

**THE ROLE OF SELF-CONSUMPTION AND RENEWABLE
ENERGY COMMUNITIES IN THE PATH TOWARDS THE
ENERGY TRANSITION IN ITALY¹**

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1. INTRODUCTION

Energy is a primary public good, but also a right³, since access to electricity is a precondition for the exercise and enjoyment of other constitutionally protected and guaranteed rights⁴. Depending on the way energy is produced, or, if preferred, the source from which it is derived, it is possible to distinguish between renewable and non-renewable energy. In particular, renewable energies (solar, wind, geothermal, hydroelectric, biomass and ocean) are defined as such because the source from which they come is almost inexhaustible; they are, in fact, natural resources, which belong to no one and must be available to all: they are common goods. These elements, simple in the abstract, must be made effective in practice; and the path of energy transition, while having as its primary objective the reduction of greenhouse gas emissions and the transition to energy production from renewable sources, can and must favour the accessibility of energy, changing the way it is produced, distributed and consumed. Thus, there clearly emerges the inextricable

³ Observes L. DELL'AGLI, *L'accesso all'energia elettrica come diritto umano fondamentale per la dignità della persona umana*, in *Riv. giur. amb.*, no. 5, 2007, 713 ff., how energy is a medium that intervenes in all key areas of development, proving to be a fundamental factor for the social and economic development of a community and for improving the quality of life of the individual. Therefore, access to energy is to be considered an indispensable right for the proper development of the human being's personality.

⁴ Similarly, to the right to housing, which can be said to be the prerequisite for a series of other rights enshrined in the Constitutional Charter, such as, for example, the formation of a family (Artt. 29 and 31 of the Constitution) and its free and dignified existence (Art. 36 of the Constitution), the right to access energy can be said to be the prerequisite for other rights, such as the right to health and a healthy environment, but also the right to the development of one's personality.

relationship between renewable energy, the energy transition, whose challenge is to move from fossil to renewable energy production, and the energy market⁵, which is inevitably dependent on the transition path undertaken at European level and beyond.

In the light of the above, this contribution will take as its starting point the energy transition path undertaken by the European Union, and in particular the *Clean Energy Package* and *Green deal* measures and their two-way connection. Among the measures that make up the *Clean Energy Package*, we will focus on Regulation 2018/1999/EU, concerning the governance of the Energy Union, and then move on to Directive 2018/2001/EU on the promotion of energy production from renewable sources and, in particular, on the configurations of the self-consumer of renewable energy and renewable energy communities. Moving then to the national level, after a brief outline of the electricity market in Italy, the transposition into Italian law of the measures on collective self-consumption configurations will be examined, concluding, finally, with some reflections on the impact that these

⁵ On this topic, see F. VETRÒ (ed.), *Il mercato dell'energia elettrica a venti anni dalla liberalizzazione*, Venezia, 2021, and P.D. CAMERON, *Competition in Energy Markets. Law and Regulation in the European Union*, Oxford, 2007; but also M. CLARICH, *Energia*, in *Enc. dir., Funzioni amministrative*, Milano, 2022, 438 ff.; A. COLAVECCHIO, *Energia elettrica*, in *Dig. Disc. Pubbl.*, agg. II, Torino, 2005, 233 ff.; G. NAPOLITANO, *L'energia elettrica e il gas*, in S. CASSESE (ed.), *Trattato di diritto amministrativo*, in *Dir. amm. spec.*, vol. III, Milano, 2003, 1635 ff.; F. DI PORTO, *Il Decreto Bersani (d.lgs. n. 79/1999). Profili pro-concorrenziali della riforma del mercato elettrico*, in *Conc. e mercato*, 2000, 407 ff.; G.G. GENTILE, *L'apertura del mercato dell'energia elettrica*, in *Rass. Giur. energia elettr.*, 1999, 3 ff.; S. CASSESE, *La disciplina del mercato dell'elettricità*, in *Rass. giur. en. elettr.*, 1998, 758 ff. On the electricity market in France and, in particular, on regulated energy prices, see S. DE LA ROSA, *Les enjeux du contrôle juridictionnel des prix réglementés de l'énergie. A propos des affaires « Anode » devant le conseil d'état*, in *Ius Publicum*, no. 2, 2018. Also noteworthy is the recent contribution by C. MICHAÏL, *The Advent of Electricity Liberalization in Cyprus. Critical Analysis of the Current State and Charting a Path to Liberalization*, in *Eur. Energy Environ. Law Rev.*, vol. 31, 2, 116 ff., on the recent Cypriot Laws allowing for the liberalization of the electric industry on the island, and delving into the analysis of Electricity Authority of Cyprus (EAC), a semi-governmental organization, and The Cyprus Energy Regulatory Authority (CERA), an independent body, which has the power by Law (see Law 130(1)/2021, regulating the Cyprus Electricity Market, Law 129(1)/2021, regulating the establishment and operation of Cyprus Energy Regulatory Authority, and Law 128(1)/2021 regulating the Natural Gas Market) to take measures to enable the liberalization of the electricity industry.

measures have and may have for the Italian legal system, but also and above all for individual citizens and communities.

2. THE ENERGY TRANSITION PATH TAKEN BY THE EUROPEAN UNION

Underlying the energy transition path taken by the European Union⁶ are the *Clean Energy Package*⁷ (or *Winter Package*), the *European Green deal*⁸ and the instruments with

⁶ On which, for more in-depth study, see P. BOCQUILLON – T. MALTBY, *EU Energy Policy Integration as Embedded Intergovernmentalism: The Case of Energy Union Governance Regulation*, in *Journal of European Integration*, vol. 42, 2020, 1 ff.; T. FAVARO, *Regolare la «transizione energetica»: Stato, Mercato, Innovazione*, Padova, 2020; F. SCALIA, *Energia sostenibile e cambiamento climatico. Profili giuridici della transizione energetica*, Torino, 2020; M.D.L.E. MATA PÉREZ – D. SCHOLTEN – K. SMITH STEGEN, *The multi-speed energy transition in Europe: Opportunities and challenges for EU energy security*, in *Energy Strategy Reviews*, vol. 26, 2019, 1 ff.; E. BRUTI LIBERATI – M. DE FOCATIS – A. TRAVI (eds.), *La transizione energetica e il Winter Package. Politiche pubbliche e regolazione dei mercati*, Milano, 2018; L. AMMANNATI (ed.), *La transizione energetica*, Torino, 2018.

⁷ On this topic, J. LOWITZSCH, *Investing in a Renewable Future. Renewable Energy Communities, Consumer (Co-)Ownership and Energy Sharing in the Clean Energy Package*, in *European Energy and Climate Journal*, vol. 9, 2-3, 2020, 45 ff.; R. MICCÙ, *Lineamenti di diritto europeo dell'energia. Nuovi paradigmi di regolazione e governo multilivello*, Torino, 2020; G. LUDWIG, *A Step Further Towards a European Energy Transition: The «Clean Energy Package» from a Legal Point of View*, in E. GAWEL – S. STRUNZ – P. LEHMANN – A. PURKUS (eds.), *The European Dimension of Germany's Energy Transition. Opportunities and Conflicts*, Berlin, 2019, 83 ff.; G. DE MEO (ed.), *Introduzione al diritto dell'energia. Questioni e prospettive*, Napoli, 2019; P. BERTOLINI – A. GEMMO, *Clean energy package. La transizione verso l'Unione dell'energia*, in *Riv. giur. amb.*, 2019; L. MEESUS – A. NOUCER, *The EU Clean Energy Package. Technical Report*, 2018.

⁸ In depth, on the *European Green deal*: A. PETTIFOR, *The Case for the Green New Deal*, London, 2020, and J. RIFKIN, *The Green New Deal: Why the Fossil Fuel Civilization Will Collapse by 2028, and the Bold Economic Plan to Save Life on Earth*, New York, 2019; but also, D. BEVILACQUA, *From sustainable development to Green New Deal*, in *Ius Publicum*, no. 1, 2021; P. CUCUMILE, *Il Green deal europeo*, in *Amb. dir.*, 2021, 1 ff.; A. MOLITERNI, *Il Green Deal europeo e le sfide per il diritto dell'ambiente*, in *Riv. quadr. dir. amb.*, 2021, 4 ff.; C. SCISSA, *What*

which these acts have been transposed into national law. These acts are based on an «integrated climate-energy approach»⁹, resulting from an awareness of the impact of the energy sector on the environment and its importance in combating climate change, which had its first significant measures in the *20-20-20 Package*¹⁰. It set three targets to be achieved by 2020: *a*) a reduction of at least 20% of greenhouse gas emissions from energy consumption in the EU compared to 1990 levels; *b*) a 20% increase in the share of energy produced from renewable sources (17% for Italy); *c*) a 20% increase in energy efficiency levels¹¹.

On 30 November 2016, with Communication No. 860, the Commission announced the adoption of an energy and climate package, which pursues three main objectives: *a*) to put energy efficiency first; *b*) to achieve global leadership in the field of renewable energy; *c*) to ensure fair treatment of consumers¹². This package of measures, referred to as the *Clean Energy Package*, consists of eight measures: Regulation 2018/1999/EU, on the governance of the Energy Union; Directive 2018/2002/EU, on energy efficiency; Directive

Room for the 1998 Aarhus Convention in the European Green Deal? An Analysis of the Possible Reluctance of the Court of Justice, in *ibid.*, 94 ff.; R. DE PAOLIS, *Constitutional Implications: The European Green Deal in the Light of Political Constitutionalism*, in *ibid.*, 112 ff.; M.C. CARTA, *Il Green Deal europeo. Considerazioni critiche sulla tutela dell'ambiente e le iniziative di diritto UE*, in *Euroius.it*, 2020, 54 ff.

⁹ Cf., F. VETRÒ, *Prefazione*, in ID. (ed.), *Il mercato dell'energia elettrica a venti anni dalla liberalizzazione*, cit., 10.

¹⁰ Cf., Directive 2009/29/EC. On the *20-20-20 Package*, see: R.S.J. TOL, *A cost-benefit analysis of the EU 20/20/2020 package*, in *Energy Policy*, vol. 49, 2012, 285 ff.; A. MACCHIATI – G. ROSSI (eds.), *La sfida dell'energia pulita. Ambiente, clima e energie rinnovabili: problemi economici e giuridici*, Bologna, 2010; S. CLÒ – E. VENDRAMIN, *Pacchetto 20-20-20: la nuova direttiva ETS e le stime comunitarie di Carbon Leakage*, in *Energia*, vol. 2, 2009, 58 ff.

¹¹ According to the European Environmental Agency (EEA) report, *Trends and projections in Europe 2021*, in www.eea.europa.eu, the European Union achieved the «full achievement – and even overachievement – of Europe's 20-20-20 goals for climate change mitigation, renewable energy deployment and energy efficiency gains».

¹² Cf., COM(2016) 860 final, 30 November 2016, 4.

2018/2001/EU, on the promotion of renewable energy (so-called. Red II); Directive 2018/844/EU, on the energy performance of buildings; Regulation 2019/943/EU, on the internal market in electricity; Directive 2019/944/EU, on common rules for the internal market in electricity; Regulation 2019/941/EU, on risk preparedness in the electricity sector; and, finally, Regulation 2019/942/EU, on the establishment of a European Union Agency for the Cooperation of Energy Regulators. These measures are aimed at bringing the energy sector in line with the European climate neutrality targets, which became mandatory with the so-called European Climate Act¹³, but also at giving concrete implementation to sustainable development in its climate neutrality meaning¹⁴.

With the *European Green Deal*¹⁵, on the other hand, in implementation of the 2030 Agenda¹⁶, the goal was set to make the European Union a net zero greenhouse gas emission

¹³ Regulation 2021/1119/EU.

¹⁴ Cf., F. VETRÒ, *Sviluppo sostenibile, transizione energetica e neutralità climatica. Profili di governance: efficienza energetica ed energie rinnovabili nel “nuovo ordinamento” dell’energia*, in *Riv. Ital. Dir. Pubbl. Comunitario*, no. 1, 2022, 69.

¹⁵ Within the path mapped out by the *European Green Deal*, several initiatives can be identified: the European Climate Act, by which the goal of reducing greenhouse gas emissions by at least 55% by 2030 was made binding; the Circular Economy Action Plan, directed at taking measures to make products placed on the European market reusable, repairable and recyclable; the Biodiversity Strategy, directed at remedying the uncontrolled use of land and sea surface and the overexploitation of natural resources; the Producer-to-Consumer Strategy, aimed at creating a food system of products from a healthy Planet; the Strategy on Energy System Integration, aimed at making the current energy system more homogeneous; the Hydrogen Strategy, aimed at fostering the installation (between 2020-2021) of at least 6 GW of electrolyzers for renewable hydrogen, which should grow to 40 GW between 2025 and 2030, to become a widely deployed energy source between 2030 and 2050; the Strategy on Offshore Renewable Energy, aimed at increasing offshore wind capacity to 300 GW by 2050.

¹⁶ Approved by Resolution adopted by the UN General Assembly on 25 September 2015, and entitled «Transforming our world: the 2030 Agenda for Sustainable Development». It is a «plan of action for people, planet and prosperity», which contains 17 Sustainable Development Goals and 169 targets, to be achieved within the next 15 years. On the subject, see: M.P. POTO, *Raggiungere la sicurezza alimentare tutelando l’ambiente e la salute umana: risposte dal*

economy. Alongside this final goal, set for 2050, are several intermediate goals, set for 2030: the reduction of greenhouse gas emissions by 55% compared to 1990; a 32% increase in the share of renewable energy sources, increased to «at least 40%» by the *Fit for 55% Package*; and the improvement of energy efficiency by 32.5%, increased to 36-39%, again by the *Fit for 55% Package*. The pursuit of these goals necessarily requires, not only simplification of European environmental Law and the streamlining of authorisation procedures¹⁷, but also the deployment of substantial economic resources and, to this end, *The Just Transition Mechanism* was set up, centred on three instruments: *The Just Transition Fund*, aimed at providing economic support to businesses and individuals¹⁸; the *InvestEU Fund*, which operates by granting guarantees for financing and investment operations related to the internal policies of the European Union¹⁹; and the *Public Sector Loan Facility*, aimed at channelling and increasing public investment for a just transition²⁰.

diritto amministrativo ambientale e soluzioni concrete alle sfide della sostenibilità nel quadro dell'Agenda 2030, in *Nuove Autonomie*, no. 1, 2022, 221 ff.; B. BORNEMANN – S. WEILAND, *The UN 2030 Agenda and the Quest for Policy Integration: A Literature Review*, in *Politics and Governance*, vol. 9, 1, 2021, 96 ff.; J. MARTENS – W. OBENLAND, *Die 2030-Agenda. Globale Zukunftsziele für nachhaltige Entwicklung*, Bonn/Osnabrück, 2016.

¹⁷ On this point, see R. RUGE, *The Reality Gap: Simplification of Environmental Law as Key for the Acceleration of Permit Procedures for Europe's Green Deal*, in *Eur. Energy Environ. Law Rev.*, vol. 31, 4, 258 ff., according to which the «reality gap» between the EU's high climate and renewable energy goals, and the failure due to lengthy authorisation procedures is whether European environmental Law may or may not be simplified.

¹⁸ Cf., Regulation 2021/1056/EU.

¹⁹ Cf., Regulation 2021/523/EU.

²⁰ Cf., Regulation 2021/1229/EU.

From the link between the measures contained in the *Clean Energy Package* and those of the *European Green Deal*, there emerges the two-way instrumental relationship²¹ between energy objectives and the goal of climate neutrality, which are destined to continue in unison along the same path.

2.1. The governance of the Energy Union

That of the Energy Union is a multi-level governance, which is characterised by a shared competence between the European Union and the Member States²², but also by a shared legislative power between the State and the Regions²³. Added to this is an administrative complexity, which sees a distribution of exclusive competences divided

²¹ Cf., F. VETRÒ, *Sviluppo sostenibile, transizione energetica e neutralità climatica. Profili di governance: efficienza energetica ed energie rinnovabili nel “nuovo ordinamento” dell’energia*, cit., 70.

²² Pursuant to Art. 4, para. 2(i) TFEU, the Union has a competence shared with the Member States in the energy sector, and this is confirmed by Art. 194 below, according to which the Union’s policy in the energy sector is inspired by a spirit of solidarity among the Member States. On the multi-level governance of the European Union, see: R. MICCÙ, *Regolazione e governo multilivello del mercato europeo dell’energia*, in ID. (ed.), *Multilevel regulation and government. Implementation of the «Third Package» and promotion of renewable energy*, Napoli, 2016, 3 ff.; N. BASSI–E. BRUTI LIBERATI–F. DONATI, *La “Governance dell’energia”, Rapporto per l’Osservatorio sulla politica energetica*, Roma, 2012; *Italiadecide, Rapporto 2011-2012. Il governo dell’energia per lo sviluppo del Paese*, Bologna, 2012. On the spirit of solidarity among the Member States, see: Y. PETIT, *La solidarité énergétique entre les Etats membres de l’Union européenne: une chimère?*, in *Revue des affaires européennes*, no. 4, 2010, 771 ff.; M. MARLETTA, *Energia. Integrazione europea e cooperazione internazionale*, 2011, 55 ff. More recently, on the division of powers in the energy sector in the European context, in the light of the Aquind judgment, see K. HUHTA, *Case T-295/20 Aquind: Clarifying the Division of Powers in the EU Energy Sector*, in *Eur. Energy Environ. Law Rev.*, vol. 32, 3, 2023, 1 ff.

²³ Art. 117, para. 3 of the Constitution, in fact, provides that production, transport and national distribution of energy is one of the subjects of concurrent legislation. On this point, see A. COLAVECCHIO, *La materia «energia» tra «nuovo» e «nuovissimo» Titolo V della Costituzione*, in *Studi in onore di Francesco Gabriele*, Bari, 2016, 358 ff.

among the various levels of government (State, Regions and local authorities) and functions exercised by the Government and the Independent regulatory authority, but also by other bodies, including the Gestore dei Servizi Energetici (GSE), the Gestore dei Mercati Energetici (GME), the Acquirente Unico (AU), and the network operators (Terna and Snam)²⁴.

Regulation 2018/1999/EU intervenes in the governance of the Energy Union²⁵ by introducing a dual cooperative logic²⁶, centred on the *National Energy and Climate Plans* (NECPs) and the *Strategy for Long-term EU Greenhouse Gas Emissions Reductions*. In addition to cooperation between Member States and the European Commission, which can act synergistically to identify the best measures to be implemented, there is also cooperation between Member States, which can submit comments on the *National Energy and Climate*

²⁴ F. VETRÒ, *Evoluzioni del diritto europeo dell'energia, transizione energetica e sistema istituzionale: il ruolo del GSE S.p.A.*, in *Dir. econ. (II)*, no. 1, 2020, 516, who also observes that in the energy sector, the complexity of governance has increased over time also due to the Europeanisation and integration of markets, from which has resulted a transfer of responsibilities and powers from the national level to supranational institutions and organisations, such as the European Commission and ACER, with decision-making evolving over time towards a supranational collaboration and coordination model.

²⁵ On the new governance of the European Union, aimed at combating climate change and pursuing energy transition goals, see L. AMMANNATI, *Una nuova governance per la transizione energetica dell'Unione europea: soluzioni ambigue in un contesto conflittuale*, in ID. (ed.), *La Transizione energetica*, cit., 3 ff., but also M. RINGEL – M. KNODT, *The governance of the European Energy Union: Efficiency, effectiveness and acceptance of the Winter Package 2016*, in *Energy Policy*, vol. 112, 2018, 219 ff., and V. TERMINI, *Regionalizzazione dei mercati e governance istituzionale*, in E. BRUTI LIBERATI – M. DE FOCATIS – A. TRAVI (eds.), *La transizione energetica e il Winter Package. Politiche pubbliche e regolazione dei mercati*, cit., 57 ff.

²⁶ Cf., F. VETRÒ, *Sviluppo sostenibile, transizione energetica e neutralità climatica. Profili di governance: efficienza energetica ed energie rinnovabili nel "nuovo ordinamento" dell'energia*, cit., 70-71.

Plans prepared by the other Member States²⁷, so that none of them can jeopardise or make it more difficult to achieve the common objectives²⁸.

As for cooperation instruments, although there is no express definition, from Recital 25 and Art. 3 and 4 of Regulation 2018/1999/EU, the NECPs are composed of a reconnaissance part, aimed at providing an overview of the current energy system and planning set-up in the Member State²⁹, and the procedure followed to define the plan itself³⁰, a planning part, describing the objectives, targets and national contributions related to the five dimensions³¹ of the Energy Union³², and a programming part, containing a description of the policies and measures related to the objectives to be pursued and the investment needed to do so³³. These are plans to extend over ten-year periods, which each Member State, following a public consultation³⁴, shall forward in provisional form to the European Commission by 31 December 2018³⁵, which shall make its own assessments and forward any

²⁷ According to Art. 2(21) of Regulation 2018/1999/EU, «regional cooperation» is defined as «cooperation between two or more Member States engaged in a partnership covering one or more of the five dimensions of the Energy Union».

²⁸ Cf., Art. 12, Regulation 2018/1999/EU.

²⁹ Cf., Recital 25, Regulation 2018/1999/EU.

³⁰ Cf., Art. 2(a), Regulation 2018/1999/EU.

³¹ Identified in Art. 1(2), Regulation 2018/1999/EU: *a*) energy security; *b*) internal energy market; *c*) energy efficiency; *d*) decarbonisation; *e*) research, innovation, and competitiveness.

³² Cf., Art. 2(b), Regulation 2018/1999/EU.

³³ Cf., Art. 2(c), Regulation 2018/1999/EU.

³⁴ Cf., Art. 10, Regulation 2018/1999/EU.

³⁵ Thus, on 1 January 2028 and every ten years thereafter. Cf., Art. 9(1), Regulation 2018/1999/EU.

recommendations no later than six months before the deadline for submitting the final version³⁶. The Member States must take into account the recommendations provided by the Commission, giving reasons if they wish to deviate from them³⁷, as well as the comments provided by the other Member States. By 31 December 2019, then by 1 January 2029 and every ten years thereafter, each Member State shall notify the Commission of the final version of its plan, being able to submit a proposal for an update by 30 June 2023³⁸, and the final version of the update by 30 June 2024³⁹.

Italy sent its proposal for an Integrated National Energy and Climate Plan to the European Commission on 8 January 2019, in which the following targets for 2030 were set: *a*) a 33% reduction in greenhouse gases for all non-ETS sectors, compared to 2005; *b*) a 30% production of energy from renewable sources in gross final energy consumption; *c*) a 21.6% production of energy from renewable sources in gross final energy consumption in transport; *d*) a 43% reduction in primary energy consumption compared to the PRIMES 2007 scenario. To this proposal, the Commission responded with a nine-point recommendation⁴⁰, in light of

³⁶ Cf., Art. 9(2), Regulation 2018/1999/EU.

³⁷ Cf., Art. 9(3), Regulation 2018/1999/EU.

³⁸ Thus, by 1 January 2033 and every ten years thereafter, or provide the Commission with reasons why the plan does not need to be updated. Cf., Art. 14(1), Regulation 2018/1999/EU.

³⁹ Thus, by 1 January 2034 and every ten years thereafter. Cf., Art. 14(2), Regulation 2018/1999/EU.

⁴⁰ Thus identified: *i*) sustain the level of ambition that the country has set for itself, with the 30% share of energy from renewable sources by 2030, by adopting detailed and quantified policies and measures that are in line with the obligations imposed by Directive 2018/2001/EU; *ii*) ascertain that the planned energy efficiency instruments also allow for adequate savings in the period 2021-2030; *iii*) specify the diversification and energy dependency reduction measures envisaged to support energy security objectives; *iv*) set clear targets, milestones and timetables for the implementation of planned energy market reforms; *v*) specify the national and funding targets for research, innovation and competitiveness to be achieved in the period 2021-2030; *vi*) carry out consultations with neighbouring countries and in the High Level Group on Central and South East European Gas Interconnection (CESEC) with a view to finalising the integrated national energy and climate plan; *vii*) list actions taken and plans

which, Italy supplemented its NECP, notifying the Commission of the final version on 20 January 2020, which remained substantially unchanged from the previous version, but supplemented by the measures contained in Legislative Decree No. 111 of 14 October 2019 (the so-called Climate Decree), converted into Law No. 141 of 12 December 2019, and the Budget Law 2020⁴¹.

The NECPs, as mentioned above, are complemented by the *Strategies for Long-term EU Greenhouse Gas Emissions Reductions*, which are considered essential to contribute to economic transformation, the achievement of sustainable development goals and the fulfilment of commitments under the UNFCCC and the Paris Agreement⁴². Member States shall develop and communicate to the European Commission, by 1 January 2020, and then, as for the NECPs, by 1 January 2029 and every ten years thereafter, their Long-Term Strategies, which shall have a time horizon of at least thirty years⁴³. The Member States and the Union's Long-Term Strategies contain the measures and instruments aimed at fostering: the reduction of greenhouse gas emissions and the increase of their removals; the reduction of emissions and the increase of removals in individual sectors; the progress in the transition to a low greenhouse gas emission economy and the socio-economic effects expected from decarbonisation measures; the links with other national long-term programmes and objectives⁴⁴.

to phase out energy subsidies, especially fossil fuel subsidies; *viii*) complete the analysis of interactions with air quality and air emissions policy; *ix*) better integrate the fair and equitable transition aspect. Cf., COM(2019) 4412 final, 18 June 2019.

⁴¹ Cf., Law no. 160 of 27 December 2019.

⁴² Cf., Recitals 35 and 36, Regulation 2018/1999/EU.

⁴³ Cf., Art. 15(1), Regulation 2018/1999/EU.

⁴⁴ Cf., Art. 15(4), Regulation 2018/1999/EU.

Italy forwarded to the Commission its Long-term Strategy, developed under the coordination of the Ministry of Ecological Transition, the Ministry of Economic Development, the Ministry of Sustainable Infrastructure and Mobility, and the Ministry of Agricultural, Food and Forestry Policies, with the contribution of a technical working group in which experts from ISPRA, RSE, GSE, Milan Polytechnic, ENEA and CMCC participated, on 11 February 2021. There are seven guidelines through which the measures to be taken are developed: *a)* the broadening to all public policies of the transformations envisaged therein; *b)* a change of attitude on the part of the various institutional levels, citizens and businesses, together with a greater sharing of the need to proceed convincingly along the road to transition; *c)* the gradual reconversion of gas transport and distribution infrastructures, first with gas-hydrogen mixtures and then with hydrogen, together with the promotion of enhanced cooperation between electricity transmission and gas transport system operators; *d)* achieving a unified framework within which the national strategies have a number of major common axes of action, such as on the role of hydrogen and renewable fuels and on the energy vectors to be favoured; *e)* interconnecting the major infrastructures linking the Member States, such as power lines, gas pipelines, roads, railways, sea and airways; *f)* the promotion of research into technological and operational solutions to reconcile the growth of renewable energy sources with the protection of the environment and the landscape; *g)* the sharing on a global scale of the European pathway towards carbonisation⁴⁵.

The cooperative logic behind the aforementioned instruments is made effective by the provisions contained in Chapter IV of Regulation 2018/1999/EU, whereby Member States are obliged to communicate their *Biennial Progress Reports* and *Annual Reports* to the Commission via an online platform, aimed at making cooperation effective among Member States and between them and the Commission, as well as facilitating public access

⁴⁵ Cf., *Strategia Italiana di Lungo Termine sulla Riduzione delle Emissioni dei Gas a Effetto Serra*, in www.mase.gov.it, 9-10.

to information⁴⁶. Of particular relevance among the biennial Progress Reports are the *Integrated National Energy and Climate Progress Reports*, to be notified to the Commission by 15 March 2023 and every two years thereafter⁴⁷, and which include the *Integrated Reporting on Renewable Energy*, the *Integrated Reporting on Energy Efficiency*, the *Integrated Reporting on Energy Security*, the *Integrated Reporting on the Internal Energy Market*, the *Integrated Reporting on Energy Poverty*, and the *Integrated Reporting on Research, Innovation and Competitiveness*. Through these instruments, the Commission exercises a monitoring function on the activities of individual Member States, carrying out assessments on the NECPs and, more generally, on the achievement of the energy transition objectives, possibly making specific recommendations.

Regarding their legal nature, the Italian NECP and *Long-Term Strategy* were included in the category of «acts of high administration»⁴⁸. Although these acts have, in fact, absorbed the National Energy Strategy (SEN), which has been considered a «political act»⁴⁹, they do not seem to share its legal nature. This conclusion is supported by the circumstance according to which these acts, unlike the SEN, were adopted in fulfilment of an obligation to adopt, provided for within a broad legislative framework of supranational rank, which punctually provided for the adoption procedure, binding the States to pursue the goals set by the same, eliminating that freedom of goals, typical of political acts. Also excluded was the possibility of attributing a regulatory nature to them. First and foremost, the lack of a

⁴⁶ Cf., Art. 28(1), Regulation 2018/1999/EU.

⁴⁷ Cf., Art. 17(1), Regulation 2018/1999/EU.

⁴⁸ Cf., F. VETRÒ, *Evoluzioni del diritto europeo dell'energia, transizione energetica e sistema istituzionale: il ruolo del GSE S.p.A.*, cit., 521 ff.

⁴⁹ Cf., G. VERCILLO, *Procedimento di formazione e natura giuridica della SEN*, in L. CARBONE – G. NAPOLITANO – A. ZOPPINI (eds.), *Annuario di Diritto dell'energia 2019. La strategia energetica nazionale: «governance» e strumenti di attuazione*, Bologna, 2019, 97 ff.

ministerial (or inter-ministerial) decree encompassing them, instead of only publishing them on the institutional website of the Ministry of Economic Development (as for the NECP) and on the institutional website of the Ministry of the Environment and Energy Security (as for the Long-Term Strategy). Moreover, even if these acts were to be adopted by ministerial or inter-ministerial decree, their qualification as regulations would presuppose the prior communication to the Council of Ministers and the opinion of the Council of State, and, especially, the possibility of immediately innovating the legal system; a possibility that these acts do not have, since they contain general lines of action, which in themselves are not self-sufficient⁵⁰.

As anticipated, these acts seem rather to be placed in the category of acts of high administration, presenting their typical characteristics: *a)* they represent an initial implementation moment, albeit in general lines, of the political guideline on energy matters; *b)* they are the expression of a power, albeit discretionary in the identification of measures, which is in any case binding in the ends to be pursued; *c)* they are subject to the principle of legality, as they must be adopted and updated within certain deadlines, bear a certain content and comply with procedural rules; *d)* they are adopted in light of the regulations and directives of which the *Clean Energy Package* is composed, which, besides constituting the logical-legal antecedent of their genesis, also act as parameters against which to assess the suitability of their content to ensure the achievement of the binding objectives set forth in the Euro-unitarian legislation⁵¹.

Ultimately, the combination of the forecasts of the NECP with those of the Long-Term Strategy represent the tool that will have to guide future Italian political action in the

⁵⁰ Cf., F. VETRÒ, *Evoluzioni del diritto europeo dell'energia, transizione energetica e sistema istituzionale: il ruolo del GSE S.p.A.*, cit., 522-523.

⁵¹ Cfr., F. VETRÒ, *Evoluzioni del diritto europeo dell'energia, transizione energetica e sistema istituzionale: il ruolo del GSE S.p.A.*, cit., 523.

transition path (where the energy transition plays a fundamental role) towards a zero-greenhouse gas emission economy.

2.2. The promotion of energy production from renewable sources in the EU framework

Having briefly outlined the multi-level governance of the Energy Union and the cooperative logic behind it, it is now necessary to focus on the measures for the promotion of energy from renewable sources⁵² and Directive 2018/2001/EU (so-called Red II).

Given that, pursuant to Article 194(1) TFEU, the promotion of energy from renewable sources is one of the Union's objectives⁵³, it is also a fundamental component of

⁵² On the topic of promoting energy from renewable sources prior to the enactment of Directive 2018/2001/EU, see: F. DE LEONARDIS, *Il ruolo delle energie rinnovabili*, in R. MICCÙ (ed.), *Multilevel Regulation and Government in Energy Markets*, Napoli, 2016, 379 ff.; F. CORTESE – F. GUELLA – G. POSTAL, *La regolamentazione della produzione di energie rinnovabili nella prospettiva dello sviluppo sostenibile*, Padova, 2013; M. COCCONI, *Promozione europea delle energie rinnovabili e semplificazione*, in F. MERUSI – V. MESSERINI – V. GIOMI (eds.), *Profili giuridici e problematiche istituzionali dell'approvvigionamento di energia da fonti rinnovabili*, Napoli, 2012, 75 ff.; B. POZZO (ed.), *Le politiche energetiche comunitarie. Un'analisi degli incentivi allo sviluppo delle fonti rinnovabili*, Milano, 2009; A. JÄGER-WALDAU, *Photovoltaics and renewable energies in Europe*, in *Renewable and Sustainable Energy Reviews*, vol. 11, 7, 1414 ff. For an analysis of the renewable energy sector in EU Member States prior to the Clean Energy Package, see M. PACESILA – S.G. BURCEA, S.E. COLESCA, *Analysis of renewable energies in European Union*, in *Renewable and Sustainable Energy Reviews*, vol. 56, 2016, 156 ff.

⁵³ In the EC sphere, energy has long lacked an express legal basis. Nevertheless, the adoption of measures, even significant ones, on energy matters at European level has been linked to Art. 308 (formerly Art. 235), TEC, which recognised the possibility of the European Community exercising powers beyond those expressly conferred upon it, should this prove necessary for the achievement of one of the Community's aims, and in Art. 3 lett. o) and u), TECE, which provided for the Community's competence to adopt measures to promote the creation and development of trans-European networks and in the fields of energy, civil protection, and tourism. Subsequently, the Lisbon Treaty included Title XXI, dedicated to energy, where it was stated that the Union's policy in the field of energy is aimed at ensuring the functioning of the energy market and the security of supply, as well as promoting energy saving,

the package of measures adopted by the European Union to reduce greenhouse gas emissions, but also to fulfil the commitments undertaken by the Union itself on the occasion of the 2015 Paris Agreement on climate change and for energy and climate policies in the 2030 horizon⁵⁴.

The aforementioned Directive 2018/2001/EU follows several other measures adopted at EU level on the promotion of energy from renewable sources⁵⁵. First of all, mention must be made of Directive 2001/77/EC, issued following the *1997 White Paper*⁵⁶ on renewable energy sources and the commitments made by the Union at the *Kyoto Protocol* on

energy efficiency, the development of energy from renewable sources and the interconnection of energy networks (Art. 194 TFEU). Since then, energy, which is directly linked to environmental matters, has also formally assumed a central role in the Union's policies, and it was on the basis of Art. 194 TFEU that the measures that make up the *Clean Energy Package* were adopted. On the evolution of energy policies in the Community sphere, see: M.A. SCINO, *La politica energetica europea: dalle origini alle più recenti evoluzioni*, in *Rass. Avv. St.*, 2012, 80 ff.; J.F. BRAUN, *EU Energy Policy under the Treaty of Lisbon Rules. Between a new policy and business as usual*, in *EPIN Working Paper*, no. 31, 2011; S. QUADRI, *L'evoluzione della politica energetica comunitaria con particolare riferimento al settore dell'energia rinnovabile*, in *Riv. it. dir. pubbl. com.*, 2011, 839 ff.; N. PARISI – M. FUMAGALLI MERA VIGLIA – D. RINOLDI – A. SANTINI (eds.), *Il Trattato di Lisbona e l'energia*, in *Studi in onore di Ugo Draetta*, Napoli, 2011, 393 ff. For an analysis of Art. 194 TFEU and Title XXI, see J.C. PIELOW – B.J. LEWENDEL, *The EU Energy Policy after the Lisbon Treaty*, in A. DORSMAN – W. WESTERMAN – M. KARAN – Ö. ARSLAN (eds.), *Financial Aspects in Energy*, Berlin, 2011, 147 ff.

⁵⁴ Cf., Recital 2, Directive 2018/2001/EU.

⁵⁵ On the long path taken by the European Union to arrive at a legal framework on the energy issue, see M.M. SOKOŁOWSKI, *European Law on the Energy Communities: a Long Way to a Direct Legal Framework*, in *Eur. Energy Environ. Law Rev.*, vol. 27, 2, 2018, 60 ff.

⁵⁶ Cf., COM(97) 599 final, 26 November 1997. Observes M.M. SOKOŁOWSKI, *European Law on the Energy Communities: a Long Way to a Direct Legal Framework*, cit., 61, that the *White Paper* «is one of the very first EU documents addressing renewable energy in a complex way», although not the first European document to address the issue, could be mentioned, for example, the Communication from the Commission to the Council «Member States energy policies: main issues for the future» (COM(84) 693 final, 13 December 1984, and the Communication from Commission to the Council «New Community energy objectives» (COM(85) 245 final, 28 May 1985).

the reduction of greenhouse gas emissions, which aimed to promote the use of renewable energy sources in the production of electricity in the internal market and to create the basis for a future Community framework on the subject⁵⁷. This was followed by Directive 2009/28/EC, which established a common framework for the promotion of energy from renewable sources⁵⁸, providing for the possibility for each Member State to adopt *National Renewable Energy Action Plans*, whereby national targets for the share of energy from renewable sources consumed in the transport, electricity and heating and cooling sectors to 2020 were set⁵⁹, and Directive 2009/72/EC on the electricity market, in which it is possible to identify a fundamental antecedent regarding the possibility of self-produced energy consumption⁶⁰, whereby the so-called Closed Distribution Systems were established⁶¹.

⁵⁷ Cf., Art. 1, Directive 2001/77/EC.

⁵⁸ On this issue and on administrative procedures related to renewable energy sources, see T. HOWES, *The EU's New Renewable Energy Directive (2009/28/EC)*, in S. OBERTHÜR – M. PALLEMAERTS – C. R. KELLY (eds.), *The New Climate Policies of the European Union: Internal Legislation and Climate Diplomacy*, Brussels, 2010, 117 ff.

⁵⁹ Cf., Art. 4(1), Directive 2009/28/EC.

⁶⁰ Similarly, C. BEVILACQUA, *Le comunità energetiche tra governance e sviluppo locale*, in *Amministrazione in cammino*, 13 May 2020, 3.

⁶¹ These are distribution systems, which supply electricity within a geographically limited industrial, commercial or shared services site, where, for specific technical or security reasons, and limited to the owner, the system operator or their related undertakings, partial integration of the production and consumption process is envisaged. Cf., Art. 28, Directive 2009/72/EC.

This regulatory framework⁶² is followed, finally, by Directive 2018/2001/EU, which aims to provide a common framework for the promotion of energy from renewable sources⁶³, setting at 32% the share of energy produced from renewable sources in the gross final consumption of energy⁶⁴, increased, as mentioned, to «at least 40%» by the *Fit for 55% Package*.

But the most interesting and innovative rules for our purposes in this Directive are those aimed at regulating self-consumers of energy from renewable sources and Renewable Energy Communities. The former is a group of at least two self-consumers of renewable energy who are located in the same building or block of flats and act collectively⁶⁵, producing renewable electricity for their own consumption, storing it or selling it, provided these activities do not constitute their main commercial or professional activity⁶⁶. In relation to self-consumers of renewable energy, Member States must ensure that final consumers may be allowed to produce renewable energy for their own consumption, but also to store or sell

⁶² Also noteworthy is the European Commission's Communication of 22 January 2014, aimed at providing a «Framework for energy and climate policies for the period from 2020 to 2030», which laid the foundations for future EU policies in the energy sector and where it is stated that «the transition to a sustainable, secure and competitive energy system will not be possible without a significant increase in the share of renewable energies, which will therefore have to continue to play a key role in this transition» (7).

⁶³ Cf., Art. 1, Directive 2018/2001/EU.

⁶⁴ Cf., Art. 3(1), Directive 2018/2001/EU. On the subject of organised self-consumption, a noteworthy antecedent is the document SWD(2015) 141 final, *Commission Staff Working Document. Best practices on Renewable Energy Self-consumption* – Accompanying the document Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions Delivering a New Deal for Energy Consumers (COM(2015) 339 final), 15.7.2015, in www.eur-lex.europa.eu.

⁶⁵ Cf., Art. 2(15), Directive 2018/2001/EU.

⁶⁶ Cf., Art. 2(14), Directive 2018/2001/EU.

surplus production (including through sale and purchase agreements⁶⁷), to install and operate storage systems for self-consumption and to receive remuneration (including through support schemes) for self-produced renewable energy fed into the grid⁶⁸. As for Renewable Energy Communities⁶⁹, they are an autonomous legal entity, based on open and voluntary participation and controlled by shareholders or members (natural persons, small or medium-sized enterprises or local governments), located in the vicinity of the renewable energy production facilities owned or developed by the Community, and whose objective is to provide environmental, economic or social benefits to its shareholders or the local areas in which they operate, rather than to make financial profits⁷⁰. Member States must ensure the right for final customers to participate in energy communities, to which they must also guarantee the production, consumption, storage and sale of renewable energy, but also to be able to trade self-produced renewable energy within them and to access all electricity markets in a non-discriminatory manner. Not only that, Member States must also consider the

⁶⁷ Meaning a contract whereby a natural or legal person undertakes to purchase electricity produced from renewable sources directly from an electricity producer. Cf., Recital 17, Directive 2018/2001/EU.

⁶⁸ Cf., Art. 21, Directive 2018/2001/EU.

⁶⁹ Renewable Energy Communities (RECs) are to be distinguished from Citizen Energy Communities (CECs), introduced by Directive 2019/944/EU, which, although Recital 43 of the aforementioned Directive, similarly to Recital 67 of Directive 2018/2001/EU, indicates that CECs are aimed at increasing «energy efficiency at household level and help fight energy poverty through reduced consumption and lower supply tariffs», they do not envisage the principles of autonomy and proximity (typical of CERs) and can only manage energy in the form of electricity (unlike CERs, which can manage different forms of energy, as long as they are generated from renewable sources), which is generated not only from renewable sources, but also fossil sources. Consider, moreover, that Recital 44 of Directive 2019/944/EU states that «membership of citizen energy communities should be open to all categories of entities», further differentiating them from the Renewable Energy Community, where participation in them is limited to natural persons, small or medium-sized enterprises and local governments.

⁷⁰ Cf., Art. 2, para. 2(16), Directive 2018/2001/EU.

possibility of support schemes for the Communities, so as to allow the removal of any (formal and substantial) barriers to their development⁷¹.

With regard to the benefits relating to self-consumption, Directive 2018/2001/EU also provides that Member States may apply non-discriminatory and proportionate charges and tariffs to self-consumers of renewable energy, in relation to the renewable electricity self-produced by them and remaining in their possession, in three cases: *a*) if such energy is actually benefiting from support schemes, only to the extent that the economic viability of the project and the incentive effect of such support are not affected; *b*) from 1 December 2026, if the total share of installations in self-consumption exceeds 8% of the total installed electrical capacity of a Member State, and if it is demonstrated, through a cost-benefit analysis carried out by the national regulatory authority, conducted through an open, transparent and participatory process, that the provision referred to in para. 2, lett. *a(ii)*⁷², has led to a significant disproportionate burden on the long-term financial viability of the electricity system or creates an incentive that exceeds what is objectively necessary to achieve the economically efficient deployment of renewable energy and that it would be impossible to minimise that burden or incentive by taking other reasonable measures; *c*) where that energy is produced in installations with a total installed electrical capacity of more than 30 kW⁷³.

⁷¹ Cf., Art. 22, Directive 2018/2001/EU.

⁷² According to which, Member States shall ensure that self-consumers of renewable energy, individually or through aggregators, are allowed to produce renewable energy, including for their own consumption, store and sell surplus renewable electricity production, including through renewable electricity trading agreements, electricity suppliers and peer-to-peer trading agreements, without being subject, in relation to self-produced renewable electricity that remains in their possession, to discriminatory or disproportionate procedures, charges or tariffs.

⁷³ Cf., Art. 21, para. 3, Directive 2018/2001/EU.

2.3. Transposition of renewable energy promotion measures into the Italian legal framework

Self-consumption and energy communities were already being talked about in Italy⁷⁴ before the Red II Directive. Prior to Law No. 1643 of 6 December 1962, which established the Ente Nazionale Energia Elettrica (ENEL), there were already forms of self-production of energy, such as electricity cooperatives⁷⁵. These are legal entities organised in the form of a cooperative, the purpose of which is to produce electricity mainly for the supply of its members. Within this category are the historical cooperatives, which are electricity production and distribution cooperatives that existed before the liberalisation of the electricity market in Italy. These cooperatives can be subdivided into historical concessionary cooperatives, if they have been granted a concession for the distribution of electricity, and historical non-concessionary cooperatives, if they operate in a territorial area, where a third concessionary company already exists⁷⁶.

⁷⁴ E. FERRERO, *Le comunità energetiche: ritorno a un futuro sostenibile*, in *Ambiente & Sviluppo*, no. 8-9, 2020, 677, points out how energy communities became widespread at the beginning of the last century in the most peripheral and disadvantaged areas, particularly in mountainous areas, where populations spontaneously set up energy production plants, whose energy was not sold on the market but self-consumed in the local area, thus making up for the shortages they suffered. On the status and evolution of community energy in Italy, see C. CANDELISE – G. RUGGIERI, *Status and Evolution of the Community Energy Sector in Italy*, in *Energies*, no. 13, 2020.

⁷⁵ Cf., P.A. MORI, *Cos'è l'impresa di comunità*, in P.A. MORI – J. SFORZI (eds.), *Imprese di comunità*, Bologna, 2018, 13 ff., who notes that the first electrical cooperative in the world was the Società per l'Illuminazione Elettrica in Chiavenna società cooperativa, established in 1894 in Italy and still active today.

⁷⁶ Cf., M. PEZZAGLIA, *Sistemi di utenza. Una visione tra passato, presente e futuro*, in *enusyst.ue*, 2018, 25, who also notes how remembering historical self-production systems is not only of historical utility, since it is possible to derive elements and concepts from them, which may prove valuable for the future.

Following the establishment of ENEL⁷⁷, which was entrusted with the task of carrying out the activities of production, import and export, transport, transformation, distribution and sale of electricity from any source produced in Italy⁷⁸, there was a shift from a decentralised to a centralised system, based on a monopolistic system centred on this entity. Subsequently, due to the liberalisation season initiated in the European Community, self-production of energy began to be mentioned again in Law No. 9 of 9 January 1992, Title III of which is entitled «Rules for self-producers and local authority electricity companies», that preceded Legislative Decree No. 333 of 11 July 1992, which started the privatisation process of ENEL, and Legislative Decree No. 79 of 16 March 1999 (the so-called Bersani Decree), introducing the liberalisation of the electricity market in Italy, following the enactment of Directive 96/92/EC, aimed at achieving a competitive and non-discriminatory electricity market⁷⁹. In particular, the latter decree, liberalised the activities of production, import,

⁷⁷ On which, see F.G. SCOCA, *Le funzioni pubbliche dell'Enel*, in *L'Enel tra pubblico e privato. Atti del Convegno (Bologna, 3-4 maggio 1986)*, Milano, 1987, 27 ff., and G. GUARINO, *Sulla capacità dell'Enel*, in *Scritti di diritto pubblico dell'economia e di diritto dell'energia*, Milano, 1970, 551 ff. On the privatisation process of ENEL, see G. DI GASPARRE, *L'Enel s.p.a. tra privatizzazione e servizio pubblico*, in *Nomos*, 1993, 109 ff., and G. CAIA, *Caratteri e prospettive dell'Enel s.p.a. e del suo ruolo (appunti per una ricerca sulle «privatizzazioni»)*, in *Rass. giur. energia elettr.*, 1995, 1 ff.

⁷⁸ Cf., Art. 1, para. 1, Law No. 1643 of 6 December 1962.

⁷⁹ Cf., Art. 3, para. 1, Directive 96/92/EC. The aim of this directive was to bring the internal electricity markets of the various Member States, which at the time had very different systems in place, closer together, by achieving a partial and progressive liberalisation of the internal market, which was no longer centred on a monopolistic regime, but tended towards a competitive structure. It constituted, together with Directive 98/30/EC for the natural gas sector, the first package of measures to liberalise the European energy market. These were followed by a second package of measures, marking a second step in the liberalisation process of the European energy market: these are Directives 2003/54/EC and 2003/55/EC. The first, abrogating the previous Directive 96/92/EC, is aimed at expanding the opening of the electricity market and, among other things, provides for the mandatory legal and functional unbundling of transmission and distribution from the other activities of the electricity supply chain and the identification of a minimum framework of competences and powers to be attributed to the national regulatory authorities; the second, instead, is aimed at creating a single European natural gas market, accelerating the opening of the domestic markets of the Member States. Finally, on 3 September 2009, the so-called «Third Energy Package»

export, purchase and sale of electricity, assigning the transmission and dispatching activities as a concession to the Gestore della Rete di Trasmissione Nazionale (GRTN)⁸⁰, which was also entrusted with the unified management of the national transmission grid⁸¹, owned by TERNA, a subsidiary of ENEL. Not only that, going beyond Directive 96/92/EC, it has set a cap on operators' production and import capacity equal to 50% of the total energy produced and imported into Italy, with the consequent obligation on ENEL to sell 15,000 MW of its production capacity and related plants⁸²; it has obliged ENEL to set up separate companies

came into force, aimed at bringing the internal markets of the Member States closer together with a view to building a single energy market, and composed of two directives and three regulations: Directive 2009/72/EC, concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC; Directive 2009/73/EC, concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC; Regulation 713/09/EC, establishing the Agency for the Cooperation of Energy Regulators (ACER); Regulation 714/09/EC, on conditions for access to the network for cross-border exchanges in electricity; Regulation 715/09/EC, on conditions for access to the natural gas transmission networks.

⁸⁰ Cf., Art. 1, Legislative Decree No. 79 of 16 March 1999. It should be noted that the legislator's choice was to make a distinction between the various segments of the electricity supply chain, in the sense that it decided to operate a gradual liberalisation with reference to the activities of producing, importing, exporting, purchasing and selling electricity, while maintaining a concessionary regime with reference to those of transmission and dispatching. Thus, a complex system was created in which the new liberalisation regime, falling under Art. 41 of the Constitution instead of Art. 43, coexists with the old regime of public concessions.

⁸¹ Cf., Art. 3, Legislative Decree No. 79 of 16 March 1999.

⁸² Cf., Art. 8, Legislative Decree No. 79 of 16 March 1999. The setting of this production ceiling meant that ENEL had to sell at least 15,000 MW of its production capacity and prepare a plan for the sale of the plants. In this respect, on 29 October 1999, pursuant to the Prime Ministerial Decree of 4 August 1999, ENEL set up three new joint-stock companies: Eurogen, Elettrogen, and Interpower for the purpose of selling the plants. The above-mentioned D.P.C.M. provided that for the sale of the shareholdings in these companies, ENEL would proceed by public offer, by direct negotiation, or by both of these methods, leaving the choice between these procedures to a subsequent decree of the Minister of the Treasury, Budget and Economic Planning, in agreement with the Minister of Industry, Trade and Crafts. On 25 January 2000, the Ministry of the Treasury, Budget and Economic Planning and the Ministry of Industry, Trade and Crafts issued such a decree, which provided for the sale of the plants by direct negotiation between ENEL and the potential purchasers, under the supervision of the Privatisation Committee, with

to carry out production, distribution, sale, exercise of ownership rights of the transmission grid and decommissioning of decommissioned nuclear power plants⁸³; and finally, it has provided for the so-called «small isolated grids»⁸⁴, in which it is possible to glimpse an anticipation of the energy communities⁸⁵. This was followed, as of 1 November 2005, by the unification of the ownership and management of the transmission grid under TERNA⁸⁶, no longer controlled by ENEL, as a result of the placement on the market of approximately 49% of its capital. This unification was confirmed by Law No. 39 of 18 February 2004 (the so-

the possibility for Eurogen, as a larger company, to make a public offer in parallel. As a result, Elettrogen was sold in September 2001 to Endesa, Eurogen was sold to Edipower in May 2002, and Interpower to the consortium headed by Energia Italiana, Electralabel and Acea in January 2003. All three divestitures were subject to a favourable opinion issued by the European Commission. Following these disposals, a transfer of the share capital of the three companies into private hands took place, instrumental to the liberalisation of the sector and the entry of new operators, reducing ENEL's market share. On this point, see M. GIACHETTI FANTINI, *La liberalizzazione del mercato dell'energia e del gas naturale: il caso italiano nel panorama europeo*, in *Aperta Contrada*, 2017, 27-28.

⁸³ Cf., Art. 13, para. 2, Legislative Decree No. 79 of 16 March 1999. Pursuant to this provision, ENEL set up five joint-stock companies that it controls: Energie Rinnovabili Geotermiche ed Alternative (ERGA), for the production of energy from renewable sources; Enel Distribuzione, for electricity distribution activities; Enel Trade, for electricity marketing and sales activities; Trasmissione Elettricità Rete Nazionale (TERNA), for the exercise of ownership rights over the transmission network; and Società Gestione Impianti Nucleari (SOGIN), for the decommissioning of decommissioned nuclear power plants.

⁸⁴ Cf., Art. 7, Legislative Decree No. 79 of 16 March 1999.

⁸⁵ Thus, C. BEVILACQUA, *Le comunità energetiche tra governance e sviluppo locale*, cit., 8.

⁸⁶ Article 1-ter of Law No. 290 of 27 October 2003, by which Law Decree No. 239 of 29 August 2003 was converted into law, delegated to a subsequent Prime Ministerial Decree the establishment of criteria, terms and conditions for the unification of the ownership and management of the national transmission grid, the management of the entity resulting from the unification, including the regulation of voting rights, and its subsequent privatisation. The resulting Prime Minister's Decree of 11 May 2004 therefore provided for the transfer, by 31 October 2005, of most of the activities, functions, assets and legal relationships, both active and passive, belonging to the GRTN, to TERNA. Following this transfer, GRTN changed its name to Gestore dei Servizi Energetici (GSE).

called Marzano Law), which, in addition to having defined the competences between the State and the Regions, in light of the new Title V of the Constitution, completed the opening of the electricity market on the demand side, already partially implemented by Legislative Decree No. 79 of 1999⁸⁷.

In the meantime, inspired by the integrated climate-energy approach mentioned earlier, the liberalisation of the energy sector has begun to go hand in hand with the promotion of energy produced from renewable sources and energy efficiency, in order to achieve not only an electricity market open to free competition, but more fully an «eco-competitive» market⁸⁸. This was followed by Law No. 6 of 4 June 2010, Article 17 of which delegated the Government, among other things, to provide for the removal of obstacles, including regulatory obstacles, to the process of aggregation of small electricity distribution companies, in order to promote their efficiency⁸⁹, and Legislative Decree No. 93 of 1 June 2011, implementing Directives 2009/72/EC, 2009/73/EC and 2008/92/EC, which confirmed the total opening of the market on the demand side. Finally, the 2017 National Energy Strategy (Italian SEN)⁹⁰, as well as setting, among other things, new quantitative targets for energy

⁸⁷ Pursuant to Art. 1, para. 30 of that law, in fact, in addition to eliminating the distinction between eligible and captive customers, it stipulates that from 1 July 2004 every non-domestic end customer becomes an eligible customer, and from 1 July 2007 every end customer, including non-domestic, becomes an eligible customer. However, it should be noted that it only provided the option for companies to separate their electricity production and sales activities, as opposed to the corresponding obligation in Directive 2003/54/EC.

⁸⁸ In this sense, F. VETRÒ, *Prefazione*, in ID. (ed.), *Il mercato dell'energia elettrica a venti anni dalla liberalizzazione*, cit., 10.

⁸⁹ Cf., Art. 7, para. 3(d), Law No. 6 of 4 June 2010.

⁹⁰ On National Energy Strategy, see L. CARBONE – G. NAPOLITANO – A. ZOPPINI (eds.), *Annuario di Diritto dell'energia 2019. La strategia energetica nazionale: «governance» e strumenti di attuazione*, cit.

efficiency, promotion of energy from renewable sources and reduction of emissions⁹¹, provided for the explicit recognition of energy communities, assigning a central role to self-consumers and self-production⁹².

The liberalisation of the electricity market in Italy has brought about a profound change in the sector, first of all with reference to the mode of State intervention, which has changed from direct (through the public company ENEL) to indirect (with the establishment of the independent administrative regulatory authority for the sector⁹³)⁹⁴. This liberalisation process, however, which was initially launched on the supply side and continued on the demand side, has partially achieved its objectives, since, in the first case, the major industrial

⁹¹ Regarding energy efficiency, the SEN set a reduction in final consumption from 118 to 108 Mtoe with a saving of about 10 Mtoe by 2030; with regard to renewables, it envisaged a 28% share of renewables in overall consumption by 2030; finally, with regard to emissions reduction, it envisaged a 39% reduction in emissions by 2030 and 63% by 2050.

⁹² Cf., Decree of the Ministry of Economic Development and the Ministry of the Environment and Protection of Land and Sea, 10 November 2017.

⁹³ Law No. 481 of 14 November 1995, in fact, established the Autorità di Regolazione per Energia, Reti e Ambiente (ARERA). On the genesis of ARERA, see P. RANCI, *L'avvio dell'Autorità: una valutazione in retrospettiva*, in F. MERUSI – S. ANTONIAZZI (eds.), *Vent'anni di regolazione accentrata di servizi pubblici locali*, Torino, 2017, 15 ff. On this independent regulatory authority, see also M. CLARICH – F. SCLAFANI, *Liberalizzazione e regolazione del mercato italiano: l'Autorità*, in A. CLÒ – S. CLÒ – F. BOFFA (eds.), *Riforme elettriche tra efficienza ed equità*, Bologna, 2015, 335 ff.; F.A. ROVERSI MONACO, *L'autorità per l'energia elettrica e il gas*, in E. BRUTI LIBERATI – F. DONATI, *Il nuovo diritto dell'energia tra regolazione e concorrenza*, Torino, 2007, 61 ff.; S. AMOROSINO, *L'Autorità indipendente per il settore energetico*, in AA. VV., *Attività regolatoria e autorità indipendenti, l'Autorità per l'energia elettrica e il gas. Atti del Convegno di studi tenuto a Roma il 2-3 febbraio 1996*, Milano, 1997, 332 ff.

⁹⁴ Cf., F. VETRÒ, *Il Gestore dei Servizi Energetici. La liberalizzazione del mercato elettrico tra abbattimento delle barriere all'ingresso e promozione dello sviluppo sostenibile*, in Id. (ed.), *Il mercato dell'energia elettrica a venti anni dalla liberalizzazione*, cit., 133. On the relationship between liberalisation and regulation, see the pages of S.K. VOGEL, *Freer Markets, More Rules. Regulatory Reform in Advanced Industrial Countries*, Ithaca, 1996,

groups continue to maintain strong positions against the other operators⁹⁵, while, in the second case, fully satisfactory results have not yet been achieved with regard to consumer protection⁹⁶. But with reference to the difficulty of liberalising the electricity sector, one must also consider the public utility nature of the service offered, which means that the need to open up the market must be accompanied by other relevant interests, such as the safety of installations, networks and supplies, the planning of investments in energy infrastructures, the protection of users, but also environmental protection and energy transition⁹⁷.

That said, the transposition of Directive 2018/2001/EU took place with Legislative Decree no. 199 of 8 November 2021.

In fact, Articles 21 and 22 of Directive 2018/2001/EU – those concerning self-consumers of energy from renewable sources and Renewable Energy Communities – were first implemented on an experimental and transitional basis as a result of Article 42-*bis* of

⁹⁵ According to the data provided by ARERA, *Relazione annuale sullo stato dei servizi e sull'attività svolta, Stato dei servizi 2021*, vol. 1, 2022, 92 ff., in fact, the first six industrial groups, out of a total of 14,149 active operators, cover 42% of net generation and sell 59.7% of all energy sold to end customers, and, against a gross national electricity production of 286.9 TWh, they produce 49.3% of it. In this regard, notes P. NOVARO, *Le comunità energetiche nuova declinazione del paradigma sussidiario*, in *Nuove Autonomie*, no. 3, 2022, 1057-1058, how the liberalisation process seems to have favoured large industrial groups, even those already operating previously in the sector, as the entry of new small operators is mainly due to the incentive tariff mechanisms concerning the production of renewable energy, which are not, however, pro-competitive mechanisms, as such suitable for increasing levels of competitiveness, since they are not based on market logic. They have, in fact, only resulted in the entry into the market of a myriad of subjects, with an extremely small market share, who have no real possibility of affecting the determination of the price of electricity, nor any particular interest in doing so, having the sole objective of continuing to receive the incentive tariffs.

⁹⁶ On this point, see A. CLÒ, *Conclusioni affatto conclusive*, in A. CLÒ – S. CLÒ – F. BOFFA (eds.), *Riforme elettriche tra efficienza ed equità*, cit., 564.

⁹⁷ Cf., M. D'ALBERTI, *La regolazione del mercato elettrico. Venti anni dopo la liberalizzazione*, in F. VETRÒ (ed.), *Il mercato dell'energia elettrica a venti anni dalla liberalizzazione*, cit., 50.

Decree-Law No. 162 of 30 December 2019 (the so-called «Decreto milleproroghe»), converted, with amendments⁹⁸, into Law No. 8 of 29 February 2020. This introduced a temporary regulation, so as to facilitate the transposition of the Directive on the Promotion of Energy from Renewable Sources⁹⁹, the extent of the changes to which made a longer timeframe necessary for its full transposition, and to make the investments set out in the NECP possible.

Article 42-*bis* defines the terms and conditions for the activation of collective self-consumption from renewable energy sources and for the realisation of Renewable Energy Communities. As for the subjective scope, the rule applies to those entities that produce electricity, intended for self-consumption (individual or collective), through plants powered by renewable sources, that have a total power not exceeding 200 kW, and that have come into operation after the date of entry into force of the conversion law (1 March 2020) and within sixty days after the date of entry into force of the measure transposing the directive¹⁰⁰. With regard to the two types of configuration, the self-consumers of renewable energy acting collectively must be located in the same building or condominium, while in the case of renewable energy communities, the consumers withdrawal points and the plants feed-in points must be located on low-voltage electricity grids subtended, on the date of the creation of the association, by the same medium/low-voltage transformation cabin¹⁰¹. In both cases, associated end customers retain their rights as end customers, including the right to choose

⁹⁸ Precisely including the insertion of paragraph 42-*bis*, as a result of Art. 1(1) of the Conversion Act, which refers to Annex 2 thereof.

⁹⁹ Cf., Art. 42-*bis* (1), Decree-Law No. 162 of 30 December 2019.

¹⁰⁰ Cf., Art.42-*bis*, para. 4(a), Decree-Law No. 162 of 30 December 2019.

¹⁰¹ Cf., Art. 42-*bis* para. 4 (d) and (e), Decree-Law No. 162 of 30 December 2019.

their own seller, and may withdraw from the chosen configuration at any time¹⁰². As far as internal relations are concerned, the end customers regulate their relations by means of a contract under private law, from which it is also possible to unambiguously identify the delegated party, who is responsible for the distribution of the shared energy, and to whom it is possible to delegate the management of payment and collection items towards the sellers and the Gestore dei Servizi Energetici (GSE) S.p.A.¹⁰³.

The regulation under consideration also delegated the Regulatory Authority for Energy, Networks and the Environment (Italian ARERA) to adopt the detailed measures for the actual implementation of the measures contained therein, and the Ministry of Economic Development¹⁰⁴ to adopt a decree for the incentive tariffs, the disbursement of which is referred to the GSE¹⁰⁵. The ARERA Resolution No. 318 of 4 August 2020 and the Ministerial Decree of 16 September 2020 were adopted to implement this delegation. The former, after formulating a series of definitions on the subject¹⁰⁶, governed the requirements and the procedure for accessing the incentive of shared electricity, which takes place through an application to be submitted to the GSE through its contact person and using a scheme defined by the GSE itself¹⁰⁷. The second, on the other hand, provided that for the shared energy

¹⁰² Without prejudice to any consideration agreed upon in the event of early termination for the sharing of the investments incurred, which must in any event be fair and proportionate. Cf., Art. 42-*bis* para. 5(b), Decree-Law No. 162 of 30 December 2019.

¹⁰³ Cf., Art. 42-*bis* para. 5(c), Decree-Law No. 162 of 30 December 2019.

¹⁰⁴ Responsibility for energy then passed to the Ministry of Ecological Transition (Italian MiTE), which has now become the Ministry of Environment and Energy Security (Italian MASE).

¹⁰⁵ Cf., Art. 42-*bis*, paragraphs 7 and 8, Decree-Law No. 162 of 30 December 2019.

¹⁰⁶ Cf., Art. 1, ARERA Resolution no. 318 of 4 August 2020.

¹⁰⁷ Cf., Articles 3 and 4, ARERA Resolution No. 318 of 4 August 2020.

produced by the renewable energy plants¹⁰⁸, falling within the configurations of collective self-consumption or renewable energy communities, the GSE would disburse, for a period of twenty years, a premium tariff equal to 100 €/MWh for collective self-consumption and 110 €/MWh for renewable energy communities¹⁰⁹, referring to the provisions of ARERA resolution No. 318 of 4 August 2020, as to the submission of the application and disbursement of the tariff¹¹⁰.

Turning now to the aforementioned Legislative Decree No. 199 of 8 November 2021, it first of all provides, in the wake of what has already been formulated by ARERA and in keeping with Directive 2021/2018/EU, a series of definitions, including those of self-consumer of renewable energy and of renewable energy communities, useful for understanding the relative legal regime. As for the former, it is the final customer who self-produces renewable electricity for its own consumption, being able to store or sell it¹¹¹. In addition, several end customers may join together to become self-consumers of renewable energy acting collectively. In this case, taking up what has already been established by the aforementioned Article 42-*bis*, Decree-Law No. 162 of 30 December 2019, the self-consumers must be located in the same building or condominium, they can produce and store for their own consumption with plants directly interconnected to the end customer's utility, or with one or more plants located in buildings or on sites other than those where the self-consumer is operating. However, self-produced energy surplus to the needs of self-consumers can also be stored and sold through renewable electricity trading agreements, either directly or through aggregation, as long as this does not constitute their main commercial and

¹⁰⁸ Having a total power not exceeding 200 kW.

¹⁰⁹ Cf., Art. 3, Ministerial Decree of 16 September 2020.

¹¹⁰ Cf., Art. 4, Ministerial Decree of 16 September 2020.

¹¹¹ Cf., Art. 2(n), Legislative Decree No. 199 of 8 November 2021.

industrial activity¹¹². Renewable energy communities, on the other hand, are an autonomous legal entity¹¹³ whose main objective is to provide environmental, economic or social benefits to the community itself, its members or the local areas in which it operates¹¹⁴. Participation in a renewable energy community is open to all consumers, including those belonging to low-income or vulnerable households, while the powers of control over the community lie exclusively with individuals, SMEs¹¹⁵, territorial bodies and local authorities, research and training bodies, religious bodies, third sector and environmental protection bodies, as well as the local administrations on the ISTAT list, which are located in the territory of the same municipalities where the plants are located¹¹⁶. It is only the production of renewable energy by the plants that are in the availability and under the control of the renewable energy community that is relevant to it¹¹⁷. This (self-generated) energy must be used primarily for instantaneous self-consumption on site or for sharing with community members, while, even in this case, any surplus energy can be stored and sold through buy-sell agreements¹¹⁸. Finally, the community can also produce other forms of energy from renewable sources (for use by members), as well as promote integrated home automation, energy efficiency and

¹¹² Cf., Art. 30, Legislative Decree No. 199 of 8 November 2021.

¹¹³ Cf., Art. 2(p), Legislative Decree No. 199 of 8 November 2021.

¹¹⁴ And not to make financial profits.

¹¹⁵ Note that, as far as companies are concerned, participation in a renewable energy community may not constitute the main commercial and industrial activity. Cf., Art. 31 para. 1(c), Legislative Decree No. 199 of 8 November 2021.

¹¹⁶ Cf., Art. 31 para. 1 (b) and (d), Legislative Decree No. 199 of 8 November 2021.

¹¹⁷ Cf., Art. 31 para. 2(a), Legislative Decree No. 199 of 8 November 2021.

¹¹⁸ Cf., Art. 31 para. 2(b), Legislative Decree No. 199 of 8 November 2021.

offer electric vehicle charging services to its members and take on the role of a retail company¹¹⁹.

For both configurations, what is already provided for in Article 42-*bis* of Legislative Decree No. 162 of 30 December 2019 applies, whereby end customers maintain their rights as end customers and regulate their relations through private law contracts, being able, moreover, to withdraw at any time from the chosen configuration¹²⁰. Not only that, without prejudice to the monitoring function attributed to the GSE¹²¹, it is provided that a decree of the Ministry of Ecological Transition¹²² will update the incentive mechanisms for renewable source plants, inherent to both types of configuration, concerning in particular: *a*) the possibility of accessing the incentive for renewable source plants that individually have a power not exceeding 1 MW (instead of the previous power of 200 kW) and that enter into operation on a date subsequent to the date of entry into force of the decree in question; *b*) that the incentive be disbursed only with reference to the share of energy shared by plants and consumption utilities connected under the same primary cabin; *c*) that the incentive be disbursed in the form of an incentive tariff attributed only to the portion of energy produced by the plant and shared within the configuration; *d*) that the application for access to the incentives be submitted directly at the date of entry into operation, without the requirement of prior registration in calls for tenders or registers; *e*) that access to the incentive be guaranteed until the achievement of established power quotas, on a five-year basis¹²³.

¹¹⁹ Cf., Art. 31 para. 2(f), Legislative Decree No. 199 of 8 November 2021.

¹²⁰ Cf., Art. 32, Legislative Decree No. 199 of 8 November 2021.

¹²¹ Cf., Art. 33, Legislative Decree No. 199 of 8 November 2021.

¹²² Soon to be adopted and for which the public consultation ended on 12 December.

¹²³ Cf., Art. 8, Legislative Decree No. 199 of 8 November 2021.

3. A NEW DECENTRALISED ENERGY MARKET GOVERNANCE

From the regulatory framework and sectoral discipline outlined above, it emerges how a «double decentralisation»¹²⁴ of the energy market is taking place, inspired by the principles of vertical and horizontal subsidiarity. On the one hand, in fact, there is an increasing involvement of local authorities in the achievement of those energy transition objectives imposed at EU and national level¹²⁵, where the role of the municipalities, as exponential bodies of the community, is being enhanced, so that the principle of proximity, as a corollary of vertical subsidiarity, serves as a useful prerequisite to foster horizontal subsidiarity and thus the role of the community of which the municipality is the expression. On the other hand, there is the increasingly active role of citizens¹²⁶, who, from mere passive consumers, now have the opportunity to become active players in the energy market or, if you prefer, «energy citizens»¹²⁷, shifting the boundaries of regulation, which can no longer

¹²⁴ R. MICCÙ – M. BERNARDI, *Premesse ad uno studio sulle Energy communities: tra governance dell'efficienza energetica e sussidiarietà orizzontale*, in *Federalismi.it*, no. 4, 2022. 616-617, who point out that at the basis of this process is, on the one hand, the further advancement of the liberalisation process of the energy market, driven by the transformations originated by technological progress, and on the other hand, the increasing involvement of regional and local governments, who are more and more involved in the achievement of energy saving and rationalisation objectives.

¹²⁵ Cf., J. P. TOMAIN, *The Democratization of Energy*, in *Vanderbilt Journal of Transnational Law*, vol. 48, 2015, 1125 ff., who observes how local authorities can serve as «policy laboratories», and «municipal initiatives now underway involve hundreds of cities engaged in addressing climate change, green job creation, energy efficiency, alternative fuels, and the like» (1143).

¹²⁶ On the changing role of citizens and their direct involvement in the electricity sector, see C. KATZEFF – J. WANGEL, *Social Practices, Households, and Design in the Smart Grid*, in L. M. HILTY – B. AEBISCHER (eds.), *ICT Innovations for Sustainability*, Berlin, 2015, 351 ff.

¹²⁷ The expression is used in the study by B. KAMPMAN - J. BLOMMERDE - M. AFMAN, *The potential of energy citizens in the European Union*, in *www.cedelft.eu*, who point out that the increased diffusion of energy produced

be that of the public producing company that practised regulated prices in a monopoly period, nor that of the early post-liberalisation period, which had erected firm guarantees in favour of the consumer with respect to the large energy producing and distributing companies¹²⁸.

In relation to the changes taking place in the organisation of the energy market and the emergence of the figures of the self-consumer of renewable energy and renewable energy communities, we are witnessing the introduction of the figure of the prosumer¹²⁹. This is the combination of the English terms «producer» and «consumer», and indicates the person who, in addition to being a consumer, is also a producer of a certain good. In the energy market¹³⁰, the prosumer is the person who is both a producer of electricity, even though this activity does not function as a prevalent economic and professional activity, and an end customer (or self-consumer) of the same. In other words, the prosumer is a person who owns his own plant with which he produces energy, intended, in part, for his own energy needs, and for the excess part to be fed into the grid for sale to other parties, making it possible for energy to be exchanged directly between private individuals. It has been emphasised that the production

from renewable sources in Europe is bound to favour the active role of citizens, with a shift from passive consumers to active producers of energy. The authors estimate that around 83% of European households have the potential to contribute to the production of energy from renewable sources in the 2030s and 2050s.

¹²⁸ This, A. POLICE, *Il quadro giuridico del mercato elettrico liberalizzato*, in F. VETRÒ (ed.), *Il mercato dell'energia elettrica a venti anni dalla liberalizzazione*, cit., 24.

¹²⁹ Already M. McLuhan - B. Nevitt, in *Take today: the executive as dropout*, New York, 1972, suggested the possibility that technological progress could make the consumer also a producer, but the term «prosumer» was coined by A. Toffler, in *The third wave*, New York, 1970, who already in 1970, in ID., *Future shock*, New York, had hypothesised the fusion of the two roles of consumer and producer.

¹³⁰ On the figure of the prosumer as a new actor in the energy sector, see R. Leal-Arcas – F. Lesniewska – F. Proedrou, *Prosumers and New Energy Actors*, in M. Mpholo – D. Steuerwald – T. Kukeera, (eds.), *Africa-EU Renewable Energy Research and Innovation Symposium 2018 (RERIS 2018)*, 2018.

of energy for self-consumption is a «disruptive innovation»¹³¹, contributing to greater openness and efficiency in the electricity market, which now sees effective participation of (self)consumers¹³², made possible precisely by the decentralisation of exchanges¹³³.

The configuration of collective self-consumption and, above all, that of renewable energy communities therefore change the structure of the energy market, which, in application of the principle of horizontal subsidiarity, becomes decentralised. In this way, individual citizens and local authorities can participate in the production and distribution of electricity produced from renewable sources, alongside large private companies¹³⁴, giving rise to a process of democratisation of the energy market¹³⁵, which must be matched by a

¹³¹ Cf., V. CAPPELLI, «Blockchain» and energy supply. Reflections on liability between decentralisation and consumer protection, in *Osservatorio del diritto civile e commerciale*, 2019, 335 ff.

¹³² On the changing role of the consumer, who becomes an active and aware player in the energy market, see M. FALCIONE, *Demand response: risparmio energetico dal lato della domanda. Il contributo volontario degli utenti finali alla flessibilità del consumo elettrico*, in L. CARBONE – G. NAPOLITANO – A. ZOPPINI (eds.), *Anuario di Diritto dell'energia 2016. Politiche pubbliche e disciplina dell'efficienza energetica*, Bologna, 2016, 386 ff.

¹³³ Thus, R. MICCÙ – M. BERNARDI, *Premesse ad uno studio sulle Energy communities: tra governance dell'efficienza energetica e sussidiarietà orizzontale*, cit., 622-623.

¹³⁴ On this point, it was noted that energy production and distribution in Europe is still dominated by a few multinationals, which poses a problem both in terms of energy access and energy transition. R.J. HEWITT – N. BRADLEY – A.B. COMPAGNUCCI – C. BARLAGNE – A. CEGLARZ – R. CREMADES – M. MCKNEEN – I.M. OTTO – B. SLEE, *Social Innovation in Community Energy in Europe: A Review of the Evidence*, in *Frontiers in Energy Research*, no. 7, 2019.

¹³⁵ Cf., A. BELTRAN, *Energia e democrazia politica. Qualche spunto storico*, in *Ricerche di storia politica*, no. 1, 2018, 51 ss., who states that although until recently «the idea of associating energy and democracy would have been surprising» (51), the combination of new information and communication technologies and the development of renewable energies is able to liberate «the citizen and democratic aspirations, now able to express themselves» (55) in a decentralised market that is better suited to the needs of the citizen. On this point, see also B. VAN VEELEN – D. VAN DER HORST, *What is Energy Democracy? Connecting social science energy research and political theory*, in *Energy Res. and Soc. Sci.*, vol. 46, 2018, 19 ff., who note how «the energy democracy movement has sought to

regulatory framework that allows the effective participation of end consumers in the decision-making process and the possibility of influencing decisions in advance¹³⁶. This process entails a collaborative rapprochement between individual citizens and the local authorities of which they are an expression, making the hierarchical model recede in favour of a horizontal collaborative organisation, which is well suited to the «public service network»¹³⁷ nature of the energy market.

4. COLLECTIVE SELF-CONSUMPTION AND RENEWABLE ENERGY COMMUNITIES AS AN EXAMPLE OF SOCIAL INNOVATION

Collective self-consumption and renewable energy community configurations are not only a new model of governance, favouring the decentralisation of the energy market, but also a tool for social innovation¹³⁸.

change the socio economic relations embedded the energy systems by encouraging greater public involvement and control» (21); and M. J. BURKE – J. C. STEPHENS, *Energy democracy: Goals and policy instruments for sociotechnical transitions*, in *Energy Res. and Soc. Sci.*, vol. 33, 2017, 35 ff., which they notes as «energy democracy goals include a shift to 100% renewable energy sources in ways that resist the dominant fossil-fuel energy agenda, reclaim social and public control over the energy sector, and restructure the energy sector to better support democratic processes, social justice and inclusion, and environmental sustainability» (37).

¹³⁶ In this sense, see S. LAVRIJSSEN, *The Right to Participation for Consumers in the Energy Transition*, in *Eur. Energy Environ. Law Rev.*, vol. 25, 5, 2016, 152 ff.

¹³⁷ On which, *ex multis*, see F. VETRÒ, *Il servizio pubblico a rete. L'esempio paradigmatico dell'energia elettrica*, Torino, 2005.

¹³⁸ Great fortune has been had in the definition proposed by G. MULGAN – S. TUCKER – R. ALI – B SANDERS, in *Social innovation. What is it, Why it matters and how it can be accelerated*, Oxford – Skoll centre for social

They are, in fact, instruments whose main purpose is to provide socio-economic, as well as environmental, benefits to the self-consumers themselves, but also to the community in whose context they operate. This is especially true for renewable energy communities, which can act as a driving force for the socio-economic and environmental development of the local areas in which they are established and operate. In this sense, they are also to be seen as a means of combating energy poverty¹³⁹, succinctly defined as the inability or difficulty in accessing essential energy services and meeting expenses for one's own or one's family's energy needs¹⁴⁰. In the *Clean Energy Package*, the European Commission has

entrepreneurship, in *youngfoundation.org*, 2007, according to whom «social innovation refers to new ideas that work in meeting social goals».

¹³⁹ On this topic, see A. GRIGNANI, *Le comunità di energia rinnovabile: utile risorsa per il contrasto alla povertà energetica*, in *Ambiente & Sviluppo*, no. 2, 2022, 113 ff.

¹⁴⁰ It is a complex phenomenon, which depends on a multiplicity of factors, and of which there is no unambiguous definition or uniformity regarding the indicators used for its detection. A first definition dates back to the early 1990s, when, according to B. BOARDMAN, in *Fuel poverty: from cold homes to affordable warmth*, London, 1991, there is a condition of fuel poverty when one spends more than 10% of one's income on one's basic energy needs. Later, this definition was abandoned because it was considered insufficiently precise; in a study by A. KEARNS – E. WHITLEY – A. CURL, *Occupant behaviour as a fourth driver of fuel poverty (aka warmth & energy deprivation)*, in *Energy policy*, vol. 129, 2019, 1143 ff., the condition of fuel poverty would rather depend on four factors: the energy inefficiency of the dwelling, the high cost of energy goods, the low income available to purchase them and individual behaviour. The 2020 Report of the Italian Observatory on Energy Poverty (OIPE), in *oipeosservatorio.it*, 9 ff., tells us, on the other hand, how at the European level there are two main sources of information used to monitor energy poverty: the Living Conditions Survey (EU-SILC), which includes consensus-type indicators; and the Household Budget Surveys (HBS), which allow the construction of indicators based on energy expenditure. The Third Report of the European Energy Poverty Observatory (EPOV) (S. BOUZAROVSKI – H. THOMSON – M. CORNELIS – A. VARO – R. GUYET, *Towards an inclusive energy transition in the European Union: Confronting energy poverty amidst a global crisis*, in *Publications Office of the European Union*, Luxembourg, 2020), on the basis of these sources uses 4 primary indicators, two consensual and two concerning income and energy expenditure, and 18 secondary indicators. The consensual indicators include households that report that they are unable to heat their homes adequately and those that are late in paying their bills; the secondary indicators, on the other hand, include one that identifies a household as energy poor if it has an energy expenditure share of income greater than twice the median value and one that identifies a household as energy poor if its energy expenditure in absolute terms is less than half

specified that combating energy poverty is a primary objective of the European Union, and among the tools aimed at achieving this objective are also self-consumption and renewable energy communities, which, by generating savings and improving energy efficiency, can bring economic benefits to their members, ranging from bill savings to tax relief, from the reduction of transport costs and system charges to the possibility of providing monitoring and optimisation of consumption, while making consumers themselves more aware and responsible¹⁴¹.

Ultimately, in addition to the economic benefits for members, collective self-consumption configurations bring socio-economic benefits to the community of reference, but also environmental benefits, contributing directly to the achievement of the decarbonisation objectives of the energy market, with a view to an energy transition that is fair and equitable. They are a social innovation because they represent a change in the way electricity is produced, distributed and consumed, with the direct involvement of the community and local authorities, which operate synergistically, creating opportunities for territorial development. It is, in fact, a matter of pursuing shared objectives, which are no longer only of the individual, but also of an organised community, and not only of a group of private consumers, but also of a public part, through a collaborative approach between private subjects and public authorities.

the median value. As for the OIPE, however, for its Report it also included the so-called 10% indicator, which identifies households in energy poverty if their energy expenditure is more than 10% of the total, and the so-called Faiella-Lavecchia index (I. FAIELLA – L. LAVECCHIA, *Energy poverty in Italy*, in *Politica economica*, 2015, 1, 27 ff.), according to which those households whose share of expenditure on electricity and heating is too high are in a state of poverty, as well as those in a state of severe deprivation and with zero expenditure on heating.

¹⁴¹ Cf., *Le comunità energetiche in Italia. Una guida per orientare i cittadini nel nuovo mercato dell'energia*, in www.enea.it, 2020, 26 ff.

Collective self-consumption, therefore, ushers in a process of change, which is not just an empty box, but an increasingly concrete reality, by means of ideas, which, as such, must be evaluated, set aside, implemented and improved.

***Abstract:** Energy is a primary public good, the importance of which has increasingly emerged in recent years. Indeed, the way we produce and consume energy plays a central role in the fight against climate change and in the ecological transition process, of which the energy transition is a fundamental component. In particular, renewable energies (solar, wind, geothermal, hydroelectric, biomass and oceanic) are in fact natural resources, which belong to no one and must be available to everyone: they are common goods. Among the eight instruments that make up the Clean Energy Package, the focus will be on Directive 2018/2001/EU (so-called Red II), concerning the promotion of renewable energies, and in particular on Art. 22 of the directive itself, which provides for the introduction of the so-called Renewable Energy Communities (RECs), an example of social innovation, such as to generate an economic and social benefit, not only for the individual, but for the entire reference community, by shifting production and energy consumption from a centralized level to citizens. This directive was transposed into Italian law with Legislative Decree 8 November 2021, no. 199, which dedicates Title IV to «Self-consumption, renewable energy communities and network systems». We will therefore proceed with the analysis of the regulatory system inherent to the figures of self-consumption and renewable energy communities, questioning their legal nature and possible future implications, bearing in mind that energy communities in Italy were already spoken of before the Red Directive II, and in particular in the Art. 4 of Law 6 December 1962, no. 1643.*