

The European strategy against energy poverty: the new *prosumer* between lights and shadows

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1. From the origins of European energy policy to a distributed and decentralized model.

1.1. The lack of a legal basis in the founding Treaties.

The Union’s interest in regulating the energy market began in the 1960s when the European Communities realized that in order to ensure the stability of the entire European continent, it was urgent to create a common management of coal and steel, the two main energy sources of the time¹.

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¹ For an in-depth historical and legal analysis, see R. MONACO, *Primi lineamenti di diritto pubblico europeo*, Giuffrè, 1962; H.A. SCHMITT, *The Path to European Union: From the Marshall Plan to the*

The first act specifically adopted on this subject is traditionally traced back to the “Council Resolution of 17 September 1974, concerning a new energy policy strategy for the Community”. This act, although not binding, expressed, on the one hand, the awareness of national policies that they could not manage energy resources alone and, on the other hand, the will to intervene in this sector through the instrument of ten-year plans.

There was, however, a lack of a legal basis in the Treaties authorizing the European Community to intervene in energy matters, a situation that was attempted to be remedied by teleologically interpreting the provisions contained therein. Thus, the creation of an internal energy market was conceived as functional to the realization of a single market in a broader sense, also by virtue of the impact of this sector on the activities of companies and, consequently, on competition.

This material expansion of Community competences in the energy sector² took place, first, thanks to the jurisprudence of the Court of Justice, which extended the concepts of *goods* and *services* to include energy to be able to apply the fundamental principles of the free movement of goods and services also to energy matters³. On the other hand, it was also implemented by leveraging Article 95 EC (now Article 114 TFEU) concerning the adoption of internal acts on the liberalization of energy markets and Article 308 EC (now Article 352 TFEU) concerning the conclusion of international agreements on energy security.

The impact that this gap has had on the supranational energy policy in which the Union has *de facto* exercised its competence is still evident today, drawing up a fragmented regulatory framework, based on different legal bases (including, in

Common Market, Praeger, 1981, p. 272; D. DINAN, *Europe recast: a history of European Union*, Palgrave Macmillan Basingstoke, 2004; M. DEDMAN, *The origins and development of the European Union 1945-1995: a history of European integration*, Routledge, 2006; W. Kaiser-A. VARSORI, *European Union history: themes and debates*, Springer, 2010; P. THODY, *An historical introduction to the European Union*, Routledge, 2002.

² Cf. P. MENGOZZI, *Istituzioni di diritto comunitario e dell'Unione Europea*, Cedam, 2006; A. TIZZANO (ed.), *Trattati dell'Unione Europea*, Giuffrè, 2014; G. GAJA, *Introduzione al diritto comunitario*, Laterza, 2009.

³ On the jurisprudential development of the concept of energy see, *ex multis*, ECJ, 23 October 1997, Joined Cases C-158/94 and C-159/94; ECJ, 15 July 1964, C-6/64.

particular, the aforementioned Article 114 TFEU⁴) and inspired by the so-called “horizontal cooperation model”. However, application practice immediately showed the strong inadequacy of this system because “in the energy sector, horizontal cooperation constitutes a necessity and a limit to Community action and competences, largely dependent on the implementation that [...] Member States and national regulatory authorities will want to do”⁵.

1.2. The adoption of the Lisbon Treaty and the introduction of self-consumption as the focal point of the new European energy strategy.

A turning point in European energy policy was the adoption of the Lisbon Treaty, because thanks to its Articles 4 and 194, a general legal basis was finally introduced as a basis for EU intervention in this area.

Specifically, Article 4 TFEU has clearly included energy and the environment among the competing competences between the Union and the Member States, thereby strengthening EU action in this sector and, at the same time, clarifying once and for all the division of competences⁶. On the other hand, Article 194 - specifically labelled “Energy” - specifies the aims of European energy policy by outlining the insuperable limits of the Member States’ action in this area⁷.

⁴ The interventions of the EU institutions have thus taken the form of various pieces of secondary legislation, among which we find Directive 90/377/EEC on the transparency of electricity and gas purchase prices by the end consumer, as well as Directives 90/547/EEC and 91/296/EEC aimed at promoting fair and non-discriminatory conditions regarding the transit of electricity and gas respectively.

⁵ Si riporta di seguito il testo originale della citazione: “Nel comparto energetico la cooperazione orizzontale costituisce una necessità ed un limite all’azione ed alle competenze comunitarie, largamente dipendenti dall’attuazione che [...] vorranno fare gli Stati Membri e le Autorità nazionali di regolazione” di F. MUNARI, *Il nuovo diritto dell’energia: il contesto comunitario e il ruolo degli organi europei*, in *Il diritto dell’Unione Europea*, 2006, pp. 881-899; N. AICARDI, *Energia*, in M.P. CHITI-G. GRECO (ed.), *Trattato di diritto amministrativo europeo - Parte speciale - Tomo II*, Giuffrè, 2007, pp. 1027 ff.

⁶ Cf. R. MICCÙ, *Multilevel regulation and government in the European energy market*, in R. MICCÙ (ed.), *Multilevel regulation and government in energy markets Implementation of the “Third Package” and promotion of renewable energy*, Jovene, 2016, pp. 3-75.

⁷ For a commentary, see M.A. SCINO, *La politica energetica europea: dalle origini alle più recenti evoluzioni*, *Rassegna Avvocatura dello Stato*, 2012, pp. 80 ff.; C.F. SABEL-J. ZEITLIN, *Learning from Difference: The New Architecture of Experimentalist Governance in the EU*, in *European Law Journal*, 2008, no. 14, pp. 271-327.

Based on these two provisions, the first liberalization directives were adopted at the end of the 1990s, in 1996 on electricity and two years later another one on gas.

In 2003, with the “Second Package”⁸, the EU legislator imposed more precise and stringent rules on access to national networks, obliging Member States to appoint national regulatory authorities in order to favour a multitude of competitors.

In 2006, a Green Paper was presented to identify a European strategy for sustainable, competitive, and secure energy as a central goal of the EU. Thus, the following year the Commission prepared a further package for electricity and natural gas, which came into force in 2009 and included two directives⁹ and three regulations¹⁰ aimed at the realization of an open and integrated single European market to strengthen the security and competitiveness of the Union¹¹.

In 2015, the European Commission adopted an important Communication¹² in which it expressed concern that the EU, despite already playing a leading role in renewable energy investments, was still one of the largest energy importers.

It is in this context that comes into play the Directive 2018/2001/EU (“RED II”) on the promotion of energy from renewable sources where special attention is paid to self-production, renewable energy consumption and, above all, a new *bottom-up* approach, in which self-consumption becomes a necessary tool not only for

⁸ This legislative package includes Directive 2003/54/EC “Electricity Directive”, Directive 2003/55/EC “Gas Directive”, as well as the network access regulations No. 1228/2003 for electricity and No. 1775/2005 for natural gas. Cf. B. EBERLEIN, *Experimentalist Governance in the European Energy Sector*, in C.F. SABEL-J. ZEITLIN (ed.), *Experimentalist Governance in the European Union*, Oxford University Press, 2021, pp. 61 ff.

⁹ Directive 2009/72/EC concerning common rules for the internal market in electricity (repealing the previous Directive 2003/54/EC) and Directive 2009/73/EC concerning common rules for the internal market in natural gas (repealing the previous 2003 Directive).

¹⁰ Reference is made to Regulation No. 713/2009, which established an Agency for the Cooperation of Energy Regulators (ACER); Regulation No. 714/2009 on network access conditions for cross-border exchanges in electricity and repealing the previous regulation on the subject; and, finally, Regulation No. 715/2009 on conditions for access to natural gas transmission networks and repealing Regulation No. 1775/2005.

¹¹ For an in-depth analysis see, among others, R. BOSCHECK, *The EU’s Third Internal Energy Market Legislative Package: Victory of Politics over Economic Rationality?*, *World Competition*, 2009, pp. 593 ff.

¹² EUROPEAN COMMISSION, *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee, the Committee of the Regions and the European Investment Bank, A Framework Strategy for a Resilient Energy Union with a Forward-Looking Climate Change Policy*, COM(2015) 80 final, 2015.

combating climate change, but above all to give new impetus to the internal market.

To achieve this goal, thus, in 2019 was adopted the additional energy package “Clean Energy Package for all Europeans”¹³ which introduced new rules for the electricity market, provided various incentives for consumers and also imposed an obligation on Member States to provide contingency plans for potential energy crises, increasing the competences of ACER (Agency for the Cooperation of Energy Regulators) in cross-border cooperation.

Among the various pieces of legislation that are part of this package, special mention should be made of Directive 2019/944/EU, concerning common rules for the internal market in electricity, because it explicitly places consumers at the centre of EU policy, recognizing them as key to achieving the goal of energy transition¹⁴.

Various forms of self-consumption and self-production are therefore envisaged, allowing active customers to act individually or to associate in energy communities¹⁵ in the context of a new decentralized and competitive model where they can be both owners and independent operators of their own distribution network¹⁶.

¹³ J. LOWITZSCH-C.E. HOICKA-F.J. VAN TULDER, *Renewable energy communities under the 2019 European Clean Energy Package. Governance model for the energy clusters of the future?*, in *Renewable and Sustainable Energy Reviews*, 2020, 122, pp. 1364 ff.; P. CAPROS and others, *Outlook of the EU energy system up to 2050: The case of scenarios prepared for the European Commission's 'clean energy for all Europeans' package using the PRIMES model*, in *Energy Strategy Reviews*, 2018.

¹⁴ EUROPEAN PARLIAMENT AND COUNCIL, *Directive (EU) 2018/844 of the European Parliament and of the Council of 30 May 2018 amending Directive 2010/31/EU on the energy performance of buildings and Directive 2012/27/EU on energy efficiency*, 2018.

¹⁵ Cf. M.M. SOKOLOWSKI, *Renewable and citizen energy communities in the European Union: How (not) to regulate community energy in national laws and policies*, in *Journal of Energy & Natural Resources Law*, 2020, 38, pp. 289-304.

¹⁶ See E. CUSA, *Sustainable development, active citizenship and energy communities*, in *Orizzonti del diritto commerciale*, 2020, 56, pp. 71-126; It should be noted that on 14 July 2021 the fifth energy package, “Delivering the European Green Deal”, was proposed with the aim of aligning the EU's energy targets with the new European climate ambitions for 2030 and 2050, i.e. making the EU the “first climate neutral continent” by 2050 by reducing emissions by at least 55% by 2030 compared to 1990 levels.

On this point, see the considerations of M. PIANTA-M. LUCCHESI, *Rethinking the European Green Deal: An industrial policy for a just transition in Europe*, in *Review of Radical Political Economics*, 2020, 52, pp. 633 ff.; C. KEMFERT, *Green deal for Europe: More climate protection and fewer fossil fuel*

2. The new centrality of citizens between poverty and energy vulnerability.

When speaking of self-consumption and self-production, one necessarily refers to the phenomenon known as “energy prosumerism” characterized by the opening of energy production to non-professionals. This expression, deriving from the union of the English words *prosumer*¹⁷ and *consumer*, clearly represents the European tendency - marked in the energy sector¹⁸ - to bring together two figures that historically have been opposed both because of their different contractual strength and, above all, their vulnerability¹⁹.

Vulnerability is indeed a polysemantic concept of which there is currently no unique or predeterminate definition, but which takes on different characteristics depending on the context of reference²⁰. As is well known, originally the so-called “average consumer” was the main paradigm in relation to which assess the conducts of professional agents, and it was declined by the European Court of

wars, in *Intereconomics*, 2019, 54, pp. 350 ff.; N. VALLA, *Boosting the Economic Recovery or Closing a Green Deal in Europe? Or Both?*, in *Intereconomics*, 2020, 55, pp. 350 ff.; E. CHITI, *Managing the ecological transition of the EU: The European Green Deal as a regulatory process*, in *Common Market Law Review*, 2022, 59; A. VOLPATO-E. VOS, *The institutional architecture of EU environmental governance: the role of EU agencies*, in *Research Handbook on EU Environmental Law*, Edward Elgar Publishing, 2020.

¹⁷ The expression was coined by the American Alvin Toffler in 1981 in his essay “The Third Wave”, by which he meant a particular type of user who does not merely use a good or passively enjoy a service but takes a proactive role in its production or provision.

¹⁸ In the energy market, in fact, the term “customer” is used in such a way as to also include subjects who, although professional, are nevertheless in a weak and vulnerable position. This different figure was already introduced with Directive 2003/54/EC on common rules for the internal market in electricity and replaced by Directive 2019/944/EU, and Directive 2003/55/EC on natural gas and repealed by Directive 2009/73/EC.

¹⁹ Cf. H. UNBERATH-A. JOHNSTON, *The double-headed approach of the ECJ concerning consumer protection*, in *Common Market Law Review*, 2007, 44, pp. 1237-1284; G. CASSANO-M.E. DI GIANDOMENICO, *Il diritto dei consumatori*, Cedam, 2010; P. SIRENA, *L'integrazione del diritto dei consumatori nella disciplina generale del contratto*, in *Riv. dir. civ.*, 2004, 5, pp. 787 ff.; S. WEATHERILL, *EU consumer law and policy*, Edward Elgar Publishing, 2013; G. HOWELLS-C. TWIGG-FLESNER-T. WILHELMSSON, *Rethinking EU consumer law*, Taylor & Francis, 2017. We must notice that this category is so much indefinite that G. RITZER ET AL., *The Coming of Age of the Prosumer*, in *Behav. Scientist*, 56, 2012, pp. 380-381, claim that “humans are by their nature prosumers [...] the existence of largely separable producers and consumers is, at best, a historical anomaly. Our error has been to treat production and consumption as binary”.

²⁰ See V. RUBINO, *L'evoluzione della nozione di consumatore nel processo di integrazione europea*, in *Il Diritto dell'Unione Europea*, 2017, 2, pp. 343-365.

Justice as a subject “reasonably well-informed, reasonably observant and circumspect”²¹.

This paradigm was based on the classical economic theory whereby men are perfect rational and capable of making always the most efficient choice to maximise their own welfare; thus, it was believed that imposing strict information obligations on the professional was the best way to assure the full awareness of the consumer²². However, this view was harshly criticised by those cognitive sciences that, in the 1970s, demonstrated the unreality of the imagine of “*homo oeconomicus*” in favour of the theory of “bounded rationality”²³. According to this new approach, the consumer is by nature endowed with a limited capacity to evaluate all the available options and the information, because he is subject to both internal and external factors (called “*bias*”) that influence him in a way that is often completely irrational²⁴.

Although the findings of behavioural sciences have not (yet) been fully implemented by the EU legislator, one can nevertheless observe in various regulatory areas consideration for subjects who, due to various factors, are to be considered vulnerable and, therefore, in need of more pregnant protection.

²¹ On the paradigm of the “average consumer” see for examples, ECJ, 19 April 2007, C-381/05; ECJ, 19 September 2006, C-356/04; ECJ, 12 February 2004, C-218/01; ECJ, 6 November 2003, C-358/01; ECJ, 24 October 2002, C-99/01; ECJ, 16 July 1998, C-210/96; ECJ, 20 February 1979, C-120/78.

²² Please let us referer to L. SPOSINI, *Gli obblighi informative del professionista e la garanzia commerciale del produttore nella giurisprudenza della Corte di Giustizia. Alcuni spunti a partire dal caso Absolut*, in *Pactum*, 2023, pp. 135-145.

²³ Elaborated by Harbert Simon. On the point, see H. SIMON, *A Behavioural Model of Rational Choice*, in *The Quarterly Journal of Economics*, 1955, 69, 1, 99 ff.; J. D. HANSON e D. A. KYSAR, *Taking behaviouralism seriously: some evidence of market manipulation*, in *Harvard Law Review*, 1999, 74.

²⁴ For a recognition on the different typologies of bias, see C. R. SUNSTEIN, R. H. THALER, *Nudge. La spinta gentile. La nuova strategia per migliorare e nostre decisioni su denaro, salute, felicità*, Feltrinelli, 2014; D. KAHNEMAN, P. SLOVIC e A. TVERSKY, *Judgment under Uncertainty: Heurostics and Biases*, Cambridge University Press, 1982; C. JOLLS, C. R. SUNSTEIN e R.H. THALER, *A Behavioural Approach to Law and Economics*, in *Stan. Law Rev.*, 50, 1998, 5 ss.; D. KAHNEMAN, J. L. KNETSCH, R. H. THALER, *Anomalies: The Endowment Effect, Loss Aversion, and Status Quo Bias*, in *Journal of economic perspectives*, I, 1991.

Thus, Directive 2005/29/EC introduced, as a further parameter for assessing the unfairness of a commercial practice, the concept of the “vulnerable consumer”, considered as an exception to the general paradigm of the average consumer²⁵.

According to this piece of legislation, some people require more specific protection and consideration because they are particularly vulnerable due to their mental or physical infirmity, age, or credulity. This is a rather narrow category, as it does not define precisely who can be considered vulnerable especially considering that vulnerability can take different forms²⁶.

However, precisely because of its ambiguity, the reference to vulnerability is not limited to the Directive on unfair commercial practices but is also present in further consumer legislation as well as in sector-specific policy where, depending on the context, vulnerable consumers take on different features²⁷. For instance, in the digital market the supranational legislator is concerned about those practices of constant monitoring, profiling and personalisation of online content because they create a state of “permanent vulnerability” or “vulnerability by default”²⁸, making all existing consumer rules ineffective.

²⁵ Article 5, point 3, said that: “Commercial practices which are likely to materially distort the economic behaviour only of a clearly identifiable group of consumers who are particularly vulnerable to the practice or the underlying product because of their mental or physical infirmity, age or credulity in a way which the trader could reasonably be expected to foresee, shall be assessed from the perspective of the average member of that group. This is without prejudice to the common and legitimate advertising practice of making exaggerated statements or statements which are not meant to be taken literally”.

²⁶ On the one hand, as it is recognised by the European Parliament, consumers may be vulnerable because of their socio-demographic and behavioural characteristics, their personal situation, or the market environment as well as the capacity to resist high-pressure marketing practices or the difficulties in obtaining and understanding information about services and products. See EUROPEAN PARLIAMENT, *Briefing on Vulnerable consumers*, 2021, 1-9.

²⁷ S.B JACOBS, *The Energy Prosumer*, in *Ecology of Law Quarterly*, 43, p. 524 where it is said that: “However, ‘prosumer’ is more useful as a general term because the modern energy consumers described above do more than generate electricity. They also provide essential grid services, such as storage, regulation, and demand response in both retail and wholesale markets. [...] However, scholars in other disciplines have examined the phenomenon in more detail. Web and software users who generate content have been deemed ‘prosumers’, as have home creators of audio and video imagery, and even authors of fan fiction”.

²⁸ THE EUROPEAN CONSUMER ORGANISATION, *BEUC’s preliminary input for the consumer agenda 2021-2027*, available at the link https://www.beuc.eu/sites/default/files/publications/beuc-x-2020-064_beuc_input_for_the_consumer_agenda_2021-2027.pdf. According to the European Consumer Organisation, the digital architecture of platforms is precisely built not only to detect

Even different, then, is the “energy vulnerability” which is at the centre of the European energy strategy, so much so that already in 2009 the European legislator required that MS have to take appropriate measures to protect the final customers and ensure in particular to vulnerable customers appropriate protection²⁹. As specified later by the Commission, each Member State must define the concept of “vulnerable customers” depending on their specific national situation³⁰.

The Council of Ministers of the Energy Community and the European Economic and Social Committee (henceforth EESC) were of a different opinion, which instead affirmed the need to identify a centralised definition of vulnerable customers to ensure that energy poverty is addressed in a uniform way at the European level. In particular, the Council endorsed a proposal for a regional definition of a vulnerable customer that would include those who use energy for the supply of their home on a permanent basis; those who do not exceed 200 kWh/month (i.e. the maximum electricity consumption per person) as well as 70 cubic metres per month for gas in the case of a household with up to four members; those who fall into the category of low-income citizens and, finally, those who use a single-phase meter with a connection that does not exceed the maximum power, i.e. up to 16 amperes. Instead, the EESC promoted the adoption of common indicators to tackle the phenomenon more effectively³¹.

and exploit the vulnerabilities of online users but to create new ones so that they can be studied and used to increase profits, in a way that “digital vulnerability potentially applies to all consumers in the digital marketplace”. Therefore, it is precisely in the virtual world that we see the reversal of traditional paradigms because “vulnerable consumer is the norm, rather than the exception”.

²⁹ Article No. 3, par. 7 of Directive 2009/72/EC concerning rules for the internal market in electricity and replaced by Directive 2019/944/EU and article No. 3, par. 3 of Directive 2009/73/EC on common rules for the internal market in natural gas.

³⁰ EUROPEAN COMMISSION, *Commission staff working paper: an energy policy for consumers*, Brussels, Sec(2010), 1407 final, 2010.

³¹ EUROPEAN ECONOMIC AND SOCIAL COMMITTEE, *Opinion for coordinated European measures to prevent and combat energy poverty*, 2013/C 341/05, 2013. In the same sense, see EUROPEAN COMMISSION, *A Framework Strategy for a Resilient Energy Union with a Forward-Looking Climate Change Policy*, COM(2015) 80 final, 2015. Cf. B. VOLTAGGIO, *La povertà energetica e l’Unione europea*, in S. SUPINO-B. VOLTAGGIO, *La povertà energetica. Strumenti per affrontare un problema sociale*, pp. 53 ff.

In this regard, a turning point is certainly represented by the aforementioned Directive 2019/944/EU, which has finally positivized this form of vulnerability by turning towards an integrated approach of social and energy policies aimed at combating “energy poverty”³², to which Article 29 is specifically dedicated. Although this legislation confirms the choice not to strictly define who are vulnerable customers leaving their definition to the discretion of the MS, it imposes an obligation to them to establish criteria to identify households in energy poverty such as, for example, low-income, high-energy expenditure in relation to disposable income and low energy efficiency.

In this context, MS are required to take measures to fight against the energy poverty providing, for instance, some efficiency improvements to promote an easier accessibility to self-consumption of renewable sources and participation in the energy communities for customers in low-income or vulnerable households, otherwise they would not have sufficient initial capital to invest in renewable energy technologies³³.

2.1. The introduction of the concept of energy vulnerability in the Italian legal system.

Perfectly in line with this European evolutionary process, also at national level we can see a growing consideration of the different forms of vulnerability, especially by the jurisprudential strand.

Particularly relevant in this regard is the very recent and revolutionary Ordinance No. 8650/22 with which the Italian Council of State has, for the first time, made a preliminary reference to the Court of Justice of the EU in order to definitively

³² On the definition of energy poverty, see M. GONZALEZ-EGUINO, *Energy poverty: An overview*, in *Renewable and sustainable energy reviews*, 2015, 47, pp. 377-385; L. GURUSWAMY, *Energy poverty*, in *Annual review of environment and resources*, 2011, 36, pp. 139-161; F. BIROL, *Energy economics: a place for energy poverty in the agenda?*, in *The energy journal*, 2007, 28; S. PACHAURI-D. SPRENG, *Measuring and monitoring energy poverty*, in *Energy policy*, 2011, 39, pp. 7497 ff.

³³ EUROPEAN PARLIAMENT, *Briefing on Vulnerable consumers*, p. 5.

clarify whether the paradigm of the average consumer should still be traditionally interpreted as *homo oeconomicus*³⁴.

The awareness of vulnerability as an irreducible component of human nature does not, however, prevent the attribution of a proactive role to consumers but, on the contrary, allows for more effective means of protection³⁵.

In fact, this dual consideration is fully accepted by the national legislator who, alongside the attribution of a proactive role to final customers, nevertheless intends to guarantee greater protection to those who find themselves in particularly delicate conditions or situations. Implementing, then, Article 28 of Directive 2019/944/EU – which leaves it up to the Member States to define vulnerable customers - the Italian legal system introduced the concept of energy vulnerability. In fact, Article 11 of the Legislative Decree No. 210 of 2021 provides a list of customers considered vulnerable³⁶.

These include those who are economically disadvantaged or whose health is so serious as to require the use of medical equipment powered by electricity and necessary for their survival; those who take care of people who need such equipment; those who have one of the disabilities referred to in Article 3 of Law No. 104/1992³⁷; those whose utilities are located on minor islands that are not interconnected or in emergency housing facilities provided following disasters and, finally, those over the age of seventy-five.

³⁴ For a comment on the ordinance, see L. SPOSINI, *Dal consumatore medio alla razionalità limitata nella Direttiva n. 29/2005 CE*, in *Nuova Giurisprudenza Civile Commentata*, forthcoming.

³⁵ Think, for example, of information obligations. If, in fact, information was until recently considered the only real remedy to protect the consumer, at present, on the other hand, although this instrument still retains a central role in consumer discipline, there is also a growing awareness that it causes the so-called “Overload effect”. For an in-depth study of the subject, see C. SCHNEIDER-O. BEN-SHAHAR, *More Than You Wanted to Know: The Failure of Mandated Disclosure*, Princeton University Press, 2014, 240 ff.

³⁶ Legislative Decree No. 210 of 08.11.2021 implementing EU Directive 2019/944 of the European Parliament and of the Council of 5 June 2019 concerning common rules for the internal market in electricity and amending Directive 2012/27/EU, as well as laying down provisions for the adaptation of national legislation to the provisions of EU Regulation 943/2019 on the internal market in electricity and EU Regulation 941/2019 on risk preparedness in the electricity sector and repealing Directive 2005/89/EC.

³⁷ Law No. 104 of 05.02.1992, framework law for assistance, social integration, and the rights of handicapped persons.

This illustrative list attests to the legislator's awareness of the indispensability of energy for the exercise of fundamental rights and, consequently, of the urgency of measures to protect those in conditions where access to energy becomes essential for survival itself.

A new awareness is therefore emerging at both national and European level that in order to guarantee effective protection, tools such as information obligations, remedies for withdrawing from a contract, and even faster and more streamlined dispute resolution systems are no longer sufficient, but it becomes necessary to ensure the inclusion, above all, of those who find themselves without access to those goods and services that are indispensable to their existence³⁸.

According to the Union, then, in order to promote the inclusion of particularly vulnerable people and to combat energy poverty, it is necessary for Member States to recognize the fundamental role of the active participation of people³⁹, both as citizens and consumers and, in fact, it is the European Parliament itself that states that "in the context of a well-functioning energy system, local authorities, communities, cooperatives, households and individuals have a key role to play, should contribute substantially to the energy transition and should be encouraged to become energy producers and suppliers if they choose to do so" and precisely because of their importance, it becomes necessary to adopt "a common operational definition of 'prosumers'"⁴⁰.

3. "Energy prosumerism": a (heterogeneous) phenomenon still in the making.

3.1. The prosumer as a kaleidoscopic figure and the impossibility of a unitary definition at supranational level.

³⁸ L. RUGGERI, *Consumers and energy prosumerism in the European regulatory framework*, in *Actualidad jurídica iberoamericana*, 2022, 16, pp. 3290-3317.

³⁹ E. CUSA, *op. cit.*, p. 75.

⁴⁰ European Parliament Resolution of 26 May 2016 on delivering a new deal for energy consumers (2018/C 076/15). In literature, see M.R. MAUGERI, "Smart contracts", "smart grids" and "smart meters": *The new horizons of the energy market and consumer/"prosumer" protection*, in *Studi senesi*, 2020, pp. 85 ff.

Although the EU legislator has finally realized that, in order to achieve the transition to renewable energy sources, it is no longer possible to rely solely on companies, but it is inevitable to recognize the fundamental role that the choices of energy end-users play for the entire market⁴¹, there is currently still no harmonised definition of “prosumer”⁴².

The difficulty in circumscribing this figure derives from its extreme conceptual heterogeneity to the extent that it cannot be considered a unitary category. On the contrary, it encompasses entities with such different characteristics that they can be classified according to numerous elements including, for example, their size; the type of renewable source used; the amount of energy produced, consumed, or injected into the market; as well as their position in relation to the electricity grid.

Among these criteria, the one most widely used by the various Member States is certainly the role that these economic agents play in the energy market and, therefore, a distinction is generally made between so-called “residential or household” prosumers, which include households, apartment blocks, housing associations and cooperatives; and “commercial” prosumers, because they use electricity for their own purposes and provide services for the public such as SMEs, hospitals, or sports facilities. Finally, we have the “industrial” prosumers, so called because they produce a part (or all) of their energy needs on-site and then sell the excess by feeding it into the national or local grid, examples of which are large factories and farms⁴³.

⁴¹ European Parliament resolution of 26 May 2016, par. 22, which states that: “significant behavioural change among citizens will be important to achieve an optimal energy transition; considers that incentives and access to quality information are key in this respect and asks the Commission to address this in upcoming proposals; suggests that education, training and information campaigns will be important factors in bringing about behavioural change”.

⁴² The term “prosumer” was coined by futurist Alvin Tofler in his book *Future Shock* in 1970.

⁴³ Cf. J.M. WITTMAYER AND OTHERS, *Thinking, doing, organising: Prefiguring just and sustainable energy systems via collective prosumer ecosystems in Europe*, in *Energy Research & Social Science*, 2022, 86, pp. 102 ff.; A. BUTENKO-K. CSERES, *The Regulatory Consumer: Prosumer-Driven Local Energy Production Initiatives*, in *SSRN Electronic Journal*, 2015, pp. 2 ff.; Z. ZHAO AND OTHERS, *A social relationship preference aware peer-to-peer energy market for urban energy prosumers and consumers*, in *IET Renewable Power Generation*, 2022, 16, pp. 688-599; S. BHATTACHARYA AND OTHERS, *Incentive mechanism for smart grid: state of the art, challenge, open issues, future directions*, in *Big Data and Cognitive Computing*, 2022, 6, 47 ff.; B.P. KOIRALA AND OTHERS, *Energetic communities*

In order to more easily distinguish the different types of prosumers, it is customary to look at the size of the energy system and, although there is currently no unambiguous parameter to rely on even at supranational level, the amount of energy produced is often taken into account. Thus, it is estimated that for residential prosumers, the amount of energy produced is no more than 10 kilowatts (kW); between 10 kW and 250 kW for commercial prosumers and, finally, more than 250 kW in the case of industrial prosumers.

3.2. The different forms of prosumerism: from self-consumers of renewable energy to energy communities.

Given the variety of the phenomenon, it is not surprising that both legislators and the literature find it very difficult to formulate a precise and defined definition, with the result that, at present, this figure has not yet been clearly identified.

To date, there are at least five forms of energy prosumerism that are recognised at European level and whose regulation is scattered among different regulatory sources. Within Directive 2018/2001/EU⁴⁴ one finds “self-consumers of renewable energy” defined in Article 2(14), as any “final customer operating within its premises located within confined boundaries or, where permitted by a Member State, within other premises, who generates renewable electricity for its own consumption, and who may store or sell self-generated renewable electricity, provided that, for a non-household renewable self-consumer, those activities do not constitute its primary commercial or professional activity”⁴⁵. The next point also states that they may also act collectively, provided that they are in a group of at least two self-consumers located in the same building or apartment block.

Whether they act individually or in an aggregate form, the fact that it defines them as “final customers” expresses the clear will of the EU legislator not to refer

for community energy: A review of key issues and trends shaping integrated community energy systems, in Renewable and Sustainable Energy Reviews, 2016, 56, pp. 722-744.

⁴⁴ Directive 2018/2001/EU of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources, so-called “RED II”.

⁴⁵ In the Italian legal system, these new players in the energy market were introduced by Legislative Decrees No. 199/2021 and No. 210/21.

exclusively to natural persons but to open up also to legal persons producing electricity. On the other hand, it fully reflects the jurisprudential orientation of the Court of Justice about dual-purpose contracts because it is recommended that the self-consumer, if different from a household, should not sell the energy produced in excess in the exercise of his “principal” professional activity⁴⁶.

After providing a definition, Article 21 deals with listing the main rights granted to self-consumers, which can be divided into two broad categories. On the one hand, there are the so-called “operational rights” which concern the activities undertaken by them including, for example, the right to generate and consume electricity from renewable energy sources; to store any surplus produced and, finally, to sell it on the market. On the other hand, there are the so-called “financial” ones such as, for example, the right to operate electricity storage facilities without incurring any charges; to be remunerated for the energy generated and fed into the electricity grid and, finally, not to be subject to charges for that same energy produced, consumed, and sold.

In the same directive we then find “renewable energy communities” (henceforth RECs) which constitute an autonomous legal entity whose main objective is to provide environmental, economic, or social benefits to the community or local areas in which it operates and not, instead, financial profits⁴⁷. As far as its internal composition is concerned, it is based on voluntary and open participation and is controlled by shareholders or members located close to the energy production facilities, which must be developed or belong to the REC itself. Individuals, SMEs, or even local authorities such as municipalities can participate in the REC⁴⁸.

Instead, prosumers can be found in Directive 2019/944/EU, where Article 2(8) speaks of an “active customer”, i.e. a “final customer, or a group of jointly acting

⁴⁶ The jurisprudence of the European Court of Justice on dual-purpose contracts is particularly copious, therefore let us refer, among the latest, to ECJ, 9 March 2023, C-177/22; ECJ, 14 February 2019, C-630/17; ECJ, 25 January 2018, C-498/16; ECJ, 20 January 2005, C-464/01.

⁴⁷ The definition of RECs is provided for in Article 2(16) of Directive 2018/2001/EU.

⁴⁸ For an in-depth discussion on RECs, see G. DOCI-E. VASILEIADOU-A.C. PETERSEN, *Exploring the transition potential of renewable energy communities*, in *Futures*, 2015, 66, pp. 85-95; M.A. HELDEWEG-S. SAINTIER, *Renewable energy communities as “socio-legal institutions”: A normative frame of energy decentralisation?*, in *Renewable and Sustainable Energy Reviews*, 2020, 119, pp. 109 ff.

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". The active customer is, therefore, an entity that not only produces energy but also carries out other activities such as, for example, its storage.

Here, too, the attribution of the status of active client and all associated protections is based on an assessment centred on the criterion of prevailing professionalism: in accordance with Article 2(8) of the directive, these activities must not be those which he performs professionally as his principal occupation.

Point 11 then regulates a further form of energy community that goes by the name of "citizen energy community" (henceforth CEC), a legal entity that also has as its main purpose not the production of financial profits but the provision of environmental, economic, and social benefits to its members or the territory in which it operates. However, it is admitted that it may participate (unlike RECs) in the production, distribution, supply, consumption, storage of energy as well as in energy efficiency services as well as in charging services for electric vehicles or the provision of other services to its members. Again, the CEC is based on voluntary and open participation and is effectively controlled by members or partners who, however, must be natural persons or local authorities such as municipalities or small businesses⁴⁹.

4. Concluding reflections and future perspectives on European prosumers.

4.1. The positive (and negative) effects of prosumerism on poverty and energy efficiency in the European internal market.

The Union has clearly shown its intention to transform the European energy system in the name of a more sustainable development by investing in the active participation of citizens and, therefore, has been concerned to regulate and

⁴⁹ On the further differences between RECs and CECs, see E. CUSA, *op. cit.*, 86 ff.

promote the adoption at national level of forms of self-consumption and energy communities.

According to the supranational legislator, prosumerism brings undoubted advantages to the single market because, first of all, it incentivizes the direct participation of citizens in the production, consumption and sharing of energy and also fosters public-private collaboration (think of collaborations between an energy community and territorial public bodies)⁵⁰ as well as the entry into the market of a plurality of economic operators, not only “large” but also SMEs and producers independent from large ones⁵¹.

Beyond the economic consequences, this phenomenon also generates positive social effects because it fosters, both nationally and locally, the development of communities by making them energy independent and opening them up to export to the grid.

Their entry into the market then creates new job opportunities which, in turn, contribute to the territorial rootedness of families who, having the prospect of new economic income, are more inclined to stay in that specific community⁵².

However, prosumerism not only generates new revenues for households, but also increases their energy efficiency and promotes energy affordability by reducing consumption and supply tariffs⁵³.

If, as a rule, the final price is determined by the costs of production, transport, supply, and state taxes, with self-consumption the only costs to be incurred are those related to the cost of generation, which essentially arises from the installation of, for example, photovoltaic systems.

On the other hand, however, it must also be noted that the increase in the number of prosumers can cause a corresponding increase in energy costs for traditional consumers, thus leading to new situations of energy poverty. In other words, while it is true that prosumers expand the supply of energy on the market by increasing

⁵⁰ Cf. Recital No. 70, Directive 2018/2001/EU and Recital No. 44, Directive 2019/944/EU.

⁵¹ Cf. Recital No. 26 and 70, Directive 2018/2001/EU and Recital No. 44, Directive 2019/944/EU.

⁵² Recital No. 63, Directive 2018/2001/EU.

⁵³ Recital No. 67, Directive 2018/2001/EU and Recital No. 43, Directive 2019/944/EU.

competition and reducing costs through the sale of surplus energy on the national or local grid, the very fact that they no longer use this grid could lead to an increase in, for example, electricity transport prices or tariffs. This increase would inevitably be passed on to traditional consumers.

From the point of view of innovation, prosumerism then favours the spread of new technologies and new modes of consumption such as the so-called “smart grid”⁵⁴ or decentralized techniques for energy production and storage, thereby also increasing demand and the need to invest in infrastructure⁵⁵.

4.2. Energy prosumerism as a tool to combat energy poverty: utopia or reality?

In the light of the above considerations, it is clear that prosumerism can, if properly used, be a valuable aid to the development of a more sustainable and efficient energy market.

For this reason, the EU has become aware of the need to make changes in European energy policy by focusing it more and more on the active involvement of citizens, who are called upon, both individually and in association, to realize general interest objectives with an increasingly *bottom-up* approach⁵⁶.

The entire system therefore looks to the realization of the common good, cohesion and social protection in a context marked by the principles of democracy, equality and inclusion in full compliance with the ECHR and the Charter of Fundamental Rights.

As things stand, however, these objectives do not seem to have been even remotely achieved but, on the contrary, there are some critical issues that the EU legislator does not seem to have taken into due consideration.

Prosumerism is based in particular on the assumption that end customers, aware of the economic and social benefits of self-consumption, decide to invest time and resources in technologies and systems capable of harnessing renewable sources to produce energy and sell the excess on the market.

⁵⁴ Recital No. 43, Directive 2019/944/EU.

⁵⁵ Recital No. 65, Directive 2018/2001/EU.

⁵⁶ L. RUGGERI, *op. cit.*, p. 64.

This conviction, on closer inspection, presents certain problematic issues that need to be outlined, albeit briefly.

A first critical profile concerns the availability of the technologies needed to produce the energy such as, for example, photovoltaic panels. Although the production of these goods has seen rapid development in recent years precisely because of Europe's renewed focus on clean energy, they still remain "luxury" products due to the high cost of materials and production as well as the sophisticated computer systems they contain. Clearly, then, the end customer who decides to switch to these technologies still faces high upfront costs that not everyone is able to afford. This, on closer inspection, does not seem to be an issue that can be resolved even through state aid or incentives as the aspiring prosumer will always be afraid of not being able to recoup in the future what he initially spent, especially if he is already in financial difficulty.

Indeed, such behaviour should not be surprising as it stems from a particular "cognitive bias" that leads individuals to consider losses twice as much as gains, to preserve the *status quo* and to avoid any solution that might change it⁵⁷.

Through studies in the cognitive sciences⁵⁸, it has been possible to demonstrate that people make decisions driven by the need for security and, therefore, prefer to take refuge in the known rather than make a choice that may present some risk, even if it is minimal.

These considerations apply even more to the energy sector where consumers are even less likely to make purchasing choices because these have the capacity to impact the life of the entire household.

If the observations of these studies on the behaviour of individuals with respect to purchasing decisions are not given due consideration, prosumerism risks becoming

⁵⁷ Cf. C. JOLLS-C.R. SUNSTEIN-R.H. THALER, *A Behavioural Approach to Law and Economics*, in *Stan. Law Rev.*, 1998, 50; D. KAHNEMAN-J.L. KNETSCH-R.H. THALER, *Anomalies: The Endowment Effect, Loss Aversion, and Status Quo Bias*, in *Journal of economic perspectives*, 1991, 5, 1; D. KHANEMAN-P. SLOVIC- A. TVERSKY, *Judgment under Uncertainty: Heuristics and Biases*, Cambridge University Press, 1982.

⁵⁸ For an in-depth analysis see E. VIRARDI, *Le misure di contrasto alla povertà energetica alla luce dell'approccio socio-cognitivo*, forthcoming; G. RITZER ET AL., *The Coming of Age of the Prosumer*, in *Am. Behav. Scientist*, 56, 2012,

a discriminatory element between that part of the population that has the economic resources to access self-consumption and that part of the population that cannot afford such technologies and remains excluded from the energy market.

A further issue that makes the realization of a sustainable, self-consumption-oriented energy model difficult concerns the legal fragmentation that currently exists on the figure of the prosumer.

Not only do national legal systems find themselves having to readjust institutions, notions and disciplines to make them suitable for this new European approach to energy, but this situation is further complicated by the very nature of these new energy actors. More specifically, the fact that they have characteristics typical of both consumers and producers makes them difficult to place within the traditional legal categories, leaving national governments free to determine how to regulate them. This situation, of course, generates legal uncertainty and fragmentation within the Union.

It is necessary, then, to keep in mind the real behaviour of end-customers with respect to economic choices in order to avoid idolizing the prosumerism phenomenon but, above all, to recognize that only through the provision of a clear and uniform legislative framework will it finally be possible to fully exploit the potential of this phenomenon for combating energy poverty and for the realization of a more sustainable energy model⁵⁹.

⁵⁹ D. BAUKNECHT-J. BRACKER-F. FLACHSBARTH-C. HEINEMANN-D. SEEBACH-M. VOGEL, *Customer stratification and different concepts of decentralization*, in F. SIOSHANSI, *Consumer, Prosumer, Prosumager. How Service Innovations will Disrupt the Utility Business Model*, Elsevier, 2019, pp. 333 ff.