

Energy communities – status of implementation of EU directives in Poland

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Author's affiliations and addresses:

Agnieszka SPIRYDOWICZ  ^{1*}

¹ St. Lwowska 27/13,
53-515 Wrocław, Poland

*** Correspondence:**

e-mail:
spirydowiczagnieszka@gmail.com
tel.: +48 608 386 047

Abstract:

Energy communities play a key role in the energy transformation of the European Union, being a tool for implementing the assumptions of the RED II (2018/2001)¹ and market directives (2019/944)². The RED II directive promotes renewable energy sources (RES) with the goal of achieving a 32% share of renewable energy in the EU by 2030, supporting, among others, prosumers and energy communities (RECs). In turn, the market directive defines the framework for the functioning of the electricity market, emphasizing consumer rights, flexibility of the electricity system and the development of citizen energy communities (CEC). In Poland, the implementation of EU regulations has had varying degrees of success. Legal amendments, such as the RES Act (2016)³ or the Act on Farmers' Cooperatives (2018), have created the foundations for local energy initiatives, including: energy clusters and energy cooperatives. Citizen energy communities were introduced in 2024⁴. Key challenges include the lack of simplified administrative procedures, a limited financial and technical supporting system, and complex settlement mechanisms. Legal restrictions, e.g. in the scope of local government activities or failure to use the potential of virtual prosumers, hamper development of energy communities.

Keywords: energy communities, citizen energy, implementation of directives, renewable energy, energy transformation

¹ Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources (recast)

² 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)

³ Ustawa z dnia 22 czerwca 2016 r. o zmianie ustawy o odnawialnych źródłach energii oraz niektórych innych ustaw

⁴ USTAWA z dnia 10 kwietnia 1997 r. Prawo energetyczne ze zmianami

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1. European Union legal framework defining the energy communities

The RED II Directive (Renewable Energy Directive II, Directive (EU) 2018/2001 of the European Parliament and of the Council) is a key part of European Union legislation that establishes a framework for promoting renewable energy sources (RES) in the Member States. It was adopted on 11 December 2018 as a continuation and update of the first RED directive from 2009. Its aim is to accelerate the energy transformation in the EU and achieve climate goals. Key assumptions:

Overall target for RES:

- By 2030, the share of energy from renewable sources in gross final energy consumption in the EU should be at least 32%. This target may be increased.
- Energy development in sectors:
- Energy: Promotion of RES in electricity production by facilitating RES projects, such as wind farms or photovoltaic farms.
- Transport: By 2030, at least 14% of energy used in transport must come from renewable sources, with a limit of 7% for first-generation biofuels.
- Heating and cooling: Member States must increase the share of renewables in this sector by 1.3 percentage points each year.

Promoting prosumers and energy communities:

- Support for prosumers (energy producers and consumers at the same time) who can produce, consume and sell renewable energy.
- Developing energy communities as a way of locally engaging in the energy transition.
- Biofuels and biogas:
- Restricting the use of first-generation biofuels (produced from food and feed raw materials).
- Promoting second-generation biofuels (from waste and residues) and other advanced renewable fuels.

Administrative simplification:

- Simplifying and shortening administrative procedures for renewable energy projects.
- Introducing a single point of contact for renewable energy investors in each Member State.

Guarantees of energy origin:

- Requirement for all Member States to introduce systems of guarantees of origin of renewable energy, confirming its source. Sustainability and emission reduction criteria:
- Introduction of strict sustainability and greenhouse gas emission criteria for biofuels, bioliquids and biomass, so that their use actually contributes to emission reduction.

The Market Directive (DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (EU) 2019/944 of 5 June 2019) establishes rules for the generation, transmission, distribution, supply and storage of electricity, as well as consumer protection issues in the electricity market. Its aim is to create integrated, competitive, consumer-oriented, flexible, fair and transparent electricity markets in the European Union. The Directive requires introducing in the national legal systems of standards modifications of the current rules for electricity trading and the activity of energy market participants. This is to increase flexibility of the electricity system, which is necessary for the transformation of the electricity sector.



Rights of end customers:

- Customers have the right to freely choose their electricity supplier, regardless of their country of registration.
- Suppliers are required to offer transparent information on prices, tariffs and standard conditions of access to electricity services.
- Customers have the right to enter into contracts with dynamic electricity prices and to use the services of aggregators independent of electricity suppliers.

Promoting customer activity:

- The Directive supports the active participation of customers in the energy market, enabling them to generate, consume, store and sell electricity, individually or through aggregators.
- Customers have the right to join citizen energy communities, while retaining full consumer rights.

Regulations concerning aggregators:

- Aggregators may offer customers aggregation contracts without having to obtain the consent of the previous supplier.

Member States should establish transparent rules defining the roles and responsibilities of all market participants and the principles of data exchange between them.

Energy communities in the European Union are therefore defined by two main concepts: Renewable Energy Communities (REC) and Citizen Energy Communities (CEC). Both of these concepts aim to promote citizen engagement in the energy sector, but they differ in scope, legal form and membership requirements⁵.

Renewable Energy Communities (RECs):

- Scope: They focus exclusively on renewable energy sources (RES).
- Legal form: They can take various legal forms, such as cooperatives, associations or non-profit organizations.
- Membership: Members can be individuals, small and medium-sized enterprises (SMEs) and local authorities.
- Main objective: The priority is to provide environmental, economic or social benefits to members or local areas, rather than financial profit.
- Area of operation: They operate locally, meaning that members and projects are located in close proximity to each other.

Citizen Energy Communities (CECs):

- Scope: They can engage in a wide range of energy activities, not limited to RES.
- Legal form: They can take various legal forms, but must be independent from traditional energy suppliers.
- Membership: All entities can be members, including individuals, SMEs, local authorities and large companies, provided they do not control the energy community.
- Main objective: Like RECs, the objective is to deliver environmental, economic or social benefits to members or local communities, but not to maximize profit.

⁵ Bartłomiej Kupiec; Energy sharing w świetle prawa Unii Europejskiej i sprawiedliwości energetycznej; <https://press.wz.uw.edu.pl/cgi/viewcontent.cgi?article=2031&context=ikar>



- Scope of operation: They are not limited to a local area; they can operate on a larger scale, including nationally or internationally.

Key differences between RECs and CECs⁶:

1. Scope of activity: RECs focus exclusively on renewables, while CECs can engage in a wider range of energy activities.
2. Membership: RECs have more restrictive membership criteria, excluding large companies, while CECs allow them to participate.
3. Scope of operation: RECs operate locally, while CECs can operate on a broader scale.
4. Legal regulations: RECs are defined in the RED II directive, while CECs are defined in the market directive. Both directives emphasize the need to create energy communities with the active participation of citizens, but each of them approaches this in a slightly different way. This can lead to differences in the interpretation of the regulations and give Member States a lot of freedom in shaping the energy market based on distributed energy. Despite existing projects (e.g. European Energy Communities Facility, Rural Energy Community Advisory Hub, Energy Communities Repository) that analyse and support integration of energy communities in the European Union, and reports suggesting optimal models for their operation (both theoretical and practical), there is still no clear and coherent legal framework that would take into account the needs of energy communities on an EU-wide scale.

2. Objective of establishing the Energy Communities ⁷

Establishing the energy communities is a process of great importance, which has two fundamental goals. The first is the energy transformation, aimed at the wide use of renewable energy. The goal of this change is not only to develop technology and reduce dependence on fossil fuels, but above all to counteract the increasingly noticeable climate changes. Although voices questioning the existence of climate change or its impact on our lives are still being raised in public debate, the reality leaves no doubt. Excessive emissions of carbon dioxide and other greenhouse gases into the atmosphere lead to a number of catastrophic effects that have a real impact on the everyday lives of people around the world. Climate change, caused primarily by human activity, contributes to the increase in global temperature, which leads to a number of negative consequences. One of the most serious effects is global warming, which causes increasingly frequent and longer periods of drought. This in turn affects agriculture, reducing crop yields and increasing the costs of food production. Droughts also increase the risk of fires, which have been gaining in strength and scope in recent years, especially in the regions of southern Europe, Australia and California. These fires destroy not only forests, which are a natural carbon sink, but also the property and lives of many people. The second dramatic effect of climate change is extreme weather events, which are becoming more intense and frequent. Strong winds, storms and tempests cause huge destruction, both in infrastructure and the natural environment. They not only pose a threat to human life and health, but also generate huge costs associated with the reconstruction of the destroyed areas. Floods, resulting from sudden and intense rainfall, are becoming more and more common, causing destruction in cities, loss of property and ecological damage. A community approach to renewable energy offers an opportunity to reduce emissions, increase local energy self-sufficiency and create jobs in new sectors of the economy. This is a long-term solution that can bring benefits to both the environment and society. Therefore, development of energy

⁶ Implementacja przepisów Unii Europejskiej dotyczących społeczności energetycznych do polskiego porządku prawnego (https://frankbold.pl/wpcontent/uploads/2023/09/FB_implementacjaprzepisowudotyczacychspolecznoscienergetycznych.pdf) z dn. 10.01.2025

⁷ EEA; Energy prosumers in Europe — Citizen participation in the energy transition EEA Report 1/2022 The European Environment Agency (EEA)



communities is a key element of the future strategy, the aim of which is to protect our planet and ensure sustainable development for future generations. In previous years, discussions on energy transformation have focused almost exclusively on aspects related to environmental protection and combating climate change, as mentioned earlier. This topic dominated discussions among experts, politicians and representatives of the energy industry, focusing on reducing the greenhouse gas emissions, developing renewable energy sources and minimizing the impact of human activity on the climate. However, the events of recent years have significantly changed the perspective and given the discussion a completely new direction, introducing issues of energy security. The turning point in this debate was the COVID-19 pandemic, which disrupted the functioning of global economies and social systems on an unprecedented scale. During the crisis, the weaknesses of existing energy systems became evident, including their dependence on external suppliers and susceptibility to logistical and transport disruptions. The pandemic showed how important it is to have independent and local energy sources that can guarantee continuity of supply in crisis situations. In this context, energy communities began to be perceived not only as a way to achieve ecological goals, but also as an element of building the resilience of local communities to unforeseen events. Another significant impulse, which further highlighted the need for a change in approach, was the outbreak of war in Ukraine. This conflict, a huge political and economic shock, has changed the way we look at energy issues in Europe and beyond. Russia's aggression has made many countries aware of the dangers of being dependent on a single supplier of energy resources, especially when that supplier uses energy as a tool for political pressure. In the face of these events, energy communities began to be seen as a key element of the strategy for independence from external energy suppliers and increased energy security. Discussions about energy transformation have therefore taken on a broader dimension. In addition to ecology and climate protection, an equally important, if not more important, issue of security has emerged – both at the local and global level. Energy communities have become a symbol not only of pro-ecological change, but also of strategic action aimed at building more stable and independent energy systems⁸. Their development gives local communities the opportunity not only to control their own resources, but also to increase their resilience to global crises, making them one of the key tools for shaping the energy future of the world. Energy communities, by their nature, are decentralized, what means that their structure is based on the dispersion of energy production sources and its local consumption. Such a model of operation is crucial in the context of building more resilient and stable energy systems. The main goal of energy communities is to create self-balancing areas in which energy production and consumption take place within the same local environment. Thanks to this, these communities not only contribute to sustainable development, but also gain significant independence from central energy suppliers and global energy markets. One of the greatest advantages of this approach is its resilience to threats that often paralyze conventional power industry. Traditional energy systems are based on large, centralized energy production units, such as coal, gas or nuclear power plants. In the case of failures, cyberattacks, natural disasters or armed conflicts, such units are very vulnerable to disruptions, which can lead to large-scale power outages. In contrast, energy communities, due to their distributed structure, are much more difficult to shut down. If we assume that energy is produced and consumed within a limited, local area, and there are many such areas, it becomes obvious that depriving a large number of such units of energy at the same time is almost impossible. Each energy community operates largely independently, what means that problems in one of them do not directly affect functioning of the others. In addition, local energy production, often based on renewable sources such as solar, wind or biomass, makes these communities less vulnerable to disruptions resulting from disruptions in the supply of raw materials or changes in international prices.

⁸ Sebastian Eriksson Berggren, Theresa Witt, Erika Van der Linden, Lisanne Saes, Love Edander Arvefjord, David Heckenberg, Theresa Iglauer, Laura Sutinen, Emma Hanning and Göran Melin; Energy Communities, Nordic Energy Research 2023



3. Energy communities in Poland – history

The amendment to the Renewable Energy Sources (RES) Act of 22 June 2016 was one of the key steps towards the transformation of the Polish power sector. Introduction of the concept of energy clusters in this Act was aimed at creating a more sustainable, local and distributed energy system that could meet the challenges of decarbonisation, energy security and increasing the share of RES⁹.

Definition of energy clusters:

- The Act introduced the concept of energy clusters as a civil law agreement that can be created by individuals, legal entities, local government units (LGUs) and research institutes.
- The main objective of an energy cluster is to balance the production and consumption of electricity, heat or gas within a specific area, which cannot exceed the borders of one county or five communes.

Local nature of energy production and consumption:

- The Act promotes the idea of local energy self-sufficiency, i.e. the production and consumption of energy within one region. Energy clusters were to support the creation of local energy systems with a high share of RES.

Cluster support mechanisms:

- The amendment provides for the possibility of using the supporting systems, such as renewable energy auctions or project co-financing mechanisms, which was to encourage creation of the energy clusters.

Regulatory facilitations:

- The Act introduced simplifications for entities operating within energy clusters, such as simplified rules for connecting to the grid, which were to reduce entry barriers for smaller entities.

These changes had several reasons.

Development of distributed energy:

- Polish energy was (and still is) highly centralized, which makes it susceptible to disruptions and less effective in the context of local energy use. The introduction of clusters was aimed at developing the distributed energy, increasing the efficiency and reducing the transmission losses.

Increasing the share of renewable energy:

- One of the main goals was to accelerate the energy transformation by increasing the share of renewable energy in the energy mix, which was also in line with Poland's EU commitments to reduce greenhouse gas emissions.

Energy security:

- Energy clusters enable greater energy independence for local communities, which was especially important in the face of the growing risk associated with global and regional energy crises.

Support for local economies:

- Development of energy clusters was aimed at creating jobs in rural and less developed regions, supporting local entrepreneurship and the development of energy technologies.

⁹ Rescoop.eu <https://www.rescoop.eu/policy/transposition-tracker/rec-cec-definitions/poland-rec-cec-definitions>



EU obligations:

- Poland was obliged to adapt its regulations to European Union directives that promoted development of renewable energy sources and community energy.

The amendment to the RES Act in 2016 was a milestone towards the decentralization and transformation of the Polish energy system. Introduction of energy clusters was the foundation for the development of local energy initiatives, promoting cooperation between local governments, businesses and citizens. Despite the challenges associated with implementation and development of clusters, this change was a significant step towards a sustainable and more independent energy sector in Poland. However, lack of financial incentives to create energy clusters caused a long-term stagnation in the distributed energy market.

4. Energy communities in Poland – current situation

Over the years, the requirements related to the implementation of the directives referred to in Part I (Market Directive, RED II Directive) have resulted in the emergence of new definitions and entities related to energy communities.

A collective prosumer is an end user who generates electricity from renewable energy sources (RES) for their own needs in multi-family buildings, such as apartment blocks or office buildings. The energy produced is consumed on site by the residents or users of the building, which allows for reducing energy costs and increasing energy efficiency. The introduction of this institution is intended to enable residents of multi-family buildings to benefit from their own energy production, similarly to individual prosumers.

A virtual prosumer is an end user who has a RES installation located in a place other than their place of residence or business. The energy produced is fed into the grid and then received at the place of consumption, taking into account settlement mechanisms. This form of prosumerism enables using the energy from your own sources even when there is no technical or legal possibility to install renewable energy sources directly at your place of residence or work.

Both of these forms of prosumerism aim to increase citizens' participation in the energy market and promote renewable energy sources, in accordance with the European Union directives.

Concept of the virtual prosumer is still at the stage of legislative preparations and does not function in practice. According to the current regulations, the regulations regarding this form of prosumer are not to enter into force until July 1, 2025. Until then, there is no possibility of testing and assessing how the proposed solutions will work in real conditions. The virtual prosumer aims to enable the individuals or legal entities to invest in renewable energy sources located outside their place of residence or business, which in theory would allow for a more flexible approach to energy production and consumption. However, lack of examples of the application of this concept raises questions about its real effectiveness and the level of public interest¹⁰.

In turn, the collective prosumer model, which was introduced earlier, has been a challenge and, according to many experts, failed. Although its aim was to promote the joint production and consumption of energy in multi-family buildings, this solution did not catch on a large scale for several reasons. The first is the complex organizational barriers that discouraged potential users. Organizing a prosumer community requires the involvement of many parties, including building managers, apartment owners and energy suppliers, which complicates the entire process. The need to agree on technical details, such as the installation of photovoltaic systems, the division of benefits and

¹⁰ Agnieszka Stupkiewicz; Energetyka obywatelska coraz bardziej skomplikowana, 22 sierpnia 2024, <https://frankbold.pl/energetyka-obywatelska-coraz-bardziej-skomplikowana/>



the management of shared infrastructure, turned out to be too complicated for most housing communities. The second key problem turned out to be a complicated inter-prosumer contract, the provisions of which were unclear, difficult to understand and required advanced legal and technical knowledge. For many potential collective prosumers, this barrier was difficult to overcome, what limited interest in implementing this model. In addition, lack of sufficient support from the state or energy companies in terms of consulting and simplifying the procedures only deepened the problem. In addition, the practical aspects of the collective prosumer's operation, such as the method of settling energy between participants, turned out to be ineffective and economically unattractive. This model did not take into account the diverse needs of tenants of multi-family buildings sufficiently, which limited its usefulness in real conditions.

Changes to the Energy Law Act of 2024 also include the definition of energy clusters. The scope of an energy cluster's operations must still be limited to the area of one county or a maximum of five neighbouring communes, and additionally, all members of the energy cluster must be connected to the same distribution network, operated by the same Distribution System Operator (DSO), and this network should operate at a nominal voltage level below 110 kV.

Significant change is that an energy cluster must include at least one of the following entities:

- A local government unit whose scope of activity covers the area of the cluster.
- A capital company established by a local government unit, with its registered office within the area of operation of the energy cluster.
- A capital company in which more than 50% of the share capital or number of shares or stocks belongs to a local government unit.

Such conditions are intended to ensure the local nature of energy clusters, their effective coordination and consistency with regional needs and infrastructure. Additionally, the conditions that the agreement should meet are specified - it should be signed by all members of the energy cluster and include the appointment of a cluster coordinator. This document should precisely define:

- The rights and obligations of the members of the energy cluster, i.e. the parties concluding the agreement.
- The scope of cooperation within the framework of the energy cluster's activities, taking into account the areas of joint activities.
- The function of the energy cluster coordinator, together with a detailed description of his/her rights and obligations.
- The area of operation of the energy cluster, including a detailed indication of the points of energy consumption and places of its introduction to the network by individual members.
- Period of validity of the agreement and the conditions under which it may be terminated.
- Authorization for the energy cluster coordinator, which will allow him/her access to market and measurement data related to each cluster member.

The cluster should also be entered on the list of the Energy and Regulatory Office (URE). To do this a cluster development concept must be created that includes the energy balance of the cluster. Then, you can submit an application to change the settlements for your members, as well as an application to install remote reading meters.

To be able to get a discount until December 31, 2026:

- at least 30% of the electricity generated and introduced into the distribution network within the energy cluster must be generated from renewable energy sources, and



- total installed electrical capacity of the renewable energy source installation and generating units cannot exceed 150 MW of electricity and enable coverage during the year of no less than 40% of the total annual demand of the energy cluster members in terms of electricity, and
- total installed electrical capacity of energy storage facilities is at least 2% of the total installed capacity of the renewable energy source installation and generating units.

Conditions that must be met between 1 January 2027 and 31 December 2029 to get discount:

- at least 50% of the electricity generated and fed into the distribution network within this energy cluster should be generated from renewable energy sources, and
- the total installed electrical capacity of renewable energy source installations and generating units should not exceed 150 MW and cover no less than 50% of the total electricity supplies to members of this energy cluster during each hour, and
- the total installed electrical capacity of energy storage facilities should be at least 5% of the total installed capacity of renewable energy source installations and generating units.

Although many energy clusters have been created in Poland, which resulted primarily from the availability of subsidies from the National Reconstruction Plan (KPO) and the growing awareness of local government units about the need to ensure local energy needs, the discount system, which was supposed to be one of the key elements encouraging their creation, in practice turns out to be unattractive. Emergence of the energy clusters can also be attributed to the growing understanding that local energy production and consumption can contribute to increasing energy independence and improving energy security in regions.

However, despite the positive reception of the idea of energy clusters, the discount system remains problematic. In theory, it was supposed to enable real savings for cluster participants, motivating them to actively participate in such initiatives. In practice, however, the financial benefits resulting from the discount system are disproportionate to the requirements that must be met to use these mechanisms. This process requires meeting the number of formalities and technical conditions, which can be expensive and complicated, especially for smaller local governments or enterprises that do not have sufficient knowledge or resources.

High technical requirements, such as precise energy balancing in real time or the need to meet rigorous standards regarding network infrastructure, create barriers for potential cluster participants that can effectively discourage them from engaging in such projects. Additionally, the time and financial outlays associated with the implementation of appropriate technological solutions mean that many entities decide to abandon the discount system, seeing that the potential savings do not balance the costs incurred.

In addition, lack of flexibility in the rules for the functioning of the discount system, such as rigid limits related to time and energy quantity, additionally limits the possibilities of benefits. As a result, despite the initial assumptions of increasing the profitability and availability of energy clusters, this mechanism does not meet the expectations of many market participants. Moreover, limiting the discount system to a narrow scope of activity, which does not take into account the specificity of local energy needs, is also problematic¹¹.

The Act of 4 October 2018 on farmers' cooperatives introduced a definition of energy cooperatives, basing their operation on the Act of 16 September 1982 - Cooperative Law. An energy cooperative may operate in the area of one Distribution System Operator, in the area of a commune: rural or urban-rural or three rural, urban-rural communes adjacent to each other. An energy cooperative may operate

¹¹ Agnieszka Stupkiewicz, Maria Włoskiewicz, Magdalena Gąsowska – Paprota; Prawne aspekty tworzenia społeczności energetycznych, lipiec 2023



at a rated voltage lower than 110 kV, and the members of an Energy Cooperative may be at least 10 natural persons or 3 legal persons.

The maximum installed capacity of Renewable Energy Sources generating units in an Energy Cooperative may be 10 MW for electricity, 30 MW for heat, 40 million m³ for biogas or 20 million m³ for biomethane. An energy cooperative should balance at the level 70%, and the electricity generated in the energy cooperative should therefore cover not less than 70% of the cooperative's and its members' own needs during the year. The cooperative's statute is as a key document regulating the cooperative's activities and the rights and obligations of its members. It should include all the principles and rules defining the way the cooperative operates. The cooperative is registered in the National Court Register and the National Energy Association. Additionally, an application must be submitted to the Distribution System Operator (DSO) for the installation of a remote reading meter for members of the energy cooperative. Furthermore, comprehensive agreements must be concluded by each member as well as an agreement for the energy cooperative. Provisions were also established requiring distribution system operators to cooperate with energy cooperatives and provide them with the possibility of concluding a connection agreement. In addition, traditional energy suppliers have been required to provide balancing services to energy cooperatives. However, energy cooperatives should be provided with additional possibilities, such as the ability to sell electricity to external entities, which would significantly increase their operational potential and allow for the implementation of new business models. Currently, the activities of energy cooperatives are limited first of all to meeting the energy needs of their members. Extending their competences to include the ability to sell energy to companies, public institutions or other network users could transform them into more competitive entities on the energy market, while increasing local economic benefits.

In August 2024, the provisions of the Energy Law came into force, opening up new possibilities for the creation of another type of energy community called civic energy communities. The new regulations constitute a significant step towards the decentralization of the energy market, enabling the active participation of citizens, local government units and entrepreneurs in the production and management of energy.

Civic energy communities are a new type of entity that can be established by individuals, local governments or companies. Their activities are to focus on providing environmental, economic and social benefits for both their members and the local communities in which they operate. The aim is to support sustainable development, integrate pro-ecological activities and improve local energy self-sufficiency.

These communities have much wider possibilities of operation than traditional energy cooperatives or energy clusters. They can undertake various initiatives related to the generation, distribution, storage or management of energy, and their legal structure has been designed in a more flexible and simpler way than in the case of energy clusters. Thanks to this, creation of such communities is to be easier and less time-consuming for the potential founders.

One of the key advantages of civic energy communities is the possibility of establishing them also in urban areas. Previous regulations significantly limited development of local energy initiatives in cities, which particularly affected urban communes and residents of multi-family buildings. The new regulations eliminate this legal loophole, enabling the creation of energy communities in urban environments, where the demand for locally produced energy and interest in renewable energy sources is growing. A statute or agreement of a civic energy community is developed, which specifies the method of settlement and division of electricity generated by the power generation units owned by the community within the civic energy community. All that needs to be done is to submit an application for entry into the list of civic energy communities maintained by the Energy Regulatory Office, and



a member, shareholder or associate of the civic energy community retains the rights and obligations resulting from their status as a final or active customer, including a household electricity customer, what means that there is no requirement to report this fact to the DSO. Unfortunately, civic energy communities have been excluded from the possibility of using even the less favourable net-billing system, which currently applies to prosumers. Under this system, prosumers can buy back surplus energy previously directed to the network. Meanwhile, members of new energy communities have been limited to selling energy to energy companies at a fixed price or participating in energy auctions. Due to their complexity, these mechanisms can pose serious barriers for entities without specialist knowledge and experience in the energy sector. The directive in which new regulations has to be implemented assumes that decision-making and control functions in energy communities should be performed by people not professionally associated with the energy industry. However, at the same time, the legislator has only introduced complicated support mechanisms, such as energy auctions, which are difficult to understand and use by communities consisting of people without professional training. There is a lack of simple and encouraging tools that would enable local communities to operate effectively and develop in the spirit of the idea of democratizing the energy market.

In addition, the regulations regarding the decision-making and controlling community members are in some cases unclear and inconsistent. In practice, they allow medium-sized enterprises, including those professionally involved in energy market, to control the community, regardless of their business profile. Such solutions threaten the objectives of EU directives, which assume democratization and decentralization of the energy sector. There is a risk that energy communities will become a tool used by larger market entities, instead of acting for the benefit of local communities. Citizen energy communities still remain undefined in practice - the lack of a clearly defined supporting system, precisely defined role of these entities and the rules for energy distribution in the electricity system makes their functioning purely theoretical. New energy communities can only deal with electricity, omitting heat, which is a key element of the energy transformation and combating emissions in the coming years. Decarbonization of the heating sector remains one of the biggest challenges that these regulations ignore. Additionally, city residents have limited opportunities to effectively participate in energy communities. Energy clusters, although they can theoretically operate in cities, encounter numerous barriers, such as the limitation of their operation to networks with a nominal voltage below 110 kV or the requirement to apply public procurement procedures with the mandatory involvement of local government units.

At the same time, it is necessary to amend the Public Procurement Law (PZP), which currently is a significant barrier for local government units (LGUs) wishing to engage in energy clusters and trade in electricity within them. The procedural requirements imposed by the PZP are complicated and time-consuming, which discourages LGUs from actively participating in such initiatives. Adjusting the regulations should, above all, simplify the procedures related to LGUs' accession to an energy cluster and enable them to operate more flexibly in the field of energy management. In particular, it is worth considering introducing simplifications for LGUs that cooperate within local energy initiatives, such as simplified tender procedures or exemptions from certain PZP requirements in the case of activities undertaken for the benefit of the local community and the development of RES.

Another definition that appears in the context of energy communities and local government units is MIOZE (Small Renewable Energy Sources Installation). For a prosumer, who can be an individual person or an entrepreneur, who produces electricity only for their own needs, and introduces surpluses to the network as part of balance settlements (e.g. net-billing), their energy production activity does not constitute an economic activity, as long as they meet the conditions specified in the RES Act. In this case, the annual limits of installed power for a prosumer should be taken into account - 50 kW for the so-called micro-installation. In this case, they are not obliged to register their business activity in



the field of energy production, which distinguishes them from the energy producers in MIOZE. A producer in MIOZE, on the other hand, is an entrepreneur with business activity, registered in accordance with the Entrepreneurs' Law. He generates electricity from the renewable energy sources in a small installation with an installed electrical power ranging from 50 kW to 1 MW (or achievable thermal capacity in combination from 150 kW to 3 MW) and sells the generated electricity (in whole or in part) to the power grid, which constitutes its business activity.

The producer in MIOZE is responsible for meeting the technical, legal and environmental requirements related to the renewable energy installation, including obtaining a license or entry in the register of producers. He also cooperates with distribution system operators (OSD) and is obliged to conclude appropriate connection agreements and meet technical requirements. Thanks to this, MIOZE supports development of local renewable energy sources, filling the gap between prosumer activity and large industrial installations. However, attention should be paid here to local government energy. While companies, such as local government companies, can be registered in the URE register, the problem occurs in local governments that have consumption in specific buildings belonging directly to local government units (such as city hall buildings) exceeding the production capacity for a 50 kW installation, while at the same time having the ability to perform larger installations. In this case, the office will refuse registration, citing the provisions of the Local Government Act, which does not contain a provision on electricity generation in the group of own tasks. This means that despite the needs and possibilities of meeting them regarding electricity, local government units can only use the provisions regarding prosumers and cannot exceed the size of the 50 kW installation, which is associated with smaller possibilities of ensuring energy independence of buildings. In connection with this, another legal document appears (Local Government Act), in which changes should appear. In a result of changes, local governments could participate more actively in the creation and management of energy communities, which would have a significant impact on the development of local energy infrastructure and an increase in the share of renewable energy sources in the energy mix. Cooperation between local government units and other cluster members, such as cooperatives or enterprises, could be more effective if procedural barriers are eliminated. This would also enable more dynamic development of local markets and increase community involvement in the energy transformation. Introducing such changes would contribute to greater energy independence of local communities, enabling them to generate additional revenues that could be reinvested in the development of renewable energy infrastructure (RES).

5. Conclusions

In connection with the above, a group of changes is noticeable that should be introduced to meet the requirements of the European Commission directives and the development of energy communities in Poland:

- Comprehensive implementation of the definition and principles of operation of energy communities in accordance with the requirements of EU directives, including detailed provisions regulating the activities of Citizen Energy Communities and Renewable Energy Communities.
- Simplification of administrative formalities related to the establishment and operation of energy communities, which would allow for easier access to such initiatives for citizens and local communities. Simpler procedures would reduce bureaucratic barriers, making the process more accessible to non-professional market participants.
- Providing adequate financial and technical support for energy communities, including access to subsidy programs, preferential loans and other forms of financing. Additionally, technical



support in the form of training or consulting would be crucial for the proper functioning of these initiatives.

- Promoting and educating about energy communities to increase public awareness of their environmental, economic and social benefits. Information campaigns and educational programs should encourage citizens to actively participate in such projects.
- Introducing mechanisms for monitoring and evaluating energy communities, which would allow for regular analysis of their activities. This would enable ongoing adjustment of regulations and support to real needs and ensure compliance with the objectives of national and European energy policy.
- Conducting comprehensive consultations covering various stakeholder groups, in particular representatives of the business community, local government units and local communities. These consultations aim to develop practical and effective legal solutions that can be incorporated into laws and regulations. This process requires not only an in-depth analysis of existing documents, such as draft laws, regulations or other legal regulations, but also the identification of areas requiring modification. This allows for the adaptation of regulations to the actual requirements and specifics of individual regions and stakeholder groups. In many cases, these consultations require a broad analysis of legal and administrative documentation, including both national regulations and EU directives, which may have an impact on the final shape of the solutions. Often, this process also involves the need to develop detailed recommendations regarding changes to the applicable regulations, or even create new legal provisions to achieve better compliance with the real needs of stakeholders.

References

- [1] Kupiec B.: Energy sharing w świetle prawa Unii Europejskiej i sprawiedliwości energetycznej; <https://press.wz.uw.edu.pl/cgi/viewcontent.cgi?article=2031&context=ikar>
- [2] EEA; Energy prosumers in Europe — Citizen participation in the energy transition EEA Report 1/2022. The European Environment Agency (EEA).
- [3] Act of 10 April 1997 – Energy Law with amendments.
- [4] Act of 20 February 2015 on renewable energy sources with amendments.
- [5] Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources (recast).
- [6] 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 changing the Directive 2012/27/UE.
- [7] Stupkiewicz A.: Energetyka obywatelska coraz bardziej skomplikowana, 22 sierpnia 2024. <https://frankbold.pl/energetyka-obywatelska-coraz-bardziej-skomplikowana/>
- [8] Stupkiewicz A., Włoskiewicz M., Gąsowska-Paprota M.: Prawne aspekty tworzenia społeczności energetycznych, lipiec 2023.
- [9] Berggren S.E., Witt T., Van der Linden E., Saes L., Edander Arvefjord L., Heckenberg D., Iglauer T., Sutinen L., Hanning E. and Melin G.: Energy Communities, Nordic Energy Research 2023.
- [10] Rescoop.eu <https://www.rescoop.eu/policy/transposition-tracker/rec-cec-definitions/poland-rec-cec-definitions>
- [11] Act of 6 marca 2018 r. - Prawo przedsiębiorców wraz ze zmianami.
- [12] Act of 8 marca 1990 r. o samorządzie gminnym wraz ze zmianami.

