The Energy Performance of Mixed-use Buildings in Italy and in the United States. Treatment Criteria and Tools for Financing Energy Adaptation

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Abstract

The paper analyses the legal issues related to the treatment of mixed-use buildings in light of the Energy Performance of Buildings Directive. For this purpose, criteria such as the building's ownership and destined use (used in Italy) and the criterion of separation (used in the United States) are considered. A study is included of European and national case law developed with regard to mixed contracts. Finally, the paper explores the buildings' energy efficiency framework in the United States and suggests tools that might be used for financing energy adaptation.

Keywords

Energy Performance of Buildings, Mixed-use Buildings, Treatment Criteria, IECC, ASHRAE Standards, Financing Energy Adaptation.

I. The Energy Performance of Buildings Directive between Neutrality Goals and Duties

The 'collective achievement of the climate-neutrality objective'[1] is no longer just a political commitment, but becomes a binding obligation since the protection of people's rights depends on it. Arts 1 and 2 of the European Climate Law define climate neutrality as an 'objective'. However, if one looks at climate neutrality through an axiological and functional perspective, which focuses on the fundamental values and existential interests to be protected (health, life, security, environmental quality), its

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[1] Art 2 of the European Parliament and Council Regulation 2021/1119/EU of 30 June 2021 establishing the framework for achieving climate neutrality and amending Regulations (EC) No 401/2009 and (EU) 2018/1999 ('European Climate Law') [2021] OJ L243/1.

legal relevance can be understood.[2] This consists of a 'positive obligation'[3] for the European Union and its Member States to adopt any necessary measure to mitigate and prevent the adverse effects of climate change, thus including the reduction of emissions to net zero by 2050, with the aim of ensuring people effective protection.

In this scenario, the buildings sector is one of the many parts of the global sustainability project, which has been outlined by the United Nations Agenda 2030 and imposed due the dramatic consequences of climate change.[4] In fact, it has a significant impact on the path towards climate neutrality as buildings are a key contributor to energy consumption and greenhouse gas emissions.[5] This pushed the European legislator to redesign the current regulatory framework on the energy performance of buildings by providing for new duties for Member States.[6]

For this purpose, the revised Energy Performance of Buildings Directive (EPBD) acts at the same time on two fronts. It provides for different measures, obligations, and deadlines for new and existing buildings, basing the choice on the distinction between public and private, and residential and non-residential ones.

Starting from new buildings (Art 7 EPBD), these, if owned by public bodies, must be zero-emission from 2028. All others, namely privately owned new buildings, will have to comply with new energy standards from

[2] On the notion of 'interest' as a result of legal assessment, see E. Betti, 'Interesse (Teoria generale)' *Novissimo Digesto italiano* (Torino: Utet, 1962), VIII, 838-840. The importance of adopting an interpretative methodology based on the functional, axiological, and systematic analysis of the law and legal acts is highlighted by Id, *Interpretazione della legge e degli atti giuridici. Teoria generale e dogmatica* (Milano: Giuffrè, 1971) and P. Perlingieri, 'L'interpretazione della legge come sistematica ed assiologica. Il broccardo *in claris non fit interpretatio*, il ruolo dell'art. 12 disp. prel. c.c. e la nuova scuola dell'esegesi' *Rassegna di diritto civile*, 990 (1985).

[3] The existence of States' 'positive obligations' concerning climate change has been recently affirmed by the European Court of Human Rights in the climate change litigation case Eur. Court H.R. (GC), *Verein KlimaSeniorinnen Schweiz and Others* v *Switzerland*, Judgment of 9 April 2024. The judges recognized that States enjoy wide discretion, but this does not exempt them from compliance with the duties of effectively implementing the mitigation and prevention measures under the European Convention on Human Rights and pursuant to the Paris Agreement.

[4] See the latest Synthesis Report 'Climate Change 2023' of the Intergovernmental Panel on Climate Change available at www.ipcc.ch.

[5] According to the European Environment Agency Indicators (available at www.eea.europa.eu) and the European Commission data on energy efficiency in buildings (available at www.commission.europa.eu), in the European Union, buildings are responsible for 35% of energy-related emissions and 40% of energy consumption. So, a reduction of these levels is crucial to successfully achieve by 2050 the climate-neutrality objective set in European Parliament and Council Regulation 2021/1119/EU.

[6] The new regulatory framework is defined by the European Parliament and Council Directive 2024/1275/EU of 24 April 2024 on the energy performance of buildings [2024] OJ L series and Directive 2023/1791/EU of 13 September 2023 on energy efficiency [2023] OJ L231/1.

2030. Meanwhile, before the established deadlines, States must adopt measures to ensure that all new buildings are at least 'nearly' zero emission (Art 2 EPBD) and public bodies which intend to occupy a not-owned new building will have to prefer them.

As regards existing buildings (Arts 8 and 9 EPBD), the legislative framework is even more complex since it requires an in-depth assessment of features of the existing building stock,[7] geography, climate, and costs[8] to gradually reduce the energy performance thresholds of non-residential buildings (under 16% from 2030 and 26% from 2033) and residential ones (by decreasing the average primary energy use by at least 16% by 2030 and 20-22% by 2035). Moreover, each Member State is being called on to establish a national building renovation plan (Art 3 EPBD), which should include further national targets to achieve the lower maximum energy performance thresholds by 2040 and 2050.[9]

In both cases, the compliance of States and owners will be checked through the energy performance certificate (Arts 19 and 20 EPBD), which will keep track of the energy class of the building. Although the Directive is addressed to the Member States, making them responsible for achieving the set goals, provisions on the certificate reveal that the buildings' adaptation to new energy standards becomes a duty also for private owners. This arises through the obligation to show the certificate proving the energy class to the potential buyer or tenant and the legal consequences if no certificate is shown, or if no adaptation is made.[10]

[7] The European legislator leaves the decision on whether or not to apply the minimum energy performance standards to certain heritage buildings to the discretion of Member States. In Italy alone, among other European States, the building stock consists to a large extent of heritage buildings. This makes Italian compliance with the EPBD goals and duties more difficult since the choice of whether or not to exempt a building from the efficiency process will have to face economic, legal and administrative challenges.

[8] As highlighted by E. Baldoni et al, 'From Cost-optimal to Nearly Zero Energy Buildings' Renovation: Life Cycle Cost Comparisons under Alternative Macroeconomic Scenarios' 288 *Journal of Cleaner Production*, 1 (2021), there is a big 'investment gap between Cost-Optimal (CO) solutions, that are more economically convenient, and nearly Zero Energy (nZE) solutions, which have the lower energy consumption'. This results from the high costs of investments for building renovation that are needed to achieve 'greater energy savings'. It follows that policymakers are required to adopt financial and legislative measures capable of guiding investors towards not only more economically convenient, but above all more energy efficient solutions.

[9] The different deadlines to deploy solar energy installations on existing public and non-residential buildings can be mentioned among these (Art 10 EPBD).

[10] The EPBD does not provide for specific sanctions. Each State will be able to decide on the possible legal effects of certificates in accordance with national rules (Art 20, para 7) and, therefore, to provide for more or less strict sanctions for breaching the obligation to disclose the certificate or for cases of its invalidity. Following these considerations, it is clear that the Directive designs the adaptation to new energy standards as an obligation which, if not fulfilled, might produce both legal and economic effects in terms of the validity of a contract and the loss of value of the property on the market. The latter effect

II. Outlining the *Quaestio Iuris*

The brief overview of the Directive shows the ambitious roadmap full of obligations and responsibilities which clearly impact on domestic law, its categories and institutes. Property and negotiating autonomy, traditionally considered the highest expression of individual freedoms, are directly affected by sustainability and climate-neutrality duties and are required to reshape underlying legal relationships[11] in accordance with them.[12] Thus, the duty to make buildings energy efficient and the obligation to attach to the sale or lease contract the energy performance certificate intersect with the property's function and with contractual validity.[13]

Following these considerations, the focus of the paper is on the domestic legal implications of such an interaction through an analysis of so-called 'mixed-use' buildings. Given the lack in Italy of any regulatory framework, interpretative questions arise about their treatment in implementing the EPBD, especially if one considers that a single building, or even a unit, may be destined for different uses and that such uses may

undoubtedly represents the significant price for the real estate market and for banks of the application of new building rules whose economic impact must be properly managed and mitigated over time. On the economic effects of the previous European legislative framework on buildings' energy performance, see E. Fregonara et al, 'The Impact of Energy Performance Certificate Level on House Listing Price. First Evidence from Italian Real Estate' 65 *AESTIMUM*, 143-163 (2014).

[11] This confirms the far-sighted intuition of P. Perlingieri, *Introduzione alla problematica della «proprietà»* (Camerino-Napoli: Edizioni Scientifiche Italiane, 1970), who over 50 years ago suggested considering property as a legal relationship that from the structural point of view is configured as a relationship between opposing centres of interests, while from the functional side it can be seen as the regulation of such interests.

[12] The impact on legal categories and institutes of 'ecologism', which protects the environment 'as a function of preserving the human species and the living conditions', is highlighted by E. Caterini, 'Iniziativa economica privata e "crisi ecologica". Interpretazione anagogica e positivismo', in G. Perlingieri and E. Giorgini eds, *Diritto europeo e legalità costituzionale a trent'anni dal volume di Pietro Perlingieri. Atti dell'Incontro di Studi dell'Associazione dei Dottorati di Diritto Privato, 9-10 settembre 2022* (Napoli: Edizioni Scientifiche Italiane, 2024), 273-362. As regards the relation between environmental interest and the contract, see M. Pennasilico, 'Contratto ecologico e conformazione dell'autonomia negoziale' *Giustizia civile*, 809-835 (2017).

[13] This was well highlighted in the presentation held by E. Caterini on environmental sustainability and civil relationships during the 17th national conference *Cambiamento climatico, sostenibilità e rapporti civili* organized by Società Italiana degli Studiosi di Diritto Civile in Rome on 11 January 2024. The author points out that currently the obligation to attach the energy performance certificate to the sale or lease contract is only relevant to the assessment of the exact fulfilment of the contractual performance or to contractual defects such as error or deliberate deception (see Corte di Cassazione 16 May 2022 no 15577 and 9 August 2022 no 24534, *Giustizia Civile Massimario* (2022)). However, according to his opinion, the 'energy efficiency first' principle and the EPBD's obligation to adopt new energy standards may directly affect the 'lawfulness of the object of a contract', making the energy performance certificate 'an element of its validity'.

at the same time satisfy different interests and purposes of the owner. Therefore, particular attention is paid to criteria that can be applied to mixed-use buildings, also in light of European and national case law developed with regard to mixed contracts. Finally, in a comparative perspective, the paper explores the buildings' energy efficiency framework in the United States and suggests tools that might be used for financing energy adaptation according to the EPBD.

III. Mixed-use Buildings. The Ownership and Destined-use Criterion

The EPBD establishes different goals and deadlines according to the ownership criterion (public and private buildings) and to the destined-use criterion (residential and non-residential buildings). However, the building stock also includes mixed-use buildings, whose treatment is entirely left by the European legislator to the discretion of each State (Recital 34 EPBD). The question arises about how cases should be managed such as those in which: (a) a building includes both residential and non-residential units; (b) a residential unit is used for business activity; (c) a building or a residential unit is bound by a building convention?[14] Which criterion must be followed by States to decide whether to treat such buildings as residential or non-residential?

Following the ownership criterion, in case (a), the residential units might be treated as non-residential units and vice versa because of the private or public property of the whole building or some units, regardless of their specific use. This is the case of a building constructed and owned by a construction company that leases units both for residential and non-residential purposes. This is still the case of a building composed of private residential units and public non-residential units intended for institutional purposes or leased to a private individual for business activities. In these non-exhaustive examples, the States' choice will likely be based on the owner, either a private company, a private individual, or a public body. The

[14] Note that the case under letter (c) is extremely interesting as it involves a complex legal relationship between the private builder and the public body in which parties agree on the builder's right to construct on public ground (the so-called '*convenzione in diritto di superficie*') or on the ground transferred to him by a public body (the so-called '*convenzione in piena proprietà*') in return for limits that the builder must bear (temporary impossibility to sell the construction, imposed prices in the case of selling or lease) and obligations to fulfil (eg, urbanization, construction of an adjacent road or additional car parks, the implementation of public lighting). Its relevance to the topic derives from the fact that the legal relationship between the private builder and the public body is characterized by a mixture of patrimonial and non-patrimonial interests, which goes beyond the ownership of the assets and leads to different conclusions depending on assessment according to the ownership or destined-use criterion.

same considerations can be extended to other cases in which, therefore, the measures and deadlines will apply that are provided for the residential and non-residential sector, given the private individual's ownership in case (b), and the private builder's ownership in case (c).[15]

On the other side, following the destined-use criterion, another choice might be made on the basis of the concrete use of the building or its units and, therefore, the specific interest satisfied by that use. Thus, in case (a), preference may fall on treating a building as a residential one to allow the unit's owners to benefit from longer deadlines and appropriate financial measures to adapt their properties to new energy performance standards. This should be done taking into account the existential dimension of the right to housing[16] realized by residential constructions and also the particular attention paid by the EPBD to vulnerable households.[17] According to such hermeneutical methodology based on the functional and axiological reading of the property,[18] it is possible to reach the same conclusion in case (c). In the latter case, the legal relationship between the private builder and the public body resulting from the building convention realizes at the same time the builder's patrimonial interests to construct, lease or sell under specifically imposed conditions, and the public body's interest to ensure people the existential right to housing through social housing. It seems reasonable, then, to apply more favourable rules referring to residential buildings. By contrast, a different conclusion can be reached in case (b) in which the choice to treat a residential building or unit used for business or professional activity as a non-residential one may precisely come from the patrimonial nature of the activity carried out. Although the choice might seem easy, especially if it deals with a single-family building, its complexity arises in all those cases in which, for example, the unit used for business purposes is part of a residential condominium building. Hence, the discussion turns to the initial question: which criterion must be followed by States to decide on how to treat such buildings?

IV. The Italian 'Superbonus 110%' Case. Mixed-use Buildings, Fiscal Incentives and Rule of Prevalence

[15] See n 14 above.

[16] 'The legal relevance of "home", not just as an economic value, but also as an affective one', which derives from Art 8 ECHR, is well highlighted by L. Vicente et al, 'Beyond Lipstick and High Heels: Three Tell-Tale Narratives of Female Leadership in the United States, Italy, and Japan' 32 *Hastings Women's Law Journal* 3, 12-17 (2021).

[17] 'That are particularly exposed to high energy costs and that lack the means to renovate the building that they occupy'. Art 2, point (28) EPBD.

[18] P. Perlingieri, n 11 above.

As can readily be understood, the question is justified by the fact that for the purpose of identifying the most suitable domestic rules and measures to comply with the charted roadmap, preference for the ownership or the destined-use criterion can lead to different scenarios. The mentioned cases show that a building and even a unit can serve several interests, patrimonial and existential, which often coexist. Consequently, their effective protection may depend on the choice of whether to treat the relevant building or unit as a residential or non-residential one.

At this point, there are two intermediate considerations. On one hand, it is clear that the ownership criterion should be avoided as it does not look at the specific use of the building or unit.[19] Therefore, this does not make it sufficiently appropriate to protect the owner's interests or to grade them to find the most suitable and effective case discipline.[20] On the other hand, the destined-use criterion seems to be insufficient, too, because, as case (b) shows, its application will lead to the automatic qualification of a residential unit used for business or professional activity as a non-residential one, without considering that such use might also serve personal or non-patrimonial interests. This underlines the necessity to continue analysing the issue at a deeper level in which the destined-use criterion is combined with an investigation on the interests and purposes pursued by a specific use.

On closer inspection, the choice on how to treat a mixed-use building or unit not only affects the time profile, namely the shorter or longer deadline to align buildings with the new energy standards, but also impacts on the financial profile in terms of individuals' economic capacity and access to measures to face energy adaptation costs. The Directive generally provides for Member States to adopt financing and support measures, such as funds, fiscal incentives, subsidized loans, contractual tools, to facilitate the building transition towards zero-emission (Art 17 EPBD). With regard to the scope of such measures, no difference is made between public or private buildings or between their use, for residential or for business

[19] The insufficiency of the ownership criterion is underlined by P. Perlingieri, *Il diritto civile nella legalità costituzionale secondo il sistema italo-europeo delle fonti* (Napoli: Edizioni Scientifiche Italiane, 4th ed, 2020), III, 274 and 277. The author considers this criterion static and, therefore, proposes a functional approach based on the destined use of a good, the only one capable of enhancing the social function and the utility expressed by a good. This perspective is also adopted with regard to the 'category of commons' by G. Perlingieri, 'Criticità della presunta categoria dei beni c.dd. "comuni". Per una "funzione" e una "utilità sociale" prese sul serio' *Rassegna di diritto civile*, 136-163 (2022).

[20] The decision of Corte di Cassazione 17 luglio 2017 no 17683 is an example of the inadequacy of the ownership criterion. The High Court was called to decide on the false application of the cadastral provisions for a building owned by a private entity that had been rented to the municipality and used for public offices. It was stated that solely private ownership was not sufficient to qualify the building as intended for commercial use as the concrete use of the building would need to be assessed.

purposes. It follows that each State will have to coordinate financial measures with choices of treatment of the mixed-use buildings and units because the application of the former will also depend on the latter.

The need of harmonization is well highlighted by the Italian 'Superbonus 110%'[21] case, which raised some critical issues in applying fiscal incentives to mixed-use buildings. This tax benefit allowed individuals to deduct 110% of expenses for energy efficiency interventions, including the installation of photovoltaic systems and infrastructure for charging electric vehicles. The issue arose in connection with condominiums used for both residential and business purposes, especially whether to apply or not the tax benefit provided for individuals also to those who use the building units, part of a condominium, for professional or commercial activity. The case was solved by the Revenue Agency ('Agenzia delle Entrate') according to the prevalence rule based on the building's use.[22] In particular, on one hand, the exclusion from the scope of the tax benefit of buildings used entirely for business activities was confirmed.[23] On the other, it was decided that in the case of interventions made on common parts of a residential condominium, which includes non-residential units too, owners of the latter would be allowed to deduct costs linked to common parts if this type of unit covered less than 50% of the total area of the building. In the case where non-residential units were over the mentioned percentage, only owners of residential units would be able to benefit from such tax measure by deducting expenses incurred on common parts.

As shown in the Superbonus 110% example, the rule of prevalence of residential units or non-residential ones in a condominium was used as a decisive criterion to establish when also the owner of a non-residential unit would be able to benefit from the fiscal measure. However, its concrete application led to situations with a differentiated treatment[24] of the same

[21] Established in Art 119 of decreto legge 19 May 2020 no 34. Currently, legge di bilancio 2022 has extended the possibility to benefit from such measure by reducing, however, to 70% (in 2024) and 65% (in 2025) the amount of eligible costs.

[22] See Agenzia delle Entrate, Circolare 8 August 2020 no 24/E and Circolare 22 December 2020 no 30/E.

[23] An example in this perspective is the decision of Corte di giustizia tributaria di primo grado Friuli-Venezia Giulia Trieste 11 April 2023 no 81. The Italian tax judges considered as 'fiscal avoidance' and 'abuse of law' the case in which a company (the owner of the whole building) established a condominium through the donation of some units to private individuals only to benefit from the Superbonus incentive.

[24] This critical aspect of the rule of prevalence has already been highlighted with regard to whether and when it is possible to apply consumer law to a condominium. See G.A. Chiesi and M. Sturiale, 'Condominio: "essere o non essere" (consumatore)?' *Immobili & proprietà*, 493, 498 (2020). The authors argue that in some cases the application of the rule of prevalence may bring benefits to persons or organizations which 'under normal conditions' would be excluded by law.

type of unit (non-residential) solely depending on its location, in a residential or non-residential building, and its size, above or under 50% of the total building's area. Thus, to date in Italy there are units that do not differ in terms of their use but whose owners in some cases were allowed the fiscal benefit and in some others not.

For the purpose of transposing the EPBD, this case makes evident, therefore, that Member States like Italy, which miss a regulation of mixed-use buildings, are required to carefully assess, not only the criterion that will be used to qualify a mixed-use building or unit as a residential or non-residential one, but also the effects, in terms of their reasonableness, that the choice might produce, especially in relation to other measures.

V. European and Italian Case Law Concerning Mixed Legal Relationships. From 'Prevalence' and 'Marginality' to Assessment of Interests and Purposes of Use

The rule of prevalence used by the Revenue Agency, which looks from a functional point of view at the specific destined use of a building and unit, is not new to European and national case law. Starting from the *Gruber* case,[25] which was among the first to address the issue of a person purchasing goods intended for purposes which are in part within and in part outside the person's trade or profession (the so-called 'mixed contract'), its application has been extended from consumer contracts to cases concerning condominiums, property, and even disputes on tax assessment.

Thus, in a case relating to the purchase of a smartphone by a lawyer, the Italian Corte di Cassazione pointed out that a person who buys a good for mixed-use can only be considered a consumer if the professional use is marginal.[26] In another case, the notion of consumer was applied relating to a condominium on the basis that the building in question is mainly composed (according to the rule of prevalence) of units owned by natural

[25] Case C-464/01 *Johann Gruber* v *Bay Wa AG*, Judgment of 20 January 2005, available at www.eur-lex.europa.eu. For some considerations on this case, see V. Crescimanno, 'I "contratti conclusi con i consumatori" nella Convenzione di Bruxelles: autonomia della categoria e scopo promiscuo' *Europa e diritto privato*, 1135 (2005); R. Conti, 'La nozione di consumatore nella Convenzione di Bruxelles I. Un nuovo intervento della Corte di giustizia' *Il Corriere giuridico*, 1384 (2005); J. Vannerom, 'Consumer Notion: Natural or Legal Persons and Mixed Contracts', in E. Terryn et al eds, *Landmark Cases of EU Consumer Law: In Honour of Jules Stuyck* (Cambridge: Intersentia, 2013), 57.

[26] See Corte di Cassazione 17 February 2023 no 5097, commented by C. Marseglia, 'Statuto giuridico del professionista consumatore nei rapporti giuridici a scopo misto' *I Contratti*, 380-390 (2023); E. Bacciardi, 'Lo statuto eurounitario degli atti di consumo con scopo promiscuo. Distingue frequenter' *Rivista di diritto civile*, 148-173 (2024).

persons who use them for non-professional purposes.[27] And yet, in the field of taxation, a notice of tax assessment was considered 'legitimate' in a case where the assessment was based on evidence found – during a search carried out without the Prosecutor's authorization – in a car owned by the taxpayer but assigned to an employee for mixed-use (both work and private life), which was located during working time in the company's parking space.[28]

Since its first decisions, which as it is seen were followed accurately by Italian judges, the European Court of Justice supported the rule of prevalence with the 'criterion of marginality' of the professional use to identify those mixed legal relationships mainly marked by a non-professional activity. However, given the difficulty of identifying a clear distinction between personal and professional interests,[29] the rigidity and insufficiency of such a line of interpretation soon emerged. For instance, in the matter of condominium/consumer law, the unsuitability of the rule of prevalence with regard to the mutability of the composition of a condominium[30] and equal treatment[31] was highlighted. On the other hand, the need was seen to stop not only at the nature of use of a specific good but also to assess the underlying interests and those which characterise the mixed legal relationships.[32]

This change in the hermeneutic approach, which looks from a qualitative point of view at the purpose of the use, can be found in recent European decisions.

In particular, in the *Schrems* case,[33] a specific purpose of the mixed contract, consisting of the protection of consumers' rights, was enhanced.

[27] See Tribunale di Milano 26 November 2020. The national decision follows Case C-329/19 *Condominio di Milano, via Meda* v *Eurothermo SpA*, Judgment of 2 April 2020, available at www.eur-lex.europa.eu, commented by J.-D. Pellier, 'L'extension de la protection contre les clauses abusives' 4 *Revue des contrats*, 75-77 (2020); G. De Cristofaro, 'Diritto dei consumatori e rapporti contrattuali del condominio: la soluzione della Corte di giustizia UE' *Nuova giurisprudenza civile commentata*, 842 (2020).

[28] See Corte di Cassazione-Sezione tributaria 24 November 2021 no 36474, *Giustizia Civile Massimario* (2021), in which the judges considered the car as being used for work purposes at that specific time.

[29] L. Ruggeri, 'Nozione di consumatore e contratti con duplice scopo' *Quaderni della Società Italiana degli Studiosi del Diritto Civile* (forthcoming).

[30] A. Celeste, 'Il condominio diventa "consumatore" sia pure solo se le unità immobiliari dell'edificio risultino prevalentemente di proprietà di persone fisiche' *IUS Condominio e Locazione*, 11 January 2021.

[31] R. Calvo, 'Complessità personificata o individualità complessa del condominio-consumatore' *Giurisprudenza italiana*, 1320-1327 (2020).

[32] L. Ruggeri, n 29 above.

[33] Case C-498/16 *Maximilian Schrems* v *Facebook Ireland Limited*, Judgment of 25 January 2018, available at www.eur-lex.europa.eu. On this case, see T. Lutzi, '"What's a Consumer?" (Some) Clarification on Consumer Jurisdiction, Social-Media Accounts, and Collective Redress under the Brussels la Regulation: Case C-498/16 Maximilian Schrems

The European judges extended the nature of a consumer to an individual who used a private account also for his professional activity by establishing that 'activities of publishing books, lecturing, operating websites, fundraising and being assigned the claims of numerous consumers for the purpose of their enforcement do not entail the loss of a private Facebook account user's status as a "consumer"'.

With regard to mixed-use buildings, the interpretative solution that considers the concrete purpose for which a unit is used was adopted in a case concerning the issue of applying consumer law to a natural person who uses the apartment both for personal and professional purposes.[34] The Court of Justice stated that 'the situation in which a natural person uses the apartment constituting his or her personal home for professional purposes also, such as in the context of salaried teleworking or in the exercise of a liberal profession, cannot be excluded from the scope of the concept of "consumer"'.

For their part, national decisions also go in the same direction.

Thus, the High Court specified that the fact that a building regulation only allows residential use of its units does not automatically exclude the possibility for the unit's owner to use it also for professional purposes. In each concrete case, indeed, it is necessary to assess whether the residential use can include mixed uses which are compatible with 'housing functions'.[35]

Focus on the personal dimension of the professional activity's purpose was made in another interesting decision, too, which concerns so-called 'mixed debt' (*indebitamento promiscuo*).[36] The point of the dispute was whether an individual willing to restructure debts relating to personal and family needs and partially to his business and professional activity should be granted the consumer plan. Thanks to the functional approach, through which an accurate assessment was made of the existential interests to be satisfied by the consumer plan, the judges at first instance made an extensive reading of the notion of consumer to include the individual liable for mixed debts on the assumption that the existence of business and professional debts alone cannot deprive the individual of the possibility to protect his personal and family interests affected by the state of insolvency.

v. Facebook Ireland Limited' 25 *Maastricht Journal of European and Comparative Law*, 374-381 (2018).

[34] Case C-485/21 *'S.V.' OOD* v *E. Ts. D.*, Judgment of 27 October 2022, available at www.eur-lex.europa.eu.

[35] Corte di Cassazione 5 July 2019 no 18082.

[36] Tribunale di Brescia 12 November 2022 no 2741 commented by C. Ravina, 'L'indebitamento "promiscuo" dà accesso alla ristrutturazione dei debiti del consumatore?' *IUS Crisi d'Impresa*, 13 June 2023.

VI. A Look at the United States. IECC, ASHRAE Standards and the Criterion of Separation

As pointed out, in Europe the new Energy Performance framework is to be transposed by 2026 and will be gradually implemented within at least the next 20 years to comply with the target enshrined in Union law of economy-wide climate neutrality by 2050. Member States are free to decide how to treat mixed-use buildings and units. These are an important part of the building stock, so much so that, in Italy, the need has arisen to clarify several concerns especially from the fiscal perspective (see Section IV). Given the impact of mixed-use buildings on tax-incentive policies, but also the difficulties that may arise among the owners of units in a condominium in managing energy performance-related choices,[37] the States' decision should then consider the adoption of specific measures and benefits to facilitate the path in achieving the climate neutrality goal (highly energy-efficient, decarbonised and zero-emission buildings) of such a type of buildings, too.

A different approach towards buildings' energy efficiency is used in the United States. Unlike the European Union, there is no federal net-zero legislation.[38] In line with the Paris Agreement, a greenhouse gases reduction target (50-52% by 2030) has been set in the Nationally Determined Contribution.[39] Furthermore, a Long-Term Strategy towards net-zero emissions by 2050 has been adopted.[40] Within these commitments, however, States are free to enact their own policy, as in the case of buildings' energy efficiency. The regulation on energy performance of both residential and commercial buildings is in fact mainly entrusted to each State of the Federation that is called upon to adopt the Energy Code to improve year by year energy efficiency, to reduce emissions, and save consumer costs.[41]

Despite the differences in the adopted energy standards,[42] what ensures a minimum level of harmonization between State regulations are

[37] F.G. Viterbo, *Variabilità e relatività dei rapporti condominiali. Proprietà, persone, "gruppo"* (Napoli: Edizioni Scientifiche Italiane, 2021).

[38] L. Delta Merner et al, 'Comparative Analysis of Legal Mechanisms to Net- zero: Lessons from Germany, the United States, Brazil, and China' 15 *Carbon Management* (2024), available at https://doi.org/10.1080/17583004.2023.2288592.

[39] Available at https://unfccc.int/sites/default/files/NDC/2022-06/United%20States%20NDC%20April%2021%202021%20Final.pdf.

[40] Available at https://www.whitehouse.gov/wp-content/uploads/2021/10/us-long-term-strategy.pdf.

[41] For more, see the Building Energy Codes Program created by the U.S. Department of Energy's Building Technologies Office, available at www.energycodes.gov.

[42] According to the data of the Building Energy Codes Program (available at https://www.energycodes.gov/state-portal), currently there are States such as, for example, among others, Connecticut, Illinois and New Jersey that have adopted the IECC

the American Society of Heating, Refrigerating and Air-conditioning Engineers Standards (ASHRAE 90.1) and the 2021 International Energy Conservation Code (IECC) which are used by States as a model for their Energy Codes.[43] Both establish minimum energy conservation and efficiency requirements, but they differ in their scope. The IECC model is used for residential Codes, while the ASHRAE for commercial ones.

Unlike the European EPBD that leaves the choice on mixed-use buildings to the Member States, in the 2021 IECC the choice is made ex-ante whereby such buildings must at the same time comply with rules provided for both residential and commercial buildings. In other words, in the United States, the issue on how to treat mixed-use buildings has not been left to the States' discretion since the choice falls on the criterion of separation to be applied in Federal States through Energy Codes.

It is interesting to note that such international standards make a particular choice in relation to the qualification of residential and commercial buildings. Among the first, only one-and-two-family dwellings and multi-family three-storey dwellings or less are included. Multi-family four-storey buildings and greater are treated instead like commercial buildings. Furthermore, from the point of view of use, residential buildings are a broad category that includes occupancies containing 'sleeping units' where the occupants are transient or permanent in nature such as boarding houses, hotels, dormitories, monasteries, assisted living and social rehabilitation facilities and so on.[44]

VII. Conclusion. The Treatment of Mixed-use Buildings and Tools for Financing the Energy Adaptation

In the United States the application of IECC and ASHRAE standards to mixed-use buildings follows the criterion of separation. Thus, their energy performance requirements depend on the building's legal qualification, its use and size. These characterizing elements must be

2021 for residential buildings. At the same time, however, there are other States that are still at the IECC 2009 (Kentucky) or have not yet adopted any State-wide Energy Code (Mississippi). See K.A. Kellogg and N. La Cumbre-Gibbs, 'The Impact of State Level Residential Building Code Stringency on Energy Consumption in the United States' 278 *Energy & Buildings* (2023).

[43] In the field of green construction, the 2021 International Green Construction Code (IGCC) represents another model, already adopted by many Federal States, which provides for guidelines to improve the sustainability and environmental performance of buildings' design, construction and operation. As a result of a public-private partnership, the IGCC was elaborated to be used in coordination with the IECC and ASHRAE standards.

[44] The occupancy classification is provided by the International Building Code (IBC 2021) available at https://codes.iccsafe.org/content/IBC2021P2.

combined to identify in the configuration of each specific building the energy standards applicable to residential and commercial parts.

In the European Union, since each State will choose how to treat mixed-use buildings, under this specific profile the implementation of the new Directive will not be harmonized. The choice may fall on their treatment as residential or non-residential buildings or on their separate treatment according to the approach of the United States. In the first two cases, criteria like those of ownership and destined use may be exploited. However, as evidenced in previous sections, the ownership criterion only makes a formal assessment of the owner of the property. This highlights the limit of the ownership criterion consisting of the inability to grasp the dynamic profile of the property to be identified with the use and function for which it is intended. To avoid unequal treatment and to enhance the property relationship from the substantial point of view, the application of the destined-use criterion seems to be more suitable. However, such a criterion, whose application is mostly based on the rule of prevalence, should be integrated with a deeper analysis of interests and purposes for which the implementation of the use of a building or unit is intended. This approach is clearly more complex from the practical side, but it might be more effective, inclusive and reasonable in terms of protection, as is shown by the analysed European and national case law.

There are at least two reasons for the need to place attention on the treatment criteria of mixed-use buildings. On one hand, sustainability, as a pathway towards the protection and enforcement of fundamental rights, significantly affects its perception by institutions, societies and private individuals. Its impact on law and sources is strengthening the collective dimension of the ecological transition[45] by requiring all actors to perform specific duties. Its impact on legal categories like property is strengthening once again its dimension of solidarity[46] by requiring States to adopt policies and measures to achieve the climate-neutrality goals, and builders and owners to 'cooperate'[47] in the energy adaptation of buildings. On the

[45] B.L. Boschetti, 'Oltre l'art. 9 della Costituzione: un diritto (resiliente) per la transizione (ecologica)' *DPCE online*, 1153-1164 (2022).

[46] The property's dimension of solidarity which requires the owner to adopt specific conduct and to comply with duties has already been well highlighted in the field of cultural heritage where owners are required to preserve and enhance the cultural value of the building also for the benefit of third parties and future generations. See F. Longobucco, 'Beni culturali e conformazione dei rapporti tra privati: quando la proprietà "obbliga"', in E. Battelli et al eds, *Patrimonio culturale. Profili giuridici e tecniche di tutela* (Roma: RomaTre-Press, 2017), 211-226, and with specific focus on the 'duty of enhancement' K. Zabrodina, 'La valorizzazione degli immobili culturali tra vincoli espropriativi e strumenti cooperative alternativi' *Teoria e prassi del diritto*, 335-354 (2023).

[47] The duty to cooperate is an expression of overcoming the individualistic idea of property in favour of the relational perspective and is justified by the principle of solidarity: P. Perlingieri, n 19 above, 281-282.

other hand, however, such new duties certainly have costs to be borne by both States and private individuals, thus affecting the public budget and individuals' economic capacity in bearing the costs of energy adaptation.

It follows that, whatever the States' decision on whether to treat mixed-use buildings as residential or non-residential ones, or separately, the uncertainty about funding measures and fiscal incentives (as evidenced in the Italian 'Superbonus 110%' case) strengthens the need to consider also other tools for financing the transition towards a net-zero building stock. Among those that stand out are the negotiating tools which are capable of combining the public and private sector (including institutions, local bodies, enterprises, investors, non-profit organizations and individuals) such as public-private partnerships, energy saving performance contracts, green bonds, social impact investing, and power purchase agreements.

The advantage of such tools lies in the possibility to diversify funding sources and to include as beneficiaries, in energy efficiency projects, all types of buildings: residential, non-residential and mixed-use ones. Other advantages lie in the opportunity for public bodies to register some of these contracts off-balance sheet.[48] In this perspective, private-public partnerships and energy saving performance contracts, which are spreading in Italy thanks to the recent reform of the regulation on public contracts,[49] are particularly suitable for buildings partially intended for institutional purposes or social housing. On the other side, green bonds and power purchase agreements, whose use is consolidated in the United States,[50] seem to be attractive for financing the energy adaptation of mixed-use condominiums which include both residential and commercial units. Such tools may be a valuable alternative both for covering the entire cost of the operation and for integrating costs which are not covered by State fiscal or funding measures.

[48] See the 2022 Manual on Government Deficit and Debt published by Eurostat in January 2023 with regard to the registration of public-private partnerships and energy performance contracts.

[49] Decreto legislativo 31 March 2023 no 36.

[50] See https://betterbuildingssolutioncenter.energy.gov where several USA case studies applying energy performance financing tools can be found. In the European Union, the spread of green bonds and power purchase agreements is still rather small due to their recent regulation (European Parliament and Council Regulation 2023/2631/EU of 22 November 2023 on European Green Bonds and optional disclosures for bonds marketed as environmentally sustainable and for sustainability-linked bonds [2023] OJ L series; European Parliament and Council Regulation that has recently been approved by the Council at the third reading and that will improve the Union's electricity market design).