Acta Universitatis Wratislaviensis No 4187
PRAWO CCCXXXVII Wrocław 2023

https://doi.org/10.19195/0524-4544.337.12

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Perspectives for and obstacles to energy democracy in renewable energy transition processes

Abstract: The paper is an attempt to show both opportunities and limitations for energy democracy, which also multiplies the ambiguity of this concept, arising from the lack of coherent legal regulations. This means that, the perspectives that energy democracy opens can simultaneously be the barriers to its development. This results in a different social perception of this phenomenon, which affects legislation and effectiveness of forms of democratic participation in energy policy.

Keywords: energy democracy, energy transition, social movement, participation, renewable energy.

Introduction

Faced with the reality of the energy crisis and real, rather than potential, problems in accessing energy resources, we need to develop concepts and frameworks (especially legal) to define and regulate the energy market and to enable society to access it. Climate change and the threat of energy shortages remind us that people are not only consumers of energy, but also responsible players, who can shape and influence energy policy. In legal systems, energy is perceived not only as a part of technology, as a form of economic value, or as one of the many aspects of the broad field of environmental protection. Energy and the problems related to it are first and foremost social issues. From this point of view, energy is no longer a subject isolated from social rights and needs, but it becomes a part of social life and a good that determines the social development and welfare of the country's inhabitants. That is why terms such as energy justice, energy rights, energy citizenship, energy poverty, energy communities and energy democracy are so

important in today's legal language in the area of energy law. Energy democracy is an accurate reflection of the extent of social movements and civil participation in the transition to renewable energy and the current shift in the perception of public engagement and participation beyond traditional forms of governance.[1] It is said to be a cultural, political and social concept linked to an awareness of the contemporary need for a just and inclusive energy transition as a key word in the renewal of energy transition.[2] This will allow the creation of more democratic regimes that will improve and accelerate energy transition by increasing the production of renewable energy and making the relationship between citizens and the energy market more dynamic. In the last few years, the European Union and other countries, in particular Canada and the United States, have confirmed and, above all, developed solutions that have given the citizens the main role in the energy transition processes.[3] The aim is to make citizens engaged (or re-engaged) in energy transformation and responsible for energy production and consumption,[4] as a result of the "recognition of the need to change the socio-economic relations embedded in the energy system by encouraging greater public involvement and control".[5] In contrast to existing energy systems, which are based on centralization, they create "disengaged energy consumers"[6] without the tools to initiate or shape the energy transition.

This paper on energy democracy is an attempt to find at least the general meaning of this term, but first of all, the opportunities that energy democracy brings and the shortcomings it encounters and also causes as a natural consequence of its assumptions and effects. It is, therefore, divided into four main sections, which simultaneously attempt to answer the salient questions about energy democracy and its limits.

The second part of this paper is dedicated to clarifying what exactly the term "energy democracy" means, as well as establishing its nature and indicating its general objectives. In this context, the legal framework that exists in

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[1] M. Wahlund, J. Palm, "The role of energy democracy and energy citizenship for participatory energy transitions: A comprehensive review," *Energy Research & Social Science* 87, 2022, p. 3.

[2] T.M. Skjølsvold, L. Coenen, "Are rapid and inclusive energy and climate transitions oxymorons? Towards principles of responsible acceleration," *Energy Research & Social Science* 79, 2021.

[3] See: European Commission, Clean Energy for all Europeans, Publications office of the European Union, Luxembourg, 2019; European Commission, A Framework Strategy for a Resilient Energy Union with a Forward-looking Climate Change Policy. COM (2015) 80 Final, 25.02.2015, Brussel, 2015.

[4] A.R. Kojonsaari, J. Palm, "Distributed energy systems and energy communities under negotiation," *Technology and Economics of Smart Grids and Sustainable Energy* 6, 2021, no. 1, p. 17.

[5] B. van Veelen, D. van der Horst, "What is energy democracy? Connecting social science energy research and political theory," *Energy Research & Social Science* 46, 2018, p. 25.

[6] I. Soutar, C. Mitchell, "Towards pragmatic narratives of societal engagement in the UK energy system," *Energy Research & Social Science* 35, 2018, p. 134.

many countries, within which energy democracy is created and implemented, plays a special role.

The third part analyses the opportunities that energy democracy offers to societies and states, and the prospects for social, political and economic transitions. From this perspective, it is meaningful to show different angles of the issue. Especially the links between energy democracy that leads to the transition to renewable energy and changes in societies, legal systems, policies and the economy. Therefore, the main areas that should be used for this part of the research should answer the questions of what energy democracy can give to the individuals (citizens, residents, consumers) and what it can give to the state and whether it has any impact on central and general policies.

The picture of energy democracy will not be complete if it is presented without its drawbacks. Energy democracy cannot be analysed without the research of what inhibits it and its development in the first place, and simultaneously what obstacles for its planned effects it creates on its own.

Consequently, the fourth part of this paper will be both an attempt to find the answer to the question of whether the contemporary picture of energy democracy and its shortcomings are the effect of the lack or inappropriateness of the social, political or legal framework for it, or whether they are the result of the imperfection of energy democracy itself.

Therefore, in order to unify both the third and fourth parts, they are organized with three general criteria in mind, which will help describe the perspectives and obstacles for energy democracy and simultaneously compare them and evaluate the effectiveness of introducing forms of energy democracy in legal systems and reality. These chosen criteria are:

1. Legislation, which is the method of introducing energy democracy into legal systems but also the way of establishing frameworks limiting it. In this respect, the problem of the relationship between the forms of energy democracy (especially social movements) and local and state authorities, which is connected with the mater of various kinds of political systems, needs to be analysed.
2. Social perception, which can be crucial for the effectiveness of energy democracy. As energy democracy is a kind of a social movement, its success or failure depends on the way citizens engage with it. Without public support, it cannot constitute itself or achieve its goals.
3. Economic conditions, which can be transformed into energy democracy as a result of the activities of its citizens, but which can also slow down transitions. Financial barriers, as well as the resistance of energy companies can truly limit energy transition through forms of energy democracy.

The dogmatic and descriptive research method has been used to achieve this objective, as it helps both characterize and assess energy democracy. This paper presents a partial review of the literature on energy democracy, which enables the

identification of recurring or overlapping themes and issues of the concept raised in other research. For this reason, the paper is not limited to one legal system, but in principle aims to present a general view of the problem and the various ways of coping with it worldwide, which helps name and specify issues related to energy democracy, which are different and simultaneously common for many systems.

1. Energy democracy – the meaning

No attempt to solve the main problems raised in this paper, which are the perspectives for and obstacles to energy democracy, can be made without explaining the meaning of this term and at least presenting its general idea. Nor can this be done in isolation of the basic concepts that make it up and define the way in which it is perceived. Therefore, it is so important to understand the meaning of both energy and democracy and their multidimensional nature.

Starting from the most general level of linguistic interpretation of the term, it needs to be understood that this is a term composed of two elements: "energy" and "democracy". They can give a different meaning together than that perceived separately. "Energy", as a word describing a phenomenon, is initially placed among others connected with science, especially physics, but it is also a term that exists in social science, which is economy. Therefore, it is noticeable that it has become a key topic in the contemporary word both in science and technology, as well as in social science in general. Apart from the meaning of energy as a phenomenon that makes things happen, as it is perceived in physics, as a multidimensional or common term for many scientific fields, energy is seen to be a power derived from the use of physical or chemical resources, especially to provide light and heat or to operate machines.[7] Meanwhile, "democracy" is a term that is essentially associated with areas of social science described as a "a system of government by the whole population or all eligible members of a state, typically through elected representatives,"[8] often referred to as "rule by the people".[9] Comparing the above with the way energy democracy is perceived in science and law, it becomes clear that this two-unit term brings to light meaning of energy democracy that is more specific than the commonly understood energy and democracy.

First of all, together as "energy democracy", they open a new perspective in which especially energy is not only an aspect of technology or economy, but also

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[7] Oxford Dictionary. See: www.oxforddictionaries.com/us/definition/american_english/energy (accessed: 10.04.2023).

[8] Oxford Dictionary. See: www.oxforddictionaries.com/us/definition/american_english/democracy (accessed: 10.04.2023).

[9] Robert A. Dahl, "democracy". Encyclopedia Britannica, https://www.britannica.com/topic/democracy (accessed: 21.05.2023).

the "basic structure of society".[10] It is seen not as something exclusive, but existing within the society framework, a social movement that links many different fields of transitions, which are changes in the energy infrastructure which, in this context, also opens up possibilities for deep political, economic and social transformation.[11] Resistance to the fossil fuel agenda, the reintroduction of social control in the energy sector, which is simultaneously changed into one which supports democratic participation in its governance, as well as environmental sustainability and inclusion, emerged with energy democracy.[12] This kind of change opens up the ways in which energy is produced, consumed and managed, by including the social point of view represented by individuals and groups of citizens. In this way, it helps prevent and solve social problems related to the energy crisis, in particular energy poverty.

Secondly, as a form of civil activation, it is distinguished from other terms, such as energy citizenship, energy society and energy decentralization. While it can be seen as a form of energy decentralization, scholars see it as different in nature from energy citizenship, indicating that, while they both aim for similar outcomes, which can broadly be described as democratization of energy policy and civil engagement in energy policy and supporting energy transitions, they are, in many ways, different tools for achieving them.[13] Although they both see the foundation for change in active civil participation, especially in initiating change and taking part in decision-making through the creation and membership of energy communities,[14] the way they are conducted and their outcomes are different. If energy citizenship is based more on individual behavioural change towards democratization of the energy sector, then energy democracy is more focused on institutional and systemic changes. In short, it can be said that energy democracy asks the question of how energy can be governed more democratically, if energy citizenship is mostly about possible roles that citizens can play in participatory energy governance.[15] If energy democracy is more of a procedural instrument for energy transition, then energy citizenship is more a form of substantive rights and duties that allow citizens to take action and demand changes in the energy policy model.

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[10] M.A. Heldeweg, S. Saintier, "Renewable energy communities as 'socio-legal institutions': A normative frame for energy decentralization?," *Renewable and Sustainable Energy Reviews* 199, 2020.

[11] M.J. Burke, J.C. Stephens, "Energy democracy: goals and policy instruments for sociotechnical transitions," *Energy Research & Social Science* 33, 2017, p. 35.

[12] M. Wahlund, J. Palm, "The role of energy democracy and energy citizenship for participatory energy transitions", p. 7.

[13] Ibid, p. 3.

[14] Ibid, p. 1.

[15] Ibid, p. 9.

In this sense, although energy citizenship is a basic element of energy democracy,[16] the latter is of a more political nature[17] and is perceived more as a social movement,[18] objecting to the current centralized energy regime in many countries.[19] It focuses on different forms of control over energy production and consumption,[20] with the aim of redistributing economic and decision-making powers to citizens, making them recipients, stakeholders and account-holders of the entire energy sector.[21] Energy democracy then describes the form of group participation in energy policy and its impact on shaping the general view of energy policy, including the shaping of legal regulations in this matter. At the same time, energy citizenship is a narrower concept based on individual actions and practices in energy consumption and production,[22] which is associated with a change in individual behaviour.[23]

Thirdly, energy democracy does not focus on energy in general, but on renewable energy sources as a response to the energy crisis. It is an objection to the centralized energy system based on fossil-fuels, performed with the available tools of renewable energy and energy communities. Therefore, it is primarily linked to environmental sustainability and renewable energy sources, which links it to energy justice, with social rights to energy and, primarily, to a healthy, sustainable or ecologically sound environment.[24] Energy democratization should always be linked to opening up to new forms of energy sources, which is also the pluralism that is the basis of the concept.

This is also the case at the European level, where the EU has a long tradition of local cooperation to satisfy energy needs and use renewable energy.[25] In

[16] See: M.J. Burke, J.C. Stephens, "Political power and renewable energy futures: a critical review," *Energy Research & Social Science* 35, 2018, pp. 78–93.

[17] See: K. Szulecki, I. Overland, "Energy democracy as a process, an outcome and a goal: a conceptual review," *Energy Research & Social Science* 69, 2020.

[18] Ibid.

[19] See: B. van Veelen, D. van der Horst, "What is energy democracy?", pp. 19–28.

[20] See: J.C. Stephens, "Energy democracy: redistributing power to the people through renewable transformation," *Environment: Science and Policy for Sustainable Development* 61, 2019, pp. 4–13.

[21] K. Szulecki, "Conceptualizing energy democracy," *Environmental Politics* 27, 2018, p. 35.

[22] P. Devine-Wright, "Energy citizenship: psychological aspects of evolution in sustainable energy technologies," [in:] *Governing Technology for Sustainability*, ed. J. Murphy, London 2007, pp. 41–62.

[23] B. Lennon, N. Dunphy, C. Gaffney, A. Revez, G. Mullally, P. O'Connor, "Citizen or consumer? Reconsidering energy citizenship," *J. Environ. Policy Plan* 22, 2020, p. 185; M. Lennon, "Decolonizing energy: Black Lives Matter and technoscientific expertise amid solar transitions," *Energy Research & Social Science* 30, 2017, p. 18 *et seq*.

[24] M.A. Heldeweg, S. Saintier, "Renewable energy communities as 'socio-legal institutions'", p. 3.

[25] M.M. Sokołowski, "European Law on the Energy Communities: a Long Way to a Direct Legal Framework," *European Energy and Environmental Law Review* 27, 2018, p. 60; M.M. Sokołowski, "Local Public Energy Utilities: a Road to Improving Local Energy Security," *Network Industries Quarterly* 17, 2015, p. 15.

Directive 2018/2001 of 11 December 2018 on the promotion of the use of energy from renewable sources[26] ("RED"), the stimulation of the energy communities is the most important step in changing the energy system in all Member States. Article 22 of the Act on "Renewable energy communities" states that: "Member States shall ensure that final customers, in particular household customers, are entitled to participate in a renewable energy community while maintaining their rights or obligations as final customers, and without being subject to unjustified or discriminatory conditions or procedures that would prevent their participation in a renewable energy community, provided that for private undertakings, their participation does not constitute their primary commercial or professional activity".

The role of energy communities and energy democracy is also addressed in recital 43 of Directive 2019/944 of 5 June 2019 on common rules for the internal market for electricity and amending Directive 2012/27/EU[27] "Distributed energy technologies and consumer empowerment have made community energy an effective and cost-efficient way to meet citizens' needs and expectations regarding energy sources, services and local participation. Community energy offers an inclusive option for all consumers to have a direct stake in producing, consuming or sharing energy. Community energy initiatives focus primarily on providing affordable energy of a specific kind, such as renewable energy, for their members or shareholders rather than on prioritizing profitmaking like a traditional electricity undertaking". This shows that, especially at the level of international law, forms of energy democracy, including the concepts of "energy communities" or "citizen energy", are targeted at transforming the general model of the energy economy or energy policy from a centralized to a decentralized one, but, above all, it shows the ways of making the energy transition to renewable energy sources through new technologies.

A general concept of energy democracy, which has many faces, emerges from the above. It means the normative goal of decarbonization and energy transformation but is also a term denoting the emergence of civic activities in the area of energy.[28] In this approach, it is not only the form of participation in decision-making processes but also the ownership and control of energy production.[29] The conclusion is that energy democracy leads to an increase in the role of society and citizens in the matters previously dominated by energy companies.[30]

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[26] K. Szulecki, "Conceptualizing energy democracy", p. 23.

[27] Directive (EU) 2019/944 of the European Parliament and of the Council of 5 June 2019 on common rules for the internal market for electricity and amending Directive 2012/27/EU (recast), OJ. EU. L. of 2019. No. 158, p. 125 as amended.

[28] K. Szulecki, "Conceptualizing energy democracy", p. 23.

[29] D. Szwed, B. Maciejewska, *Demokracja energetyczna*, Warszawa 2014, p. 3.

[30] K. Szulecki, "Conceptualizing energy democracy", p. 24.

2. Perspectives of energy democracy

For years, the concept of energy democracy has been perceived as an attractive way of activating citizens and transforming existing ways of pursuing the energy policy. In this way citizens are enabled to achieve many diverse group and individual goals, as a society and as individuals. In conclusion, the general picture of the state system in the energy sector is changing in a way that takes into account the interests of society and not only the strategic goals of the state. With this approach, we can say that the energy sector is changing from a distant and unattainable field to a field with a social face and a decentralized form of governance. From the point of view of decentralized energy democratization, it can help to satisfy economic needs and allow social participation, which makes it an instrument that guarantees substantive and procedural justice and therefore it is a way of creating a different type of society oriented towards renewable energy sources.[31] In this sense, it can be noticed that it opens many opportunities for the legal system, society and the economy.

Legal perspectives. Existing energy democracy will not be possible without changes in the legal systems, which create a framework for such solutions and protect their presence. Their introduction into the legal system legitimizes such social movements, which then leads to a better understanding and acceptance by other players. The same can be said about renewable energy sources in particular. The energy transformation based on renewable energy sources challenges the existing legal and political systems[32] and sets directions of regulations and system transformation. It is said that energy development is a matter of policy, not technology.[33] It is undeniable that energy democracy can be perceived as a condition and effect of energy development. It is simultaneously undeniable that legal regulations can accelerate or stop the process of energy democratization. From this point of view, energy democracy can be a result of changes in legal systems, but it can also stimulate this process.

Without legal frameworks, which create protection and support for social or private initiatives in the energy system, it would be difficult to constitute and maintain examples of energy democratization in terms of the transition to renewable energy.[34] It is important to make energy democratization a normative tool or an institution for it,[35] as a result of which it will play the main role in energy

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[31] M.A. Heldeweg, S. Saintier, "Renewable energy communities as 'socio-legal institutions,", p. 7.

[32] K. Szulecki, "Conceptualizing energy democracy,", p. 25.

[33] D. Szwed, B. Maciejewska, "Demokracja,", p. 4.

[34] B. Warbroek, T. Hoppe, "Modes of governing and policy of local and regional governments supporting local low-carbon energy initiatives; exploring the cases of the Dutch regions of Overijssel and Fryslân," *Sustainability* 9, 2017, p. 75.

[35] M. A. Heldeweg, S. Saintier, "Renewable energy communities as 'socio-legal institutions,", p. 3.

transition. Ensuring that civil society groups have the tools to autonomously resist the solutions imposed by governments and energy companies or to make strategic choices in the area of energy is of fundamental importance.[36]

The above shows that expressions of energy democracy can realize postulates of energy justice both in environments where frameworks exists and where authorities do not support energy democracy. Therefore, legal systems that reflect current policies are indicators of the how open states are to new ways of managing and using energy. A link can be seen between the legal system – good governance understood as democratic and good institutions – and the energy system. In the spirit of decentralization, governments are introducing more prosocial amendments to energy legislation, while the transformation of the energy system into a more democratic form itself contributes to enhancing the development of strong and good institutions.[37] Consequently, amendments to the law are necessary for the formal and normative recognition of forms of energy democracy as legal institutions of public authorities and to ensure their protection.

Understanding energy democracy as a form of governance structure helps place it in a particular legal position, which safeguards the interests and values it represents. In particular, it helps introduce it in existing energy settings by allowing a shift in governance between authority and energy company environments to a renewable energy democracy movement and associations,[38] while simultaneously maintaining heterogeneity and state and company positions. With this approach, it can be said that energy democracy is oriented towards the same goals as the legal system and state institutions; it just enables them to be achieved in different ways. It cannot be denied that energy democracy is consistent with the rule of law, democracy, human rights, autonomy, fair competition, consumer protection and freedom of association. Decision-making processes lead to solutions that are consistent with the common good, which makes them more legitimate and qualified.[39] It makes energy democracy a factor that can improve legal systems for the government and citizens from a normative perspective by increasing legitimacy and democratic meaning, but also pragmatically by achieving efficiency and coherence between local and central policies created with experts.[40]

In this way, it also supports the functioning of state institutions and energy companies' institutions especially in the achievement of energy justice, which is important for legal changes in this area. It is stated that: "The institutional meaning of impact of energy justice is crucial to use and name it in practice and legal

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[36] M.A. Heldeweg, "Normative alignment, institutional resilience and shifts in legal governance of the energy transition," *Sustainability* 9, 2017, p. 1273.

[37] K. Szulecki, "Conceptualizing energy democracy,", p. 23.

[38] Ibid, p. 24.

[39] Ibid, p. 30.

[40] Ibid, p. 31.

acts."[41] It is also based on energy democracy, if energy justice focuses on the moral implications of collective decisions, energy democracy shows their political aspect.[42] Still, energy justice is defined as the fair treatment and participation of all people in the development and enforcement of environmental laws, which also shows it is a political claim, bringing it close to energy democracy.[43] This means that institutionalized energy justice can strengthen the decentralized, democratic legitimacy of the participants of energy democracy.[44] These words gain a greater value when we realize that energy justice is also the social right of access to energy, which also means access to affordable, secure and sustainable energy and energy sources, which must be linked to a "resilient institutional setting" to be prosperous.[45] With this understanding, forms of energy democracy movements towards renewable energy communities, such as transition movements and carbon-neutral initiatives, are able to support this social right to a healthy, sustainable or ecologically sound environment.

In the light of the above, energy democracy also supports energy in overcoming barriers to energy transition,[46] which is connected with analysing the form of the whole energy system, creating new structures and new governance frameworks for the entire energy sector.[47] The legal regulation that can answer all the above postulates and expectations, in a way, is RED, which introduces energy communities (forms of energy democracy) to the governance of energy, while maintaining the role of the state and energy companies, thereby recognizing the potential of energy democracy and social initiatives. According to this regulation, Member States are required to ensure that renewable energy communities have the right to produce, consume, store and sell renewable energy, to share it with other energy communities and not to be discriminated against on the market. This action by the Member States, according to the Directive, must be performed by removing administrative barriers and unreasonable regulations for such activities and by creating frameworks and regulations supporting energy communities.

RED enables the environment of civil networks to be made similar in various countries (primarily in the Member States), which helps duplicate forms and

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[41] N. Simcock, "Exploring how stakeholders in two community wind projects use a "those affected" principle to evaluate the fairness of each project's spatial boundary," *Local, Environ Times* 19, 2014, p. 242.

[42] K. Szulecki, "Conceptualizing…,", p. 26.

[43] Ibid.

[44] I. Soutar, C. Mitchell, "Towards pragmatic narratives of societal engagement in the UK energy system,", p. 132.

[45] M.A. Heldeweg, *Investing in energy justice: modes of legal energy governance, especially of energy community initiatives*, (Preprint contribution to the (forthcoming) edited volume related the 25th World Jurist Association conference in Aruba, 30 October – 2 November 2017).

[46] Ibid.

[47] I. Soutar, C. Mitchell, "Towards pragmatic narratives of societal engagement in the UK energy system,", p. 137.

standards of energy democracy expressions in various jurisdictions. It helps harmonize the basic rules, rights and obligations and the system of public authorities supporting them in the energy transition process.[48]

Social perspectives. Energy democracy can be described as a response to centrally controlled fossil-fuel energy systems, which are recognized as unsustainable and unjustified.[49] The energy democracy movement is oriented towards restructuring this socio-technical regime based on the fossil-fuels energy economy and towards counteracting energy injustice and marginalization by replacing existing monopoly infrastructures with democratic and renewable structures.[50] It also changes the social focus of the issue, showing that it sees the connection between energy problems and other social issues, which are usually analysed separately,[51] and calls for the involvement of communities and citizens, who are affected by current issues of energy systems,[52] in the decision-making processes, rather than energy corporations.[53] This means that energy democracy also opens up many social possibilities and it is certainly one of them.

This aspect of the phenomenon is important because it detaches energy democracy and the forms of its expression from legal systems. Renewable energy communities can exist without a legal institution of civil energy networks, even in non-democratic countries and without governmental fostering,[54] thanks to current social movements. It shows that the main role in the emergence and development of energy democracy is played by the social approach to it, connected with the recognition of needs and the awareness of the requirement to take steps towards energy transition. This helps spread energy transition through social networks, which can bring its positive results faster and more visibly.

One of the social objectives of energy democracy that can be achieved is the mitigation of social inequalities by providing equality in decision-making processes and access to renewable energy. It is important that it involves different individuals and groups of individuals, which enables the energy policy to be shaped in a way that takes into account different interests and many points of view. The fossil fuel based energy sector has always been oriented towards pursuing the interests of the groups with political power, which has excluded the diversity of perspectives, especially of minorities and vulnerable and disadvantaged

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[48] M.A. Heldeweg, S. Saintier, "Renewable energy communities as 'socio-legal institutions,", p. 6.

[49] N. Healy, J. Barry, "Politicizing energy justice and energy system transitions: fossil fuel divestment and a just transition," Energy Policy 108, 2017, pp. 451–459.

[50] M.J. Burke, J.C. Stephens, "Energy democracy: goals and policy instruments for sociotechnical transitions," *Energy Research & Social Science* 33, 2017, p. 35.

[51] Ibid, p. 36.

[52] Ibid, p. 37.

[53] K. Jenkins, D. McCauley, R. Heffron, H. Stephan, R. Rehner, "Energy justice: A conceptual review," *Energy Research & Social Science* 11, 2016, p. 175.

[54] See: L.L. Delina, "Can energy democracy thrive in a non-democracy?," *Frontiers in Environmental Science* 6, 2018, pp. 1–5.

individuals and communities.[55] In energy democracy, the key principle of the movement is to link social (energy) justice priorities with renewable transformation, resisting systems of oppression, including racism and sexism, which have been supported and reinforced by fossil-fuel-reliant energy systems.[56] It also means tackling poverty and unemployment. With energy democracy comes the concept of industrial access, which means ending the fundamental economic injustices associated with an industrial sector with green job creation programmes.[57] The way to achieve these goals can be through protests or public and private support for programmes that address these issues, as well as through advocacy for policy reforms.[58] This means that energy democracy enables the most important social issues to be resolved in the most adequate way by involving the most interested groups in the agenda and decision process.

This leads to the most significant change that energy democracy brings to the socio-political order, which is the transformation of the role of society in energy policy. First of all, citizens go from being consumers to being producers, stakeholders and owners of the energy infrastructure. This leads to the emergence of a new player in the energy policy, who is a prosumer, an active member of the energy democracy movement and a nexus of participation in energy initiatives and cooperatives.[59] The prosumer is not only a participant of the energy market but has an impact on the policies planned and regulated by central and local authorities.

History provides examples of such bottom-up movements, starting with social movements shaping and changing policies. One of these is that of the social initiatives in the State of New York after Donald Trump pointed out that he would withdraw the U.S. from the Paris Agreement (French: *Accord de Paris*) on climate change. As a result of social pressure on the state authorities, the state joined with California and Washington to form the United States Climate Alliance, which, among other things, has ensured continued policy innovation and greenhouse gas reductions. The energy democracy movement spread to other states in the U.S., which resulted in an alliance of states with an aggregate population of over 100 million people. This means that, apart from the central policy, a significant part of the U.S. is continuing the Barack Obama administration's policy on renewable energy. This led to the development of the "energy democracy" framework, which undoubtedly plays a major role in the state's energy-transition policy. To improve the implementation of the "Reforming the Energy Vision" policy, this

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[55] For more see: R. Pearl-Martinez, J.C. Stephens, "Toward a Gender Diverse Workforce in the Renewable Energy Transition," *Sustainability: Science, Practice and Policy* 12, 2016, pp. 1–8.

[56] J.C. Stephens, "Energy democracy,", p. 8.

[57] D.J. Hess, "Energy democracy and social movements: A multi-coalition perspective on the politics of sustainability transitions," *Energy Research & Social Science* 40, 2018, p. 179.

[58] Ibid.

[59] K. Szulecki, "Conceptualizing energy democracy,", p. 31.

coalition of states also sought greater local control over energy ownership and greater public influence in decision-making, but it also sought to support access to new renewable energy sources and green jobs, as well as an end to the development of natural gas.[60]

Economic perspectives. The social perspectives described above gave a hint of the economic opportunities that come with the development of energy democracy. It is hard to deny that energy democracy is indifferent to the economy. As has been stated, energy democracy is oriented toward creating new jobs and economic growth,[61] which is a positive and huge social change, but also has a great impact on the economy. Participatory business models postulating energy democracy are nothing more than wealth-creation opportunities, as well as ways of creating new jobs for low-income groups, not just for wealthier individuals who have traditionally benefitted more from commercial forms of community energy.[62]

Energy democracy also allows for the rationalization of the costs of energy production and use. The activity of prosumers in energy production means social innovation, local development and cooperation between different groups and entities. Consequently, it helps reduce and share the costs of energy production and to increase the affluence of society.[63]

Ensured by the spread of energy democracy, a gradual but steady shift from centralized and fossil fuel-based energy system to a more decentralized and distributed one based on renewables will be typical activity for an increasing number of people. This will bring new household technologies, new forms of production of renewable energy, micro-grids, local storage solutions, automation and smart home devices.[64] It will undoubtedly affect the changing structure of the energy market and will have an impact on pricing policy, by increasing competition. There is also no point in stopping this process if the aim is to achieve greater democratization in the energy sector. The share of energy produced by entities cooperating in energy democracy forms is an indicator of the degree of democratization of the energy system.[65]

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[60] D. J. Hess, "Energy democracy and social movements,", p. 180.

[61] Komitet Ekonomiczny i Społeczny Unii Europejskiej, Odmienić przyszłość energetyki: społeczeństwo obywatelskie jako główny podmiot produkcji energii ze źródeł odnawialnych. Analiza EKES-u na temat roli społeczeństwa obywatelskiego we wdrażaniu dyrektywy UE w sprawie odnawialnych źródeł energii, January 2015, p. 5–6.

[62] B. Lennon, N.P. Dunphy, E. Sanvicente, "Community acceptability and the energy transition: a citizens' perspective," *Energy, Sustainability and Society* 9, 2019, pp. 1–19.

[63] E. Okraszewska, "Demokracja energetyczna – społeczeństwo, jako prosument energii elektrycznej," *Gospodarka w Praktyce i Teorii* 43, 2016, p. 41, 47.

[64] M. Ryghaug, T.M. Skjølsvold, S. Heidenreich, "Creating energy citizenship through material participation," *Social Studies of Science* 48, 2018, pp. 283–303.

[65] K. Szulecki, "Conceptualizing energy democracy,", p. 32.

3. Obstacles to energy democracy

Obviously, with the many opportunities that energy democracy offers, there are also many obstacles that make its development impossible or limit the achievement of its goals in energy transition. Importantly, many of them are a reflection of the possibilities it brings and point to shortcomings in the current forms of energy democracy, giving directions for improvement. Likewise, we can divide them into three categories of obstacles: legal, social and economic.

Legal obstacles. The obvious conclusion that emerges from the analysis of the legal perspective of energy democracy is the need to give it a normative framework to empower these social movements. The legal changes that have already been made show many shortcomings that make the current regulations imperfect and lead to opposite results in the democratization of the energy system. The same applies to the lack of specific regulations.

Undoubtedly, the normative recognition of energy democracy strengthens its legitimacy and enables it to be positioned institutionally in the energy system. The literature rightly points out that legal institutionalization is the government's recognition of civil society organizations, which leads to better cooperation and mutual assistance and especially creates an obligation of the state to support bottom-up initiatives.[66] Without such a framework it is difficult to change the model of a centralized energy policy and demand from acts of public administration that support and foster a transition to democracy in the energy sector, which leads to the deceleration or incorrect orientation in the transition to renewable energy.

Similarly, energy democracy in the energy sector cannot be construed purely as market practices where civil energy networks are exceptional practices in parallel with standard coordination by a competitive energy market. Normative regulations are imperative for this and for the energy transition. A good example is the UK Competition and Market Authority's 2016 report, which demonstrated that the market alone is not sufficient to ensure energy affordability, so normative regulations are needed primarily to protect the vulnerable.[67]

Furthermore, it is difficult to talk about a global energy transition towards renewable energy sources if changes in the legal systems only take place in some states. Therefore, the lack of necessary global regulations obliging states to make such changes results in the lack of expected efficiency in energy transformation. It makes it more likely that the renewable energy transitions are more likely to happen in already democratic and decentralized energy systems, where such changes

[66] See: P. Mirzania, A. Ford, D. Andrews, G. Ofori, G. Maidment, "The impact of policy changes: the opportunities of Community Renewable Energy Projects in the UK and the barriers they face," *Energy Policy* 129, 2019, pp. 1282–1296.

[67] CMA, *Energy market investigation* full report available at: https://assets.publishing.service.gov.uk/media/5773de34e5274a0da3000113/final-report-energy-market-investigation.pdf (accessed: 21.04.2023).

are acceptable.[68] Additionally, they are more likely on a local scale than others.[69] Logically, energy systems can only be truly and successfully transformed through energy democracy if this has a widespread dimension.

Without the necessary consistency, energy democracy will also be understood differently, and it is a field of diversification of civil rights in this matter. Furthermore, this leads to a distortion of the essence of energy democracy. First of all, the lack of a consistent definition and theorization of energy citizenship has already allowed for more normative neoliberal structures, which can weaken the international debate on the subject and deform its real objective. It this context, the blurring of the boundaries between consumer forms of participation, direct forms of participation and representative forms of participation within energy democracy is already visible.[70] It weakens the directed orientation of participation, but also makes its pro-environmental positions invisible.

RED is an attempt to harmonize these changes, at least at EU level. This Directive defines renewable energy communities.[71] Of course, this allows flexibility in adapting this concept in the Member States, which is the role of this Directive, especially since Article 2.16 RED indicates various aspects of energy democracy, such as "effective control" by local shareholders or members, and ownership of the renewable energy project. But it simultaneously leaves a great deal of discretion to the specification by the EU Member State,[72] which makes this regulation imperfect.[73] As long as its implementation at policy level remains in the hands of the Member States, where national policies are overwhelmingly centralized, creating barriers to the decentralization of energy,[74] it is difficult to say that the main objective of the regulation, namely energy democratization and energy justice, will be achieved equally and similarly in every EU Member State. In particular, the postulates of the RED cannot be fulfilled without any procedural or substantive specification,

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[68] M. Wahlund, J. Palm, "The role of energy democracy and energy citizenship for participatory energy transitions," p. 4.

[69] Ibid, p. 10.

[70] G. Mullally, N. Dunphy, P. O'Connor, "Participative environmental policy integration in the Irish energy sector," *Environmental Science & Policy* 83, 2018, pp. 71–78.

[71] Article 2.16 defines renewable energy community as "a legal entity: (a) which, in accordance with the applicable national law, is based on open and voluntary participation, is autonomous, and is effectively controlled by shareholders or members that are located in the proximity of the renewable energy projects that are owned and developed by that legal entity; (b) the shareholders or members of which are natural persons, SMEs or local authorities, including municipalities; (c) the primary purpose of which is to provide environmental, economic or social community benefits for its shareholders or members or for the local areas where it operates, rather than financial profits".

[72] M. A. Heldeweg, S. Saintier, "Renewable energy communities as 'socio-legal institutions'," p. 9.

[73] A. Savaresi, "The rise of community energy from grassroots to mainstream: the role of law and policy," *Journal of Environmental Law* 31, 2019, no. 3, pp. 487–510.

[74] P. Mirzania, A. Ford, D. Andrews, G. Ofori, G. Maidment, "The impact of policy changes: the opportunities of Community Renewable Energy Projects in the UK and the barriers they face," *Energy Policy* 129, 2019, pp. 1282–1296.

especially as it also avoids regulating the social movement bases of the transformation of the energy system, which are not protected at all. Undeniably, energy system engagement can only be effective and protected if local players are legally recognized as legitimately building on energy citizenship[75] or energy democracy.

Social obstacles. Shortcomings and differences in the legal regulations affect the social obstacles that energy democracy faces, despite its emergence from social movements. While energy democratization primarily supports the transformation of the energy model, the lack of adequate regulations on energy democracy and renewable energy can create obstacles in achieving this goal, because they are not geared up to facilitate the social embedding of the players and the values they pursue.[76] Without this, they do not meet the expected public perception and acceptance, which is necessary for larger groups of society to be activated. The projects or issues mobilize a group of people as a "public". The more people that are aware of the problem and the tools they have at their disposal, the greater their ability to form and act with respect to the authorities. Except for the introduction of EU regulations in Member States, prosumers still face barriers such as a lack of legally possibility to set up energy communities and renewable energy consumer projects.[77]

From a policy perspective, important questions are whether social groups can meaningfully influence the shape of the energy system and whether an individual action by citizens or group action by social movements can bring about real change. Individual, energy citizenship based on individual, everyday pro-environmental practices is more controllable and easier to implement and work with, which is mirrored by policies based on shaping individual behaviour rather than cooperating with organized social groups. Consequently, this is perceived as a threat to the energy democracy movement, which can exclude more effective forms of collective participation and large sections of society.[78] Consequently, the perspective of the problem shifts from the pro-environmental need for a systemic change towards public participation in purchasing and investment decisions about the energy choices of households.

A similar problem arises with energy democracy. Research in the UK, for example, shows that although decentralized processes for managing flexibility are perceived as an effective tool to enable greater civil participation, they also lead to the unification of interests and a one-size-fits-all solution that rules out vulnerable people. The focus on civil engagement through energy democracy, in

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[75] I. Soutar, C. Mitchell, "Towards pragmatic narratives of societal engagement in the UK energy system," p. 137.

[76] Ibid, p. 134.

[77] M. Wahlund, J. Palm, "The role of energy democracy and energy citizenship for participatory energy transitions," p. 6.

[78] B. Lennon, N. Dunphy, C. Gaffney, A. Revez, G. Mullally, P. O'Connor, "Citizen or consumer? Reconsidering energy citizenship," *Journal of Environmental Policy & Planning* 22, 2020, pp. 184–197.

which the majority plays a key role, "did not consider the needs of those who lacked economic or social resources to invest in flexibility technologies or adapt their practices, such as elderly, chronically ill and people engaged in unpredictable shift work."[79] This has implications on the need for civil participation in energy system processes, with concerns about more democratic forms of participation and improperly addressed structural barriers to participation related to aspects of inclusiveness and potential impacts over time, indicating who will benefit from the transitions.[80] Still, as research currently shows, under the current frameworks, citizens, and therefore society, feel they have no more influence on decision-making than they did as consumers. Therefore, most want to move beyond the limitation of the issue to consumer empowerment, which was considered illusory.[81] Furthermore, the limit on the activity of members is also visible. Inclusion of so far underrepresented groups can be illusory as a result of remaining in internal exclusion, which weakens the guarantee of the transfer of power.[82]

Another social aspect of this is also pluralism. Energy democracy is not based only on a single renewable transition-oriented group. Rather, there is a patchwork of groups that play different roles and have different approaches to energy projects.[83] This means that there are different groups within energy democracy which may have different needs and visions and can express their assessment in a number of ways.[84] In fact, the strength of the groups depends on the direction of energy transition. This means that the direction of transformation dominates, mostly with local support.[85] What moves the subject are the motives presented by the groups. It is noticeable that, in the UK, community organizations fighting for renewable energy transition are social in the broader sense, as well as economic and environmental.[86] This results in a more pro-environmental orientation and carbon reduction/local environmental improvement[87] rather than just focusing on its financial aspect.

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[79] M. Wahlund, J. Palm, "The role of energy democracy and energy citizenship for participatory energy transitions," p. 5.

[80] B. van Veelen, D. van der Horst, "What is energy democracy?," pp. 19–28.

[81] B. Lennon, N.P. Dunphy, E. Sanvicente, "Community acceptability and the energy transition," p. 5.

[82] M. Wahlund, J. Palm, "The role of energy democracy and energy citizenship for participatory energy transitions," p. 6.

[83] G. Walker, P. Devine-Wright, "Community renewable energy: what should it mean?," *Energy Policy* 36, 2008, pp. 497–500.

[84] J. Chilvers, H. Pallett, T. Hargreaves, "Ecologies of participation in socio-technical change: the case of energy system transitions," *Energy Research & Social Science* 42, 2018, pp. 199–210.

[85] M. Oteman, J. Kooy Henk, M. A. Wiering, "Pioneering renewable energy in an economic energy policy system: the history and development of Dutch grassroots initiatives," *Sustainability* 9, 2017, p. 550.

[86] 2018 Community Energy England "State of the Sector". The report can be accessed on the CEE's website. Para 3.4, 2018, p. 30, https://communityenergyengland.org/pages/state-of-the-sector-report-2018/ (accessed: 21.04.2023).

[87] Ibid.

Furthermore, because energy democracy opens up the social movement aspect of the energy policy, it is possible that different approaches, based on different values, will be used as an obstacle to the transition to renewable energy. This has been used by the fossil fuel industry's lobbying campaigns, where citizens have been the "voice of the people" for the oil and gas energy system in debates about energy futures.[88] Another example is the creation of fake grassroots movements, such as the "Responsible Energy Citizen Coalition" to influence EU policy regarding shale gas.[89]

Economic obstacles. Research shows that energy transition through energy democracy can effectively be limited by an economic barrier, as well at state and individual level, where it often faces financial issues leading to exclusion. Energy democracy is an investment both for the authorities and the individuals which needs rational planning.[90]

Within the area of the state's responsibility, energy transition is one of the many issues that authorities face, which makes it a less effective framework for centrally planned policies. Therefore, its importance is frequently reduced in comparison with economic development or industrial strategy.[91] Furthermore, energy transition and supporting energy democracy in it requires financial expenditure, which can affect other policies and citizens.[92] This, in turn, can have a negative impact on the social acceptance of change.

This can be understood in a similar manner from the individual point of view. Greater engagement in energy policy often leads to an increase in costs. The creation of a renewable energy infrastructure, its maintenance and collection of charges for access to grids cannot be insignificant in the assessment of energy democracy. Paradoxically, it can exacerbate social inequality and exclusion. This shows that energy democracy can, on the hand, lead to an increase in participation in the energy policy and, on the other, simultaneously increase tensions by shifting responsibility for energy accessibility from the government to the citizens.[93]

4. Conclusions

The considerations and conclusions presented lead to the main finding that energy democracy is understood in various ways, which makes it a diverse concept

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[88] M. Wahlund, J. Palm, "The role of energy democracy and energy citizenship for participatory energy transitions," p. 3.

[89] B. Lits, "Exploring astroturf lobbying in the EU: the case of responsible energy citizen coalition," *European Foreign Policy and Foreign Policy Analysis* 7, 2020, pp. 226–239.

[90] D. Szwed, B. Maciejewska, *Demokracja energetyczna,* p. 27.

[91] M. Wahlund, J. Palm, "The role of energy democracy and energy citizenship for participatory energy transitions," p. 7.

[92] E. Okraszewska, "Demokracja energetyczna," p. 44.

[93] Ibid, p. 12.

and complicates its nature. The lack of unified form of perception clearly opens more perspectives for its development, but is also a source of problems that limit the spread and development of forms of energy democracy, making it not a counterbalance for centralized, fossil fuel energy systems, but rather an unknown and therefore risky phenomenon that does not protect society and its participants.

The above problems illustrate a parallel between the perspectives and obstacles analysed in this paper. Each perspective is different if its legal, social or economic possibilities simultaneously encounter obstacles, which indicates that energy democracy is still far from perfect and its construction is still ongoing. Therefore, in order to overcome this misconception, significant changes are needed to make energy democracy legal and visible. Without decisive action, especially on the part of the authorities in the area of normative regulations and modifications of the energy policy, it will not be possible to achieve its goals, such as primarily, the transition to renewable energy, or, even if they succeed, they will not be adequate for the needs of the most interested parties in such transitions. It will then only be a scientific subject and an empty shell without any real impact on reality.

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