

The spread of the “prosumer” in European and French law: the structuring of energy communities

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Abstract

Energy communities are one of the legal tools to spread the prosumer figure, called “active customer”. The contribution aims to focus on their governance by the “effectively controlled by members or shareholders” analysis and show how this element helps or not the prosumer figure concretisation, in European and French energy law

Keywords: renewable energy; prosumer; energy communities

The European Union, which has a strategy of leadership in international climate policies [1], has, more quickly than the international order [2 ; 3 ; 3 ; 4 ; 5], adopted a common energy policy¹ combining the single market with environmental and climate issues. The crisis in the energy market has reinforced the need to ensure the energy security of the Member States², in particular through the use of renewable energies.

The growing use of renewable energy (RE) sources and greater competitiveness with traditional production methods [6], the desire of citizens to take back control of the way they consume and produce energy [7] have all helped to consolidate new local social dynamics [8], resulting in a proliferation of projects that produce or consume energy differently. The result is, notably, the emergence of energy communities (EC) in all shapes and sizes [9].

As early as 2008, Walker and Devine-Wright [10] identified the two pillars of these communities: governance processes that are intended to be open and participatory, and a concern to localise their economic, political and symbolic benefits [11]. Hoffman et al [12] define EC as “a decentralised method of energy production based on a variety of distributed energy technologies where production decisions are made as close as possible to the point of consumption”. These communities go beyond participatory financial investment. Consumers are no longer spectators of their energy consumption, but become players in it.

Energy law is being mobilised to support these EC [13]. This use of law is an international movement that is embodied in the spread of the figure of the *prosumer* (1) and carries over into European EC law (2), which French law transposes in a specific way (3).

1. The international spread of the prosumer concept

The International Energy Agency (IEA) has formalised the notion of the prosumer. It echoes the work of futurologist Toffler [14], who believes that the future will be made up of “prosumers”, i.e. citizens who become active producers of goods and services rather than

passive consumers. Prosumerism characterises the breaking down of the distinction between producer and consumer [15], which emerged during the Industrial Revolution. In 2014, the IEA adapted the term to the energy sector: “The term prosumer is used to refer to energy consumers who also produce their own power from a range of different onsite generators” [16]. More broadly, and even if the definition is debated [17], according to Brown, Hall and Davis [18], a prosumer is an “actor who both produces and consumes renewable energy and actively modulates their demand”.

The IEA’s proposal has been accepted in developed countries [19]. For the European Union, in its 2015 communication, *A Framework Strategy for a Resilient Energy Union with a Forward-Looking Climate Change Policy*³: “our vision is of an Energy Union with citizens at its core, where citizens take ownership of the energy transition, (...), participate actively in the market”. The term “prosumer” is not used, but the broad outlines of the concept are present and will be given concrete form in the own-initiative opinion of the European Economic and Social Committee in 2016 [20]: “Prosumer energy can be regarded as an essential element of the transition to distributed generation”⁴. Prosumers are defined as “Prosumers are individuals, groups of individuals, households or farms able to operate in an organised way, e.g. through associations, foundations or cooperatives, that are both producers and consumers of energy produced in small installations located in back yards or on residential or commercial buildings (...). Prosumers can also be small businesses, including social enterprises and local authorities.”⁵.

These institutional positions have been incorporated into the directives, in particular the 2019 directive on electricity market, under the term “active customer” as “a final customer, or a group of jointly acting final customers, who consumes or stores electricity generated within its premises located within confined boundaries or, where permitted by a Member State, within other premises, or who sells self-generated electricity or participates in flexibility or energy efficiency schemes, provided that those activities do not constitute its primary commercial or professional activity”⁶. They may therefore, individually or collectively, consume, store, produce, sell or participate in flexibility or energy efficiency schemes.

The concept is legally defined, but it needs to be made operational, in particular so that it covers the implications in terms of “governance”, since prosumers must “operate in an organised way” [20].

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2. The operationalisation of the prosumer in the European legal order: EC

The “prosumer” can take many forms [21; 22], from individual self-consumption⁶ to collective self-consumption [23; 24] or membership of an EC in which the notion of “making a group” is an innovative breakthrough in the energy system [25].

At European level, the EC makes it possible to operationalise the notion of the *prosumer* or active customer through two types of EC [26; 9]: the renewable energy community (REC)⁷, and the citizen energy community (CEC)⁸. As groupings of activities and players, they will give their members the opportunity to become active in the energy system. Based on “*open and voluntary participation*”, they are both “*effectively controlled by members or shareholders*”⁹. Their aim 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*”¹⁰.

There are two main differences between them. Firstly, in terms of the activities carried out: the REC can produce, consume, store and sell RE, share within itself the RE produced by the production units it owns and access the relevant energy markets¹¹; the CEC, active only in the field of electricity (renewable or not) can carry out the same activities as the REC, but can also be an aggregator, energy supplier and/or energy services provider¹². Secondly, their geographical scope is not the same. This criterion is decisive for the qualification of “*effective*” control of the community. Only the REC will be linked to its territory. It will be 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*”¹³. It is exactly at the interface between these two criteria that the challenge of structuring community governance [27] arises, and therefore the operationalisation of the notion of “*active customer*”. The French case is particularly exemplary.

3. The French legal framework for EC: an example of the complex implementation of the concept of effective control

The EC French law is now codified in articles L. 291-1 to L. 294-1 and R291-1 to R293-1 of the Energy Code. The effective control mobilized to criteria, the autonomous and the geographical proximity

About effective control, there is a presumption when more than 40% of the voting rights of the community are held, directly or indirectly, by one of the categories of persons eligible to exercise such control and no other category of person holds a higher proportion of voting rights than that held by the first category¹⁴. These eligible persons meet certain criteria, distinguishing “*open*” participation from effective control¹⁵. For example, if there are no more than twenty people in the community, they may participate but may not exercise effective control over it¹⁶.

The EC must comprise at least twenty natural persons or two of the categories of persons eligible to exercise effective control over the community, “*which*

must include those who benefit, whether free of charge or in return for payment, from the environmental, economic or social advantages that the community provides”¹⁷.

A REC will be made up solely of natural persons, small and medium-sized (SMEs) autonomous enterprises¹⁸, local authorities and groups of local authorities, local semi-public companies, social entrepreneurship funds¹⁹, or associations²⁰. The same categories of member as for the CER may be members or shareholders of the CEC, and effectively control it, without reference to geographical proximity²¹.

EC should take the form of an “*autonomous*” legal entity or legal person, bringing together the various participants, whether consumers, producers or investors²². Autonomy, like effective control, is particularly linked to the search for the “*active customer*”. It expresses a certain vigilance with regard to the more traditional players in the energy sector. The preamble to the RED II Directive states that “*To avoid abuse and to ensure broad participation, renewable energy communities should be capable of remaining autonomous from individual members and other traditional market actors that participate in the community as members or shareholders, or who cooperate through other means such as investment*”²³. Under French law, autonomy is required for both communities²⁴. The European text defines an autonomous company negatively as one that is neither “*Linked enterprises*” nor “*Partner enterprises*”²⁵.

Articles R. 291-1 and R. 292-1 of the French Energy Code lay down special prohibitions for member companies of an energy pool and their employees. Thus, those “*holding more than 10% of the voting rights and 10% of the equity and quasi-equity [of a community], or of an undertaking controlling or being controlled directly or indirectly by such an undertaking, in particular, may not hold, directly or indirectly, (...) more than 10% of the voting rights and 10% of the equity and quasi-equity of that community*” on an individual basis. Collectively, these amounts may not exceed 33% or the amount held collectively by “*other natural persons [and] local authorities or groups thereof*”. More generally, a company and its employees may not together hold more than 40% of the equity, quasi-equity and voting rights.

This vigilance also applies to companies in the energy sector. Partly in line with European law, French law stipulates that when a private company participates in a community, it may not do so as part of its main commercial or professional activity²⁶. In European law, only the REC is directly concerned by this prohibition, which seems to be limited to cases where the company's participation is on behalf of “*final customers*”²⁷. The CEC is not concerned, but the directive emphasises that decision-making powers are “*limited to those members or shareholders that are not engaged in large-scale commercial activity and for which the energy sector does not constitute a primary area of economic activity*”²⁸.

The criterion of geographical proximity is the second element of effective control. It applies only to RECs and differs according to the legal nature of the members of the REC²⁹. Only those of its members located

"in the geographical proximity" of the RE projects it has developed or subscribed to will be able to control the community.

People must live in the area (french department) where the community's RE projects are located, or in an adjacent area. The REC's member associations must have at least twenty natural person members residing in the same area. This raises a number of questions. For example, will a REC that is effectively controlled by twenty natural persons living near the project have to replace the member leaving the community to move outside the geographical area in order to continue to exist?

For SMEs, the head office or one of the secondary establishments must also be located in the departement where the project is to be set up or in a neighbouring departement.

For local authorities, effective control is deemed to be exercised when each of the RE projects to which the community has subscribed or which it has developed are located in their territory or in a neighbouring territory, except for the Region, which can only act within its territory.

However, this condition of geographical proximity does not apply to all members of the REC, but only to those belonging to the category holding more than 40% of the voting rights in the community.

CEC is not subject to these conditions of geographical proximity³⁰, only its purpose, to provide environmental, economic or social benefits to its members, or "*to the local territories where it carries out its activities*"³¹, creates a link with the territory. This may be explained by the CEC activities, which does not concern renewable energies, which are more likely to be local, but only electricity, whether or not of renewable origin.

The notion of the prosumer makes it possible to analyse the spread of a paradigm shift in the energy system, which must now rely on consumers to ensure the deployment of RE. This move towards an active consumer is still in its infancy [21]. In France, the legal framework is beginning to be fleshed out by the concept of "effective control", but the other part of the prosumer concept has yet to be defined. To ensure full control, prosumers and communities must have rights equivalent to those of other players in the system [28]. In this sense, communities are subject to fair, proportionate and transparent procedures, and cost-reflective network charges, "ensuring that they contribute, in an adequate, fair and balanced way, to the overall cost sharing of the system in line"³² and "should be allowed to operate on the market on a level playing field without distorting competition, and the rights and obligations applicable to the other electricity undertakings on the market should be applied (...) in a non-discriminatory and proportionate manner"³³. The groundwork has therefore been laid; everything remains to be developed.

References

- [1] Gupta J., Ringius L., 2001, "The EU's Climate Leadership: Reconciling Ambition and Reality", *International Environmental Agreement*, 1 (2), pp. 281-299.
- [2] Florini A., Sovacool B. K., 2009, "Who governs energy? The challenges facing global energy governance", *Energy Policy*, vol. 37, pp. 5239-5248
- [3] Sovacool, B. K., 2016, "How long will it take? Conceptualizing the temporal dynamics of energy transitions", *ERSS*, vol. 13, p. 202-215
- [4] Heubaum H., Biermann F., 2015, "Integrating global energy and climate governance: The changing role of the International Energy Agency", *Energy Policy*, vol. 87, pp. 229-239.
- [5] Aykut S. C., Foyer J., Morena E., 2017, *Globalising the climate: COP21 and the climatisation of global debates*, Routledge.
- [6] Adeyemi-Kayode T. M., Misra S., Maskeliunas R., Damasevicius R., 2023, "A bibliometric review of grid parity, energy transition and electricity cost research for sustainable development", *Heliyon*, vol. 9, e15532.
- [7] Devine-Wright P., 2007, "Energy citizenship: psychological aspects of evolution in sustainable energy technologies", in J. Murphy (Ed.), *Framing The Present, Shaping The Future: Contemporary Governance of Sustainable Technologies*, Earthscan, pp. 63-86.
- [8] Dreyfus M., Suwa A., 2022, *Local Energy Governance: Opportunities and Challenges for Renewable and Decentralised Energy in France and Japan*, Routledge
- [9] Almeida de L., Cappelli V., Klausmann N., Soest van H., 2021, "Peer-to-Peer Trading and Energy Community in the Electricity Market - Analysing the Literature on Law and Regulation and Looking Ahead to Future Challenges", *RSC* vol. 35.
- [10] Walker G., Devine-Wright P., 2008, "Community renewable energy: What should it mean? 36, pp. 497-500.
- [11] Seyfang G., Park J. L., Smith A., 2013, "A thousand flowers booming? An examination of community energy in the UK", *Energy Policy*, vol. 61, pp. 977-989.
- [12] Hoffman S. M., Fudge S, Pawlisch L, High-Pippert A., Peters M., Haskard J., 2013, "Public Values and Community Energy: Lessons from the US and UK", *Sustainability*, 5, pp. 1747-1763.
- [13] Geels F.W., Schwanen T., Sorrell S., Jenkins K., Sovacool B.K., 2018, 'Reducing energy demand through low carbon innovation: a socio-technical transitions perspective and thirteen research debates', *ERSS*, vol. 40, p. 23-35
- [14] Toffler A., 1981, *The Third Wave*, Bantam Books, 537p.
- [15] Gui E. M., MacGill I, 2018, "Typology of future clean energy communities: an exploratory structure, opportunities, and challenges", *ERSS*, 35, pp. 94-107.
- [16] IEA-RETD, 2014, *Residential prosumers - Drivers and policy options*.
- [17] Parag Y., Sovacool B. K., 2016, "Electricity market design for the prosumer era", *Nature Energy*, 16032.
- [18] Brown D., Hall S., Davis M. E, 2020, "What is prosumerism for? Exploring the normative dimensions of decentralised energy transitions", *ERSS*, vol 66, 101475.
- [19] Gržanić M., Capuder T., Zhang N., Huang W., 2022, "Prosumers as active market participants: A systematic review of evolution of opportunities, models and challenges", *RSER*, vol. 154, 111859
- [20] EESC, 2016, *Prosumer Energy and Prosumer Power Cooperatives: opportunities and challenges in the EU countries*, TEN/583-EESC-2016
- [21] EEA, 2022, *Energy Prosumers in Europe - Citizen participation in the energy transition*, Report n°1.
- [22] PROSEU project, 2020 *PROSumers for the Energy Union: mainstreaming active participation of citizens in the energy transition. Policies for Prosumer Business Models in the EU*, Deliverable 4.2

[23] Lormeteau B., 2022, "Regulatory framework of collective self-consumption operations", in Debizet G., Pappalardo M., Wurtz F., *Local Energy Communities. Emergence, Places, Organizations, Decision Tools*, 1, Routledge, pp.110-125

[24] Poupeau F.-M., Lormeteau B., 2024, *L'autoconsommation collective d'électricité en France. Emergence d'une innovation contrariée*, Presses des Mines, 2024 (on line)

[25] Burchell K., Rettie R., Roberts T., 2014, "Community, the very ideal: perspectives of participants in a demand-side community energy project", *People, Place and Policy Online*, vol. 8, no. 3, pp. 168-179.

[26] Fontenelle de L., "Les communautés énergétiques", *EEL n° 8-9*, 2019.

[27] Bommel N., Höffken J. I., 2021, "Energy justice within, between and beyond European community energy initiatives: A review", *ERSS*, vol. 79, 102157.

[28] Butenko, A., 2016, "User-Centered Innovation and Regulatory Framework: Energy Consumers' Market Access in EU Regulation", *TILEC Discussion Paper No. 2016-015*.

Footnotes

¹ Art. 194(2) TFEU

² European Commission, *REPowerEU Plan*, 18 May 2022, COM/2022/230 final

³ COM/2015/080 final

⁴ § 5.13

⁵ §5.5

⁶ Art. 2 8), dir. 2019/944 of 5 June 2019 on common rules for the internal market for electricity, OJ L 158, 14.6.2019

⁷ Art. 2 16) ; art. 22, dir. 2018/2001 of 11 December 2018 on the promotion of the use of energy from renewable sources, OJ L 328, 21.12.2018

⁸ Art. 2 11); art. 16, dir. 2019/944

⁹ Art. 2 16) a), dir. 2018/2001; art. 2 11) a) dir. 2019/944.

¹⁰ Art. 2 16) c), dir. 2018/2001; art. 2 11) b) dir. 2019/944.

¹¹ Art. 16, dir. 2018/2001; art. 2 11) b) dir. 2019/944.

¹² Art. 22 dir. 2019/944.

¹³ Art. 2 16) a), dir. 2018/2001

¹⁴ Art. L. 291-3, para. 3; L. 292-4, para. 3, Energy Code.

¹⁵ Art. L. 291-1, 1°; L. 292-1, 1°, C. énergie.

¹⁶ Art. L. 291-3, paras. 2 and 3; L. 292-4, paras. 2 and 3, Energy Code

¹⁷ Art. L. 291-3, para. 2 and L. 292-4, para. 2, Energy Code

¹⁸ Defined in art. 2, Annex Commission Recommendation concerning the definition of micro, small and medium-sized enterprises, C(2003) 1422), OJ L 124, 20 May 2003, art. 2 8), dir. 2018/2001.

¹⁹ Art. L. 214-153-1, Monetary and Financial Code

²⁰ Art. L. 291-1, 2°, Energy Code

²¹ However, the text refers to small autonomous companies within the meaning of art. 2 11), dir. 2019/944.

²² Art. L. 291-3; L. 292-4, Energy Code

²³ §71, dir. 2018/2001

²⁴ Art. L. 291-1; L. 292-1, Energy Code, autonomy defined in art. 3, annex Commission Recommendation C(2003) 1422). In European law, only the CEC is concerned.

²⁵ Art. 3(1), Commission Recommendation C(2003) 1422).

²⁶ Art. L. 291-1, 2°; L. 292-1, 2°, Energy Code.

²⁷ Art. 22, 1°, dir. 2018/2001.

²⁸ §44), dir. 2019/944.

²⁹ Art. R. 291-8, Energy Code.

³⁰ §46, dir. 2019/944

³¹ Art. L. 292-1, 3°, Energy Code.

³² Art. 22, 4° d) dir. 2018/2001

³³ §46, dir. 2019/944.