may agree to problematic investments in their region (e.g., a storage facility for radioactive waste) if the investments are defined in terms of community interest. However, if citizens are offered individual compensation, not only does their definition of the situation change – that is, they start thinking about projects in terms of personal gains and losses – but their level of acceptance for the project also drops

radically. The intrinsic motivation to bear part of the cost of maintaining public services is replaced by an extrinsic motivation related to economic incentives or disincentives. Such a crowding out is in most cases permanent. Once citizens begin to calculate their individual economic benefits, it is impossible to switch them to community thinking. If the crowding-out effect has occurred in Poland (we are not aware of research confirming or disproving the fact), it would mean that the rapid development of prosumption, which has been promoted by the state and local governments, may have destroyed for a long time the chances of developing community energy or some form of energy democracy in Poland.

/// Institutional Mechanisms Shaping Local Energy Production and Distribution in Poland

After the climate crisis entered the mainstream public debate and national and EU policies, a variety of local initiatives to build local, distributed energy systems based largely on RES began to appear in Poland. These included energy clusters. We will analyse these emerging organisations in terms of "new institutionalism," with a focus on how local conditions influenced the organisational structure of the emerging collective actor, its internal relations, and relations with the environment. In other words, institutional logics are "socially constructed, historical patterns of material practices, assumptions, values, beliefs, and rules by which individuals produce and reproduce their material subsistence, organize time and space, and provide meaning to their social reality" (Thornton & Ocasio 1999: 804). The formation of these organisations was evolutionary. To analyse this evolution, we used the concepts of new institutionalism: embeddedness, institutional logic and field, bounded rationality, isomorphism, and the common good (Pawlak & Sadowski 2017). Some of these concepts, as a legacy of institutionalism, have entered the toolbox of the SAF concept, which we were unable to implement fully as a theoretical framework for our research. It also turned out that some categories of institutionalism, such as isomorphism, were very useful, and we will return to them later in the text (DiMaggio & Powell 1983). On the other hand, despite this wide range of concepts, a full analysis of the process of certification and the creation of energy clusters in Poland required the use of categories that are familiar to Polish sociology but that have previously been used in a completely different context.

We regard the political initiative to launch the energy-cluster certification process by the central government as a disruptive factor. The programme

was so attractive in its assumptions that many local entities applied for it. The certification formula involved the adoption and implementation of certain organisational solutions. The process was isomorphic in nature, due to political legislative pressure. Apart from the certification process itself, the central programme did not then offer support in creating new legislative solutions conducive to cluster activities or financial support for the development of activities undertaken within their framework. As a political action the programme succeeded, as the government was able to demonstrate that dozens of energy clusters had been created in a short period of time. However, these were only outward changes, mainly visible in statistics and reports. This brings us to the use of another category developed within Polish sociology: apparent actions.

Jan Lutyński introduced this category to describe actions taken by an actor or actors (often collective) in order to create the impression of pursuing or even achieving some important, officially recognised value or declared goal. In practice, as a result of the apparent actions neither the goals nor the values are realised. At the same time, the fact that the actions are for show is acknowledged by a significant part of the population, especially by the personnel of the organisations undertaking the said actions. The knowledge that the actions are for show may be widespread, but it remains private knowledge. Although apparent actions do not achieve their stated practical goals, they still require the involvement of various actors, and their dexterity and ingenuity. Such involvement is not exclusively in the discursive sphere. The concept of apparent actions has not found its way into international circulation. Even in the Polish context, it is used as a heuristic concept rather than a full-fledged analytical category. In our opinion, it is very useful, especially in studying the energy transition.

Apparent actions can be detected in the process of developing and implementing the idea of Polish energy clusters. For starters, the description of the concept of energy clusters is very vague. Energy clusters operating in the Polish context are not clusters in the sense of economic geography. They are not clusters of companies from the same sector cooperating and sharing knowledge to gain benefits. Energy clusters are networks of local government entities, scientific entities, research institutes, entrepreneurs, and possibly individuals working together under a legal agreement. The object of such an agreement is to work towards balancing energy production and consumption locally. Therefore, signing an agreement is sufficient to be regarded as a "cluster." In return, the signers can receive a certificate. In this way, the state can demonstrate that there are dozens of grassroots

energy initiatives. This is important because until recently energy clusters were one of the state's main instruments in the energy transition. Today this institution is not working, or at least that is how the situation is perceived by the participants of the many clusters covered in our research, which was conducted in 2019–2021. Based on an analysis of the data and the information gained from interviews and observations, it is difficult to indicate what benefits the energy-cluster programme has brought to the networks of actors who joined the initiative. The funding support and regulations that the government announced have not arrived. Many energy clusters exist only formally, with no activities beyond reporting. Those that do conduct research or business activities do so independently of government support or sometimes while working against it (the case of the Czorsztyn cluster is instructive; see Afeltowicz et al. 2024). It is also difficult to see benefits to the socio-economic system or the environment. In practice, energy clusters have not accelerated the transition and in some situations may even have delayed it (e.g., by lowering the level of social capital among actors interested in the energy transition). Today, the government no longer highlights clusters as an important instrument for changing the energy industry.

As our research shows, the current condition of energy clusters in Poland is not the result of resistance to change or incorrect implementation. The energy clusters look as if they were designed to present the Polish energy transition to the outside world (particularly in the EU arena) as a vibrant, dynamically developing process. This vibrant presentation was achieved with minimal real government expenditures on infrastructure, research and development, or legislative changes. A demonstration of the effectiveness of the energy-clusters programme has never happened. The key issue here is what a cluster is from the perspective of the law. While various government brochures and expert studies present clusters as energy communities developing RES and smart-grid or microgrid solutions, in practice, it is purely a certification programme.

Certification makes it possible to create a new class of legal entities and carve out a whole new sector of activity. The networks of actors that existed before the certification programme was launched were encouraged to become certified by the promise of financial support (which did not come). The process itself was facilitated because an energy cluster could be reported by a single actor (coordinator), and one coordinator could report several clusters (as happened). When it came to reporting on the health of the initiative, the focus was placed on the number of clusters and not on – say – the environmental benefits the programme had brought. Not only did the

government fail to provide real financial support, it also failed to provide demonstrators: model examples of how the clusters envisioned by the institution's creators would generate environmental or economic value. In theory, a great deal of value could have been generated by the exchange of experience between certified entities, but this did not happen. In practice, the committees and boards that could exchange and integrate knowledge were engaged in the co-creation of an institutional fiction. An exchange of information between energy clusters and legislators could have helped remove key barriers to distributed energy development through regulatory changes. In particular, support in the fight against operators capable of impeding the clusters' development would be significant. This has not happened either.

We argue here that the government's initiative to certify energy clusters is a model example of an apparent action. According to the original understanding, apparent actions have five characteristics:

(1) the action is officially recognised as important for achieving some socially important goal;
(2) the apparent action does not contribute to its realisation;
(3) the uselessness of such an action is known to everyone or almost everyone in the collective;
(4) this information is kept private;
(5) the real function of apparent actions lies in their very existence, while they may also have a residual, fictional, or merely formal existence.

The energy cluster initiative meets all the points:

(Ad 1) The introduction of RES and microgrid solutions into the Polish energy system is commonly defined as important. Energy clusters were supposed to facilitate this process.

(Ad 2) Most clusters do not take any action, and the state has not created conditions for the development of distributed energy. Those energy clusters that perform their assumed functions would have done so without the initiative itself. However, they had to produce their own infrastructure and negotiate with operators on their own. At the same time, the policy documents in question do not explain how facilitation through certification would translate into the achievement of transition goals.

(Ad 3) The state of the initiative was known to virtually all our respondents. Some of our respondents attempted to keep up appearances (mainly at the recruitment stage of the study), but during field observations, interviews, and workshops, the respondents spoke freely about what they thought of the institution.

(Ad 4) Information about the functioning of the clusters is not promoted at the national level. There is hardly any mention of the project, either positively or negatively. The information gained through interviews is still treated as private and unofficial.

(Ad 5) However, there is still a whole elaborate sphere of reporting practices. Experts "study" the state of clusters; there are advisory groups, and so forth. Reporting and the way the project is structured (the certification system) meant that the energy-cluster initiative was still in existence in a formal sense when we concluded our research.

The example of energy clusters shows that the conduct of apparent actions is not reduced to discursive procedures only. It is necessary to establish very specific mechanisms and create incentives for selected actors to join the show process. That is, the creation of a show institution requires the design and implementation of another institution, which consumes resources that could be devoted to solving an officially articulated problem. Thus, these actions might also be conceptualised as neo-apparent actions:

> They do not meet the defining characteristic of apparent actions, which is that their unsuitability (and sometimes harmfulness) for official purposes is widely known, and this information is only private and cannot be made public. "Neo" apparent actions, while in fact useless or even harmful, may enjoy a widespread – both private and public – perception of having at least "some kind" of usefulness, and sometimes even full usefulness. (Czyżewski 2009: 17; own trans.)

This type of action is fostered by an elaborate network of conflicting political and economic interests among the actors involved, with low public awareness of the importance and relevance of substantive solutions to the problem at hand. Not only in Poland is energy transition a problem of this type.

The actions of the creators of institutions for show can be considered a special case of political entrepreneurship (cf. Wagner 1966; De Vries & Hobolt 2020). Entrepreneurial action can be understood as action aimed at establishing new links between different resources and actors in order to generate new value for a given group. In the case of economic entrepreneurship, the work of assembling can lead to the creation of a new enterprise or an entire market. But there are also non-productive or even predatory forms of economic entrepreneurship, in which no value is added but

some actors gain an advantage through transfers (including the externalisation of costs and risks). In the case of productive political entrepreneurial action, a new group of interests may be formed, or the interests of a group that had a low capacity for independent lobbying may be articulated. In the case of predatory political entrepreneurship, the added value in the form of increased social capital does not appear, but selected actors instead gain individual benefits (i.e., public recognition, political or symbolic capital). In our case, grassroots, independent energy initiatives could be demonstrated to be a governmental success. At the same time, a politically pressing problem was not addressed.

The concept of apparent actions was created in a very specific political and cultural reality (the same one in which the concept of the sociological vacuum was created). The idea of apparent actions first described how individual and collective subjects functioned under the conditions of a socialist state. However, it can be assumed that apparent actions are still common in varying degrees of intensity, and sometimes they can be exacerbated. Lutyński pointed to the obligation to implement non-liberal ordinances and to avoid actions that would violate vested interests as one of the reasons for the intensification of apparent actions. Given the range of socio-economic challenges associated with the climate catastrophe, one wonders whether we are currently facing an intensification of such actions. At the same time, we are not thinking solely of the situation in Poland, but also about how legislators and dominant market players are trying to address the need for energy transition in countries such as Germany and Canada. The example of Polish energy clusters and the concept of apparent actions may prove to be useful heuristic tools there as well.

The ostensibly pragmatic mechanism

> occurs especially in situations where decision-makers are unable or unwilling to solve some problem treated as important by citizens. This is usually because the solution would lead to consequences undesirable to them, or would require the use of certain measures that are either impossible or have been deemed inexpedient. However, wishing to demonstrate that the problem is being solved or, at the very least, that the solution is considered a valid one, actions are ordered or undertaken that do not actually lead to this, but that have been officially recognised as appropriate and necessary actions. Those who conduct these actions, such as the participants in deliberations, meetings, or conferences convened in lieu of

> applying the necessary measures, are generally aware that these are of a show nature, as are, moreover, the principals and observers. (Lutyński 2018: 244; own trans.)

An example of an apparent action conceptualised in this manner could be the KlastER project itself. During the course of the project, many meetings and conferences were held and many reports were written, but it is difficult to say how they helped the development of grassroots energy. Those processes certainly involved people and resources that could have been used for the development of the field of RES.

Another "classical" sociological tool that can be used to analyse the energy transition in Poland is isomorphism. We can refer to the classical definition of institutional isomorphism and its basic types (DiMaggio & Powell 1983). We found the idea of coercive isomorphism to be useful: it explains how organisations are made to adopt certain patterns imposed by actors with power in a given field. The cluster certification mechanism was a good example of this. Its creation had the character of coercive isomorphism: the adoption of the organisational structures defined by the programme even though they were not connected with a local path of evolutionary development.

Another type of isomorphism which is important from the perspective of our research is mimetic isomorphism. This is a mechanism that occurs in situations of uncertainty and involves organisations imitating those patterns that they believe have led to success. In Western Europe and the United States (whose solutions and problems of energy transition we studied in the Cluster grant, with a final report in Gądecki & Zwierżdżyński 2020), the construction of cluster solutions appears in the context of the challenges facing the current electricity system. In Poland, we have long relied on solutions where electricity is generated in large and centralised facilities that can adjust production to meet consumption needs. In such a system, electricity flows unidirectionally: from production units to end users. This traditional system is challenged by the introduction of RES, since their output cannot be fully regulated and varies according to the time of day or year. In all the systems we studied, the active inclusion of households in the emerging cluster organisations remained an issue.

An important element of the energy transition in each country is the territorial and spatial context, including geographic considerations. Most of the available scientific literature emphasises that the formation and operation of energy clusters is dependent on local factors and should be

adapted to them on a case-by-case basis – so it is difficult to talk about the possibility of a simple transfer of practices from one place (and time) to another. Such a unifying approach unfortunately lay at the heart of the certification programme in Poland. Different locations, regions, and countries consist of very different constellations of actors and interest structures. This means that there are many different potential resources and ways to mobilise and design local networks by which implementers can create value for themselves beyond the obvious opportunities for low-cost energy extraction and accumulation. The Polish energy-cluster certification programme looks like a compilation of pieces of ideas that the developers of the programme found attractive, that worked in other contexts (mimetic isomorphism), and that were uncritically implemented into the Polish programme. No consideration was given to whether these pieces from different contexts were compatible with each other and whether they fit the conditions found in Poland, which are not homogeneous.

/// Conclusions

We conceived our role in the KlastER project as researchers not only in terms of conducting basic research but also in terms of providing information that would be helpful in designing solutions, identifying barriers, and facilitating various initiatives. And we found such information, but it cannot be said that we created it. The information was available in the system and was communicated by the stakeholders. The actors not only know what doesn't work, they are also aware of institutional alternatives. The various stakeholders know what regulations are missing to unlock transformation processes. The actors are aware that the operators can, if they wish, block the development of distributed, bottom-up energy systems, for example, by making it difficult to plug into infrastructure or by blocking local integration by not selling land. Representatives of the operators were aware of the costs to the system of mass energy prosumption (Doumen et al. 2022) and warned that these costs would soon have to be passed on to prosumers (which actually happened soon after we concluded our study). The information is in the system, and sometimes it is even consolidated and operationalised. It is just not being used. The institutional work is not focused on change, and some energy is spent on the tinkering required by apparent actions. Thus, it can be said that as social scientists we have been witnesses of useful information rather than creators of it. However, as social scientists, we can suggest why this existing knowledge is not used

to implement effective solutions in the field of energy transition. We refer here to the categories of the sociological vacuum and apparent actions in order to slightly change the perspective on the energy transition.

There are many indications that knowledge of how to change was available before the energy transition began in Poland. Poland had a chance, once again, to take advantage of being latecomers, who can just leapfrog some steps (cf. Perkins 2003). Many solutions have been tested elsewhere in the world. And many mistakes have been made that others can learn from. However, these lessons do not seem to have been learned in Poland. We often see solutions being copied, but not necessarily those that would fit our local needs and opportunities. The central and local authorities may think that it is necessary to be proactive, so they do something without necessarily being able to justify why they chose this option and not another. At the same time, we can see that it would be possible to choose options that could easily be integrated into the current system. However, incorporation is not enough to produce a transformation.

A field of grassroots, democratised energy has not been created in Poland. We can speak of isolated initiatives that have been successful. Some clusters have brought tangible value to their communities (see Afeltowicz et al. 2024). However, these are extremely positive cases – outliers – and not typical, scalable situations. If, in the course of transformation efforts, citizens' trust in the government has been destroyed because the government is seeking solutions that do not rely on externalising the costs, and if crowding-out mechanisms have been set in motion, this may mean that the paths to community solutions in regard to energy – in the spirit of energy democracy – have been buried. Digging them out may require much time, material resources, and entrepreneurial action. And perhaps the temptation to perform apparent actions rather than actually to change something will arise again. Although we have been talking here about the energy transition in Poland only up to 2021, we want to mention a few things about the energy transition in Poland that have occurred since the conclusion of our research. First, the cluster programme is no longer being highlighted, and those clusters that have shown any activity are beginning to be reframed as energy communities (for a map of energy communities in Poland, see Energetyka Rozproszona n.d.). Second, the number of energy cooperatives is increasing, and they are being presented from the start as exclusive economic initiatives (from the beginning, clusters were presented differently). Third, the idea of clusters may be resurrected at some point by legislators and regulators. Clusters can still apply for funding, alongside

civic energy communities and cooperatives. Other economic incentives for clusters are also emerging, such as discounts. Without going out in the field, however, it is impossible to determine whether the new instruments will work. It is also impossible to say whether the clusters discussed today and those we studied in 2021 are the same institutions. We do not know if the designers of the energy transformation have learned from the failure of the certification system and listened to the voices of the energy entrepreneurs who created the clusters. We are sticking to the results of our research here. We have focused on the state of the energy industry in 2021.

Our intuition is that apparent actions and a sociological vacuum are accompanying the energy transition in other countries as well. The energy communities promoted by the EU have less and less to do with grassroots energy. Apparent actions are not peculiar to Poland, but chances are that we have developed this competence to a very high degree. These are only conjectures and they require systematic research. In the same way, the fate of clusters after 2021 and the fate of other ongoing energy initiatives demand critical social analysis.

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/// Abstract

An energy transition is underway in Poland. Various socio-technical models of energy production and consumption are being tested, including prosumption, renewable energy generation, and microgrids. However, success has been limited. We show that sociological concepts developed to explain the course of the socio-economic transformation in Poland can easily be applied to Poland's energy transition. Using such theoretical categories as “sociological vacuum,” “apparent actions,” and institutional isomorphism, we explain the lack of success of the energy transition in Poland in connection with the functioning of different types of energy communities. This text is not a report on empirical research. Although we refer to our empirical research, which we have discussed more extensively elsewhere, the text is theoretical in nature. Our goal is to bring classical sociological categories into the discussion of energy transformations.

Keywords:
energy transition, energy clusters, sociological vacuum, apparent actions, institutional isomorphism

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