



**Overcoming the 'tenant-owner dilemma' to foster energy efficiency in residential private rented housing**

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## 1. Introduction

The seventh goal of the United Nations Sustainable Development Goals (UNSDG) focuses on affordable and clean energy, urging countries to double the rate of improvement of energy efficiency by 2030. As outlined in Directive 2012/27/EU<sup>1</sup>, ‘energy efficiency’ broadly refers to the ratio of the output of performance, service, good, or energy, to input of energy (art. 2.4). This ratio essentially quantifies how much energy is required to keep some standards, such as heating or cooling.

Energy efficiency profoundly influences housing, given that residential households contribute to 27 percent of the EU’s energy consumption (Eurostat, 2017). Maintaining a suitable energy performance of a building may have a threefold impact:

1. First, an impact on the environment, since energy efficiency policies may contribute to fewer greenhouse emissions. From an environmental perspective, it is therefore relevant to build not only energy-efficient buildings (or even zero-energy buildings, i.e. those that produce more renewable energy than they consume), but also ‘green affordable housing’ (Bradshaw *et al.*, 2005). Green affordable housing meets two criteria: on the one hand, it is affordable for low- and moderate-income households and, on the other hand, reduces its impact on the environment as needs less resources, increase the durability of the building and is healthier for the inhabitants.
2. Second, an impact on poverty (1<sup>st</sup> goal UNSDG). Vulnerable households may encounter more difficulties in paying energy bills when the dwelling has poor energy performance. This may lead to situations of energy poverty, i.e. being unable to keep their homes cold or warm.
3. Finally, an impact on health, as energy retrofits have been shown to reduce exposure to cold and air pollutants (Hamilton *et al.*, 2018), fostering better health through improved living conditions (Poortinga, *et al.*, 2017).

The European Union (EU) has competences on energy, according to art. 194 of the Treaty of Functioning of the European Union (TFEU)<sup>2</sup>. Including energy efficiency within their priorities, the EU

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<sup>1</sup> Directive 2012/27/EU of the European Parliament and of the Council of 25 October 2012 on energy efficiency, amending Directives 2009/125/EC and 2010/30/EU and repealing Directives 2004/8/EC and 2006/32/EC. OJ L 315, 14.11.2012.

<sup>2</sup> Consolidated version of the Treaty on the Functioning of the European Union. Official Journal C 326, 26.10.2012.

has extensively regulated this field through Directives 2010/31/EU (Energy Performance of Buildings Directive)<sup>3</sup> and 2012/27/EU (Energy Efficiency Directive), involving the harmonization of law of Member States. Nevertheless, the efficiency of the existing residential housing stock is below optimal<sup>4</sup>. The proportion of less energy-efficient buildings is still significant in some EU countries. By way of example, in France, buildings labeled D and E are the most representative<sup>5</sup> and in Spain, 8 out of 10 buildings are labeled E, F, or G<sup>6</sup>.

That is why the EU recently amended the Energy Efficiency Directive through Directive on energy efficiency and amending Regulation EU 2023/955 (Recast Energy Efficiency Directive 2023), with the main objective to meet the Union's targets on energy efficiency. The EU is aware that there are some legal barriers to renovations: while controlling minimum efficiency standards is relatively easy for new buildings, renovating the existing buildings stock faces several challenges, including the so-called 'split incentives' or 'tenant-owner dilemma'. Split incentives are defined in art. 2(54) as 'lack of fair and reasonable distribution of financial obligations and rewards relating to energy efficiency investments among the actors concerned, for example, the owners and tenants or the different owners of building units, or owners and tenants or different owners of multi-apartment or multi-purpose buildings'. According to this dilemma, if the landlord is in charge of energy consumptions, the tenant may not be incentivized to save energy. On the other hand, if the tenant is the one in charge of the consumption, the landlord has no incentive to invest in energy efficiency upgrades (Cellini, 2021). Nevertheless, the true impact of this dilemma is still under discussion (Singhal *et al.*, 2023).

This paper is based on the hypothesis that there exist some legal barriers, specifically under tenancy law, that prevent the effectiveness of energy efficiency measures, thus creating the so-called 'tenant-owner dilemma' or split incentives. While existing studies predominantly examine this

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<sup>3</sup> Directive 2010/31/EU of the European Parliament and of the Council of 19 May 2010 on the energy performance of buildings. OJ L 153, 18.6.2010.

<sup>4</sup> See EU Commission. *Energy efficiency buildings*. Available at: <https://ec.europa.eu/energy/en/topics/energy-efficiency/buildings> (last visit: 13.7.2022).

<sup>5</sup> Ministère de la transition écologique. Observatoire national de la rénovation énergétique. *Le parc de logements par classe de consommation énergétique*. September 2020.

<sup>6</sup> IDAE (2020) *Estado de la certificación energética de los edificios* (9<sup>th</sup> report). Available at: [https://energia.gob.es/desarrollo/EficienciaEnergetica/CertificacionEnergetica/Documentos/Documentos%20informativos/2021\\_Informe\\_seguimiento\\_9\\_CERTIFICACION\\_ENERGETICA.pdf](https://energia.gob.es/desarrollo/EficienciaEnergetica/CertificacionEnergetica/Documentos/Documentos%20informativos/2021_Informe_seguimiento_9_CERTIFICACION_ENERGETICA.pdf)

phenomenon from an economic perspective (e.g. Charlier, 2015; Weber and Wolff, 2018; Cellini, 2021), less attention has been paid to the particular civil law measures that should be changed in order to remove these barriers (Anderson, 2023; Schmid, 2016; Weatherall *et. al.*, 2018).

Therefore, the aim of this paper is to detect whether the EU Member States are tackling the tenant-owner dilemma in the private rented sector and to propose some legal measures and policy recommendations to the Member States to overcome them. In order to do so, we study these barriers from a comparative civil law perspective in selected countries, covering the so-called ‘Mediterranean regimes’ (Greece, Italy, Portugal, and Spain) and two of the ‘Corporatist Welfare Regimes’ (France and Germany), according to the classification made by Esping-Andersen (1999). Other legal systems are also mentioned when appropriate, highlighting the legal provisions that could prevent individuals from upgrading their homes.

## **2. The tenant-owner dilemma or split incentives: state-of-the-art and the European Union approach**

The Energy Efficiency Directive 2012 was the first legislative instrument that directly approached split incentives in its art. 19. Recent Recast Energy Efficiency Directive 2023 has introduced a definition of this phenomenon, as seen above (art. 2.54), and slightly modified the article referring to them. According to art. 22.9 Recast Energy Efficiency Directive 2023, ‘without prejudice to the basic principles of their laws on property and tenancy, Member States shall take the necessary measures to remove regulatory and non-regulatory barriers to energy efficiency as regards split incentives between owners and tenants, or among owners of a building or building unit, to ensure that those parties are not deterred from making efficiency-improving investments that they would otherwise have made by the fact that they will not individually obtain the full benefits or by the absence of rules for dividing the costs and benefits between them’.

Examples of such measures are provided in the second section of Article 22.9 Recast Energy Efficiency Directive 2023, including repealing or amending legal provisions, offering guidelines,

simplifying administrative procedures, and facilitating third-party financing solutions. Education, training, and relevant information provision can complement these measures.

While Article 22.9 of the Recast Energy Efficiency Directive broadly refers to legal provisions contributing to split incentives, it may not offer sufficient specificity for Member States to effectively address these barriers, which scholars have already identified. Economic authors agree that the occupancy title is a key factor when investing in energy efficiency, as tenants are less likely to live in insulated dwellings compared to owner-occupiers (Weber and Wolff, 2018; Cellini, 2021). Lang *et al.* (2021) identified which are the 16 elements encouraging landlords to improve energy conditions, including the existence of subsidies, retrofit ease, tenant energy efficiency demand, overall tenant well-being, the personal relationship with tenants, among others. They also found 23 elements reducing landlords' willingness to retrofit, including split incentives, future maintenance costs, difficulties in accessing government schemes, time constraints, or financial limitations.

According to the analyzed literature, the factors contributing to the tenant-owner dilemma may be classified as follows:

- Barriers related to the funding of energy efficiency works and factors different from the legal regime on residential leases, such as information asymmetries, availability of funding, or time constraints (non-legislative barriers).
- Barriers caused by the legislation on residential tenancies, mainly the rights and obligations of each party, especially mandatory provisions (legislative barriers).

***a) Non-legislative barriers***

Regarding the barriers that do not have their origin in the tenancy law regime, Cellini (2021) found that 'imperfectly informed renters will not be willing to pay more for energy efficiency dwellings'. Thus, tenants may not be properly informed about the benefits of energy-efficient homes, such as potential energy savings. This fact also impacts on housing prices and, subsequently, on the homeowner's willingness to improve rented homes. Nie *et al.* (2020) conclude that not only were tenants less likely to undertake energy efficiency investments, but also homeowners were more likely to adopt energy-saving measures, such as setting the proper temperature of the thermostat, or closing windows when the heat is

running. They also found asymmetric information as a key factor in the tenant-owner dilemma: ‘tenants may not know which houses are more energy efficient, and therefore those landlords with energy efficient houses will not obtain corresponding higher rents’. By its turn, Charlier (2015) confirmed that tenants are double penalized: they have high energy costs due to inefficient buildings and because they are poorer than homeowners, they are unable to invest in energy-saving systems. The author also suggests that the expected length of occupancy may not be sufficient to render any energy-saving investment profitable.

Therefore, the following elements affect the energy efficiency investments in the private rented sector (PRS):

- Lack of information on the benefits of having efficient homes, as tenants are not willing to pay more for efficient rented houses, and thus investing in energy-saving systems does not render greater profits for homeowners.
- Lack of information on the level of energy efficiency of rented dwellings makes, because homeowners and tenants are less aware of energy deficiencies.
- The landlord not benefiting from energy savings, as the tenant is the one in charge of utility bills.

A way to approach these barriers could include measures to better inform tenants about the benefits of higher energy levels or to encourage innovative financial mechanisms. For example, allowing a prospective tenant to obtain information on former energy consumptions, or even ensuring that real estate agents explain to tenants the consequences of having a certain energy efficiency performance (Caballé Fabra, 2021). This aspect has been addressed through art. 12.2 Directive 2010/31/EU, which establishes that the energy performance certificate or a copy thereof shall be shown to a prospective new tenant. The Recast Energy Efficiency Directive 2023 has strengthened the obligations for Member States to inform end users about energy consumptions, while France required through Act on Energy and Climate 2019<sup>7</sup> that tenancy agreements (and also

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<sup>7</sup> *Loi n° 2019-1147 du 8 novembre 2019 relative à l'énergie et au climat.* JORF No. 0261, 9.11.2019.

its advertisements) have to include indications on actual energy consumptions and estimate the amount of energy expenditure.

Also, the report '50 Out-of-the-Box Housing Solutions'<sup>8</sup> proposes financial mechanisms to retrofit social homes, such as the project ASTER: Access to Sustainability Through Energy-Effective Retrofit, creating a social purpose company in Belgium that manages public and private investments in social homes. It ensures that tenants benefit from at least 20 percent lower energy bills. On-bill recovery loans (Bird and Hernández, 2012), such as the program *Energiesprong*, which originated in the Netherlands, ensure that energy efficiency renovations are paid by future energy cost savings plus the budget for planned maintenance and repairs over 30 years. When renovations are undertaken in social housing, tenants pay the housing association an energy service plan equal to their previous energy supplier bill. The consequence is that the housing association is the one who benefits from the supply savings until it recovers the investment<sup>9</sup>.

#### ***b) Legislative barriers***

Conversely, there exist barriers stemming from the regulation of residential tenancies. A prime example is the allocation of utility bills to tenants, which is the prevailing trend in the studied jurisdictions (as seen below): when tenants are responsible for utility payments, landlords have fewer incentives to implement energy efficiency upgrades. However, if utility bills are allocated to landlords, this might lead to higher energy consumption, as tenants may not optimally manage energy usage, resulting in increased consumption overall (Melvin, 2018).

Although the EU mentions the split incentives phenomenon, it does not categorize the range of legislative options that Member States could employ to overcome it. Nevertheless, key elements contributing to the tenant-owner dilemma can be gleaned from prior reports and articles on this subject.

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<sup>8</sup> Housing Solutions Platforms. 50 Out-of-the-Box Housing Solutions to Homelessness & Housing Exclusion'. [https://99536665-f232-4d42-aa6c-b165414b34b8.filesusr.com/ugd/bcd9b3\\_a65c4a5b4a6443619a0edda6edfd198e.pdf](https://99536665-f232-4d42-aa6c-b165414b34b8.filesusr.com/ugd/bcd9b3_a65c4a5b4a6443619a0edda6edfd198e.pdf)

<sup>9</sup> This is considered one of the best practices in the report *Concrete Actions for Social and Affordable Housing in the EU*. FEPS, 2021. [https://feps-europe.eu/wp-content/uploads/downloads/publications/social%20affordable%20housing\\_report.pdf](https://feps-europe.eu/wp-content/uploads/downloads/publications/social%20affordable%20housing_report.pdf)

To begin, minimum energy efficiency requirements for new buildings might challenge the tenant-owner dilemma. Yet, this approach doesn't extend benefits to existing residential buildings, necessitating a broader array of legislative measures (Parejo-Navajas, 2017). According to the report 'Tenancy Law and Energy Renovation in European Comparison' (BBSR, 2016), factors impacting energy efficiency include tenancy relationship stability, rent regulation, cost distribution, and the tenant's obligation to tolerate energy refurbishment works. About tenancy stability, Ambrose (2015) highlighted that rental market transience hampers energy efficiency investments. Also, the Joint Research Center published the technical report 'Energy efficiency upgrades in multi-owner residential buildings'<sup>10</sup> in 2018, which identified challenges in energy efficiency upgrades. In the context of rented housing, the report noted that inflexible tenancy contracts could hinder energy efficiency upgrades.

Moreover, as BBSR 2016 confirmed, '(...) allocating renovation costs to the tenant through rent increases constitutes an essential precondition for an adequate distribution of the benefits of refurbishment measures in the sense of Art. 19 Directive 2012/27/EU'. This statement is aligned with the conclusions of some authors suggesting that rent controls that prevent landlords from updating the rent at the end of the contract, even after renovation works, may worsen housing conditions (Moon and Stotsky, 1993), thus perpetuating the tenant-owner dilemma.

Based on these reports and studies, the elements contributing to the tenant-owner dilemma originating from the legislation on residential leases can be summarized as follows:

- Tenant stability: key element contributing to the tenant-owner dilemma would be the stability of tenants. Especially if public funds for tenants are limited (e.g. tenants may not ask for them, low rates of financing...), legislation should ensure enough stability for tenants to allow them to recover the investment through prospective energy savings. This can be achieved through open-ended leases or minimum durations, though they are a more intrusive measure and may not ensure that the investment is recovered within the legal term.

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Available at: [https://publications.jrc.ec.europa.eu/repository/bitstream/JRC110289/energy\\_efficiency\\_upgrades\\_in\\_multiowner\\_apartment\\_buildings\\_final.pdf](https://publications.jrc.ec.europa.eu/repository/bitstream/JRC110289/energy_efficiency_upgrades_in_multiowner_apartment_buildings_final.pdf)



- Rent controls and rent updates: rent controls and the possibility to increase the rent could potentially affect energy efficiency upgrades. In order to give landlords incentives to improve rented homes, the possibility to increase the rent should be specifically regulated, while ensuring that they receive a fair market rent. As Schmid (2016) points out, countries appearing to score high rates in energy efficiency are those including effective legal provisions to allocate the costs of energy refurbishment to tenants. However, a rent increase may cause a lack of affordability or even hidden ‘renovictions’ (Polanska and Richard, 2021), so legislation should guarantee that this increase is in accordance with the investment and with the prospective energy savings. Also, according to Kholodilin (2022), landlords subject to rent controls have fewer incentives to invest in refurbishment.
- Tenant’s obligation to tolerate refurbishment works: finally, the obligation of the tenant to tolerate energy refurbishment works may also influence energy efficiency retrofits. Incentives to carry out these works are limited due to the tenant-owner dilemma. Consequently, if legislation imposes more obligations or requirements on parties (e.g. asking for the consent of the owner or the tenant to retrofit), parties may not be able to undertake these works, even when they have enough funding for doing so.

Hence, legislation in the PRS (which usually regulates the duration of the contract, rights and obligations of each party...) can mitigate these barriers by encouraging both parties to undertake renovations. Tenancy law may have a direct effect on split incentives, particularly expanding the duration of the contract, ensuring landlords enough returns, and offering parties the right to undertake these works.

### **3. The adequacy of Member States’ legislation on residential tenancies to address the ‘tenant-owner dilemma’**

#### **3.1. General comparative analysis**

In this section, we delve into whether Member States regulate residential rental contracts in a manner that promotes energy efficiency investments or, conversely, allows for the persistence of split incentives.

The landscape of tenancy law varies among the selected jurisdictions (Spain, France, Italy, Germany, and Greece)<sup>11</sup>. The TFEU does not include a competence over ‘civil law’ for the EU, so tenancy law is a prerogative of each Member State. Considering the legislative elements contributing to split incentives seen above, we studied the allocation of energy costs, the duration of residential rental contracts, the obligation to tolerate energy efficiency works, or the possibility to increase the rent after them. Additionally, we evaluate landlords’ capacity to terminate the contract, considering that this is an element influencing tenant stability (Nasarre-Aznar, 2014).

#### ***a) Duration of the contract***

One of the main differences among jurisdictions is the duration of the contract. Certain countries regulate open-ended contracts, where no fixed term determines contract termination. Among others, Portugal (art. 1094 PCC), Germany (para. 542 German Civil Code<sup>12</sup>, BGB) and Greece (art. 609 Greek Civil Code<sup>13</sup>, GCC) embrace open-ended contracts. Such contracts are in force as long as parties fulfil their obligations. However, landlords and tenants may terminate the contract by giving notice under certain circumstances. On the contrary, other countries only regulate time-limited contracts. Some of these countries, in order to provide some stability to tenants, mandate minimum durations: in Spain (5 years, for a landlord being a natural person, or 7 years, for a landlord being a legal person; art. 9 Urban Leases Act, LAU<sup>14</sup>), France (3/6 years, art. 10 *Loi* n° 89-462<sup>15</sup>) and Italy (4 years + renewable for 4 more years, arts. 2 *Legge* 9.12.1998<sup>16</sup>).

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<sup>11</sup> Much of the information about the differences in tenancy law has been obtained through the reports of the project TENLAW: Tenancy Law and Housing Policy in Multi-level Europe. <https://www.uni-bremen.de/jura/tenlaw-tenancy-law-and-housing-policy-in-multi-level-europe>

<sup>12</sup> *Bürgerliches Gesetzbuch*. Published in the Reich Gazette on 24 August 1896.

<sup>13</sup> Greek Civil Code of 23.2.1946.

<sup>14</sup> *Ley* 29/1994, de 24 de noviembre, de *Arrendamientos Urbanos*. BOE No. 282, 25.11.1994.

<sup>15</sup> *Loi* n° 89-462 du 6 juillet 1989 tendant à améliorer les rapports locatifs et portant modification de la loi n° 86-1290 du 23 décembre 1986. JORF 8.7.1989.

<sup>16</sup> *Legge* num. 431, 9.12.1998, *disciplina delle locazioni e del rilascio degli immobili adibiti ad uso abitativo*. *Gazzeta Ufficiale* núm. 292, 15.12.1998.

### ***b) Rights and obligations to undertake works***

One common feature in tenancy law across the selected countries is that landlords are primarily responsible for ensuring tenants a peaceful use of the dwelling during the contractual term (Germany, para. 535.1 BGB; Greece, art. 574 GCC; Portugal, art. 1037 PCC; Spain, art. 1554.3 Spanish Civil Code<sup>17</sup>; Italy, art. 1571 Italian Civil Code<sup>18</sup>, ICC; France, art. 6 *Loi* núm. 89-462). Landlords are also required to perform repairs and maintenance tasks to keep the housing functioning and livable. However, certain jurisdictions restrict the unilateral undertaking of improvement works (such as energy efficiency initiatives like thermal insulation or window replacement) by parties.

In Spain, Greece, and Portugal, the landlord may only unilaterally improve the dwelling when the works are deemed ‘urgent’, i.e. required by a competent authority (e.g. a public administration obliging to carry out energy efficiency works). It is doubtful, particularly in Spain, whether voluntary energy efficiency works could be imposed on tenants (Anderson, 2023). If the landlord decides to undertake these works, the tenant may have even the right to be compensated or to have a rent reduction (e.g. art. 22 LAU). Germany and France stand apart, allowing landlords to improve housing conditions without tenant consent. In Germany, this is feasible as long as tenants are notified at least three months before starting renovations (para. 555 BGB). Similarly, in France, if the work is ‘abusive’ or unrelated to the ones notified by the landlord, a judge may prohibit or interrupt its performance (art. 7.e *Loi* n° 89-462). Italian tenancy law does not regulate the legal regime of renovation works in detail and only prohibits works that limit tenants’ right to use the rented dwelling (art. 1582 ICC).

Furthermore, depending on the jurisdiction, tenants might not have the freedom to independently undertake energy efficiency works. In Spain, the tenant may not perform major works without the landlord’s consent (art. 23 LAU); the Greek Civil Code does not foresee this situation, so tenants will have no right to seek compensation for the expenses incurred unless they have the consent of the landlord (art. 591 GCC); in Portugal, tenants may only carry out minor works (art. 1073 PCC), and even landlords

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<sup>17</sup> *Real Decreto de 24 de julio de 1889 por el que se publica el Código Civil. Gaceta de Madrid* No. 206, 25.7.1889.

<sup>18</sup> *Codice Civile. Royal Decree* No. 262, 16.3.1942.

may terminate the contract when major works are performed without their consent (art. 1083.2 PCC). In Germany, tenants may only execute works with the landlord's consent, except for minor modifications (Cornelius, J. and Rzeznik, J. 2014). However, in France, while renovations by tenants are generally restricted, energy efficiency works can be undertaken at the tenant's expense, subject to written request (art. 7.f *Loi* n° 89-462).

In certain cases, legislation on residential leases encourages agreements between landlords and tenants to undertake works, allowing tenants to pay by renovating the leased dwelling. This is the case of art. 17.5 Spanish LAU, that provides that 'in tenancy contracts, parties may agree to wholly or partly replace the obligation to pay the rent with a commitment from the tenant to renovate or restore the property under the agreed terms and conditions'. This possibility is also regulated in art. 6 French *Loi* num. 89-462, the so-called '*clause-travaux*': parties may agree that the tenant will undertake some renovation works, which will imply a reduction of the rent for a certain time frame. They shall decide, moreover, how to compensate the tenant in case of early termination upon proof of the expenses incurred (Garcia Teruel, 2019). This arrangement incentivizes energy efficiency measures: tenants, responsible for utility bills, are motivated to enhance energy performance, making utility costs more affordable while temporarily alleviating rent payments. Landlords, generally disinterested in improving energy conditions, benefit from a renovated property after a specific timeframe without incurring costs or needing to evict tenants.

Moreover, such contracts may be a way to articulate the so-called 'green leases', i.e. contractual clauses whose aim is to better organize energy efficiency upgrades (Collins, 2019, Janda *et al.*, 2016). Lease terms could include clauses about who pays for renovations, compensation to a tenant in case of an early termination or rent increases due to improved energy efficiency.

### ***c) Termination***

In general terms, all jurisdictions foresee the termination of the contract at the end of the agreed term, in time-limited contracts. The contract can also terminate by agreement of both parties, by a breach of the contract (e.g. due to a non-payment of the rent), or as a result of inhabitable conditions, destruction, or ruin of the dwelling. Nevertheless, there are other causes of termination of the contract that are only

regulated in some jurisdictions. Spain and Germany, for example, allow termination due to landlords' housing needs. Early termination by tenants is foreseen in all these countries with different notice periods (Molina and Garcia, 2015). For instance, three months' notice in Greece, France, and Germany, with some exceptions; in Spain, the tenant shall use the dwelling for at least six months; the same in Portugal for open-ended contracts, plus two- or four-month notice. In Italy, six months, art. 2 Legge 9.12.1998).

Moreover, in some cases, the landlord may decide to undertake energy efficiency works and evict the tenant because of the lack of habitability during the works. This phenomenon is called 'renoviction', being allowed in Portugal (for open-ended leases, art. 1101 PCC). In Spain, tenants are entitled to suspend the contract or terminate it when the landlord is obliged to perform certain works asked by a competent authority (art. 26 LAU).

#### ***d) Rent increases due to energy efficiency upgrades***

Generally speaking, the initial rent is freely agreed by the parties at the beginning of the contract, based on the principle of contractual freedom, which should guarantee that the landlord receives a sufficient rate of return. In recent years, however, some countries introduced limits to the initial rent for residential leases. For instance, in Spain, the recent Housing Act (Act 12/2023) that limits the initial rent when the housing is rented by a 'large landlord', as defined in Article 3.k of the Housing Act, in high-demand areas. Also, France introduced a rent cap based on energy efficiency performance. For dwellings with an energy efficiency rate of F or G, the initial rent shall not exceed the rent charged to the previous tenant (art. 17 II Loi n° 89-462).

Moreover, as seen above, an important tool to mitigate the tenant-owner dilemma is the potential to increase the rent following energy efficiency upgrades, which some jurisdictions regulate. This is the case of Germany, as para. 559 BGB establishes that the landlord may increase the rent annually an eight percent of the total energy efficiency expenditure unless such an increase would burden the tenant excessively. The fairness and effectiveness of this amount was recently studied by Ahlrichs and Rockstuhl (2022), who confirmed that 'just for small retrofitting investments for buildings with a low energy efficiency standard, the fair percentage-retrofitting-fee is above 8%. The fair percentage-retrofitting-fee is lower than 8% for all other cases and thereby unfair for the tenant'.

The possibility to increase the rent after energy efficiency works is more limited in Spain and France. In Spain, landlords may only undertake voluntary energy efficiency works once the first five or seven years of the contract have elapsed. In this case, the rent may be updated after that term by applying the legal interest rate plus three points to the capital invested, with a maximum increase of 20 percent. Nevertheless, even when reached the minimum term of 5 or 7 years, they may need the tenants' consent to renovate the rented dwelling. In France, the landlord may increase the rent due to improvement works provided that it was agreed in writing (art. 17.1 *Loi* núm. 89-462). In addition, even without reaching an agreement, the landlord may charge the costs of the energy efficiency works to the tenant, in a fixed amount between 10 and 20 euros per month and during a maximum term of 15 years (Article 23-1 *Loi* núm. 89-462 and Decree num. 2009-1439, of 23 November 2009<sup>19</sup>), provided that the works benefit the tenant (e.g. they suppose a reduction in consumption). Landlords of housing with an energy efficiency class of F or G cannot ask for this surcharge.

In Italy, Portugal, and Greece, in principle, it is not possible to raise the rent for that reason, except otherwise agreed (for Italy, art. 13 *Legge* 9.12.1998; Bianchi, 2014; see for Greece, Konistis, 2014 and for Portugal, Correia et al. 2014; see also BBSR, 2016).

#### ***e) Person in charge of paying utility bills***

Tenants are in charge of paying utility bills (art. 20 LAU, art. 9 *Legge locazioni de immobili urbani* 1978<sup>20</sup>; for Greece, see Konistis, 2014; in France, art. 7 and 23 *Loi* núm. 89-462). In Germany, parties may decide to oblige the tenant to make an advance payment for the utility costs (*Nebenkosten*) in a reasonable amount. In this case, the landlord may make an adjustment in writing based on the final consumption (para. 556 (II) BGB). In Portugal, parties may decide whether the landlord or the tenant shall pay the utility bills; however, except otherwise agreed, the one responsible for paying them is the tenant (art. 1078.2 PCC).

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<sup>19</sup> Décret n° 2009-1439 du 23 novembre 2009 pris en application de l'article 23-1 de la loi n° 89-462 du 6 juillet 1989 tendant à améliorer les rapports locatifs relatif à la contribution du locataire au partage des économies de charges issues des travaux d'économie d'énergie réalisés par un bailleur privé. JORF No. 0273, 25.11.2009.

<sup>20</sup> *Legge* num. 392, 27.7.1978.

*f) General comparison of legislative elements contributing to the tenant-owner dilemma*

In Table 1, we have color-coded tenancy law features of the Private Rental Sector (PRS) that could impact energy efficiency investments: in red, those posing significant challenges to parties; in yellow, minor difficulties; and in green, features promoting energy efficiency. For each feature, we have indicated in brackets whether the measure incentivizes tenants or landlords to invest in energy efficiency.

The comparison reveals that certain countries have specifically regulated legislative measures within their residential tenancy laws to promote energy efficiency (France, Germany), whereas others have left this challenge unaddressed (Spain, Italy, Greece, and Portugal). France has taken the approach of compelling landlords to retrofit through rent caps for less-efficient dwellings, but also permit parties to undertake renovations without the consent of the other one, potentially averting project delays. Concerning rent increases after energy efficiency works, France permits landlords to assign the retrofits' costs to tenants in a limited amount, which may not be sufficient to return the energy efficiency investment.

Also, Germany has several legal measures to encourage these types of work. As shown, these measures give the landlord incentives to impose modernization measures and to increase the rent, although an eight percent per year may be unfair for tenants for important investments, following Ahlrichs and Rockstuhl (2022). However, if tenants wish to carry out these works (e.g. with the aid of public funding), they can only do so with the landlord's consent. The other countries, namely the ones from the Mediterranean Private Rented regimes, pose more difficulties to parties: in Greece, Spain, Italy, and Portugal, neither the landlord nor the tenant are encouraged to carry out works without the other parties' consent. In addition, of these four countries, only Spain specifically permits rent increases for these works, but only a minimum term of five or seven years has elapsed (typically nearing the end of the contract), and is contingent on the tenant's consent for improvement works.

As for the duration of contracts, Spain, France, and Italy only regulate time-limited contracts and, even considering that legislation imposes minimum terms, the duration might prove inadequate for tenants to recoup the cost of energy efficiency investments (BBSR 2016). Consequently, legislation on residential tenancies may create challenges for tenants looking to improve their housing conditions, as

they have limited possibilities to perform major renovations, except when the works are agreed upon with the landlord and included within a *clause-travaux* (France) or a ‘renovations in lieu of rent’ arrangement (Spain).

### **3.2. Is there room for coercive measures?**

The Communication ‘A renovation wave in Europe’ 2020 mentioned some practices to reduce split incentives that were undertaken in certain countries, such as the bans on renting less-efficient homes in France, and the Dutch initiative mandating office buildings to attain an energy performance certificate class C by 2023 and class A by 2030. The European Commission aimed to encourage Member States to adopt these bans through a revision of the Energy Efficiency Directive. However, the 2023 Recast Energy Efficiency Directive did not incorporate this measure.

When neither landlords nor tenants decide to undertake energy efficiency works, despite the availability of public subsidies and supportive tenancy laws, coercive measures (positive obligations) arise to ensure renovations (Hasnaoui and Hoops, 2021). In this vein, Charlier (2015) suggests as a proper policy the implementation of minimum standards to eliminate from the market less-efficient dwellings. According to the author, one possibility could be, ‘with every change in dwelling occupancy, homeowners whose dwellings fall below a certain energy label or energy consumption threshold must undertake measures to upgrade it’.

In fact, in France, landlords are not allowed to rent dwellings with low energy efficiency rates as of 2023. As stated in art. 6 *Loi* núm. 89-462, housing that does not reach a minimum rate will not be considered ‘decent housing’ and therefore cannot be rented. French decree 2021-19<sup>21</sup> establishes that decent housing shall consume less than 450 kilowatt hours of final energy per square meter of living space per year. Moreover, the Energy Efficiency Regulations 2015 for England and Wales deem housing with a performance indicator below an ‘E’ grade as ‘sub-standard’ and, consequently, unfit for renting

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<sup>21</sup> *Décret n° 2021-19 du 11 janvier 2021 relatif au critère de performance énergétique dans la définition du logement décent en France métropolitaine*. JORF No. 0011, 13.1.2021.



(art. 23). Here, landlords of less-efficient housing are compelled to undertake renovations if they wish to continue renting such properties.

However, it's important to note that coercive measures interfering with private preferences could prove inefficient and even counterproductive in their intended effects (Sunstein, 1986). As commented, rent controls and similar measures are an element contributing to the tenant-owner dilemma. Therefore, even if the intention behind such measures is to elevate energy efficiency in rented housing (e.g., through rent caps for less-efficient homes), they might paradoxically lead to the opposite outcome (Moon and Stotsky, 1993). In cases where landlords lack adequate funding programs, or legislation fails to provide mechanisms for retrofitting (e.g. allowing them to impose the works to tenants), compulsory renovations may increase the rental black market or lead to hidden costs being charged to tenants. Also, the proportionality of imposing these types of bans should be assessed in each country: these measures may limit the right to obtain enough profits from one's property, imposing to landlords the costs of sustainability policies and, thereby, potentially challenging art. 1 Protocol 1 of the European Convention of Human Rights<sup>22</sup>, devoted to the protection of property<sup>23</sup>. Nevertheless, imposing energy efficiency works or limiting someone's use of the property may be considered a control of use by the State (as in similar cases of positive obligations, *Lindheim v. Norway* and *Denev v. Sweden*), not necessarily breaching art. 1 Protocol 1 ECHR.

#### **4. Conclusion and policy implications**

The European Union has promoted legal and financial measures, including Directives 2010/31/EU and 2012/27/EU to reach energy efficiency targets. Nevertheless, the EU is aware of some limitations to improving buildings' energy performance that falls outside its competence. This is the case of private law measures, such as tenancy law, which depend on each Member State.

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<sup>22</sup> Council of Europe, Protocol 1 to the European Convention for the Protection of Human Rights and Fundamental Freedoms, 20 March 1952.

<sup>23</sup> See, regarding the violation of Art. 1 Protocol 1 ECHR, the Case *Anthony Aquilina v. Malta*. The rent control system imposed in Malta breached art. 1 Protocol 1 ECHR because of the proportionality test. According to the Court, 'a fair balance must be struck between the demands of the general interest of the community and the requirements of the protection of the individual's fundamental rights' (sec. 58).

In the recent Recast Energy Efficiency Directive 2023, the EU introduces a concept for ‘split incentives’, also known as ‘tenant-owner dilemma’. Indeed, as previous research concluded, under tenancy law neither landlords nor tenants are encouraged to perform energy efficiency works. The tenant-owner dilemma is caused by the fact that homeowners do not have incentives to improve energy conditions, because they are not directly benefiting from this investment, as tenants are the ones in charge of paying utility bills.

The Recast Energy Efficiency Directive 2023, in order to encourage Member States to challenge split incentives, introduces a list of measures that they may implement. However, in terms of the possible civil law measures, the list is too vague and only refers to the need to repeal or amend ‘legal and regulatory provisions’. This paper concludes that the elements of tenancy law creating the tenant-owner dilemma are not only those related to the assignment of utility bills but also those linked to the duration of the contract, rent increases for renovation works, or the possibility of landlords and tenants to carry out energy efficiency works without the other party’s consent. This paper also detects how states may shape tenancy law in order to overcome the tenant-owner dilemma from a civil law perspective. It should be a priority in legislation that landlords and tenants are both given the ability to perform energy efficiency work on rented dwellings and that the landlord is allowed to increase the rent once the rented home has been renovated, provided that this increase is part of the actual investment. Moreover, regulating long-term rental contracts, preferably through open-ended leases, would ensure that the tenant, in case of performing energy efficiency works, may recover the investment.

Some countries, particularly the ones of the so-called ‘Corporatist Welfare regimes’, have already addressed the split incentive challenge and included several of these measures, such as France and Germany. Nevertheless, the efficiency of the introduced measures is still under debate, especially in France, where some compulsory measures may potentially discourage landlords from retrofitting rented housing. On the contrary, Mediterranean private rented law regimes, such as Spain, Italy, Portugal, and Greece have not yet regulated some of the studied policies. Further research would benefit from analyzing the economic and legal efficiency of such measures, determining how a certain jurisdiction may find a balance between incentives to landlords and to tenants to retrofit.

Apart from these tenancy law measures, policymakers may also challenge the tenant-owner dilemma through other mechanisms. It is advisable to reinforce parties' autonomy through additional clauses included in the contract to manage energy efficiency renovations, or 'renovations in lieu of rent', by which the tenant assumes some renovation works for not paying the rent during a certain period of time. Making sure tenants are informed about previous consumption or looking for new financial mechanisms may also contribute to the split incentive problem, leaving coercive measures, such as bans to rent less-efficient homes, to a second plane in case incentives fail. All in all, studies on split incentives may help the EU lawmaker to propose more concrete measures during the implementation and review of the Energy Efficiency Directive.

## References

- Ahlrichs, J., and Rockstuhl, S. (2022), "Estimating fair rent increases after building retrofits: A max-min fairness approach", *Energy Policy*, No. 164, 112923.
- Ambrose, A. (2015) "Improving energy efficiency in private rented housing: Why don't landlords act?", *Indoor and Built Environment*, Vol. 24, No. 7, pp. 913-924.
- Anderson, M. (2023), "L'onada de renovació energètica dels edificis: adaptabilitat i limitacions de les institucions de Dret civil ", *Revista catalana de dret públic*, No. 66, pp. 119-134. <http://dx.doi.org/10.58992/rcdp.i66.2023.3958>
- Bianchi, R. (2014), "National report for Italy", *Tenancy Law and Housing Policy in Multi-level Europe*. [https://www.uni-bremen.de/fileadmin/user\\_upload/fachbereiche/fb6/fb6/Forschung/ZERP/TENLAW/Reports/ItalyReport\\_09052014.pdf](https://www.uni-bremen.de/fileadmin/user_upload/fachbereiche/fb6/fb6/Forschung/ZERP/TENLAW/Reports/ItalyReport_09052014.pdf)
- Bird, S. and Hernández, D. (2012), "Policy options for the split incentive: Increasing energy efficiency for low-income renters", *Energy policy*, No. 48, pp. 506-514. <https://doi.org/10.1016/j.enpol.2012.05.053>
- Bradshaw *et al.*, (2005), "The Costs and Benefits of Green Affordable Housing", *Cambridge (MA): New Ecology*. Available at: <https://center4affordablehousing.org/wp-content/uploads/2018/10/The-Costs-Benefits-of-Green-Affordable-Housing.pdf>
- Caballé Fabra, G. (2021), *La intermediación inmobiliaria ante los nuevos retos de la Vivienda*. Tirant lo Blanch, Valencia.
- Charlier, D. (2014), "Split incentives and energy efficiency: Empirical analysis and policy options", *Options Document de travail ART-Dev*, No. 7.
- (2015), "Energy efficiency investments in the context of split incentives among French households". *Energy Policy*, No. 87, pp. 465-479. <https://doi.org/10.1016/j.enpol.2015.09.005>

- Cellini, S. (2021), "Split incentives and endogenous inattention in home retrofits uptake: a story of selection on unobservables?", *Energy Economics*, No. 104. <https://doi.org/10.1016/j.eneco.2021.105656>
- Collins, D. (2019), "Green leases and green leasing in theory and in practice: a state of the art review", *Facilities*, Vol. 37, No. 11-12, pp. 813-824. <https://doi.org/10.1108/F-02-2017-0023>
- Cornelius, J. and Rzeznik, J. (2014), "National report for Germany", *Tenancy Law and Housing Policy in Multi-level Europe*. [https://www.uni-bremen.de/fileadmin/user\\_upload/fachbereiche/fb6/fb6/Forschung/ZERP/TENLAW/Reports/Germany\\_Report\\_09052014.pdf](https://www.uni-bremen.de/fileadmin/user_upload/fachbereiche/fb6/fb6/Forschung/ZERP/TENLAW/Reports/Germany_Report_09052014.pdf)
- Correia, D. Santos, N. Garcia, M.O. (2014), "National report for Portugal", *Tenancy Law and Housing Policy in Multi-level Europe*. [https://www.uni-bremen.de/fileadmin/user\\_upload/fachbereiche/fb6/fb6/Forschung/ZERP/TENLAW/Reports/Portugal\\_Report\\_18052015.pdf](https://www.uni-bremen.de/fileadmin/user_upload/fachbereiche/fb6/fb6/Forschung/ZERP/TENLAW/Reports/Portugal_Report_18052015.pdf)
- Esping-Andersen, G. (1999), *Social foundations of post-industrial economies*. Oxford University Press, Oxford.
- Directorate-General for Energy (2017), *Good Practice in Energy Efficiency: For a Sustainable, Safer and More Competitive Europe. Clean Energy for all Europeans*. European Commission, Brussels.
- EU Science Hub (2018), *Energy efficiency upgrades in multi-owner residential buildings: Review of governance and legal issues in 7 EU Member States*. European Commission, Brussels.
- Federal Institute for Research on Building, Urban Affairs and Spatial Development (BBSR) within the Federal Office for Building and Regional Planning (BBR) (2016), Tenancy law and energy renovation in European comparison. *BBSR-Online-Publikation* 14/2016, Bonn, 2016. [https://www.bbsr.bund.de/BBSR/EN/publications/OnlinePublications/2016/bbsr-online-14-2016-dl.pdf?\\_\\_blob=publicationFile&v=1](https://www.bbsr.bund.de/BBSR/EN/publications/OnlinePublications/2016/bbsr-online-14-2016-dl.pdf?__blob=publicationFile&v=1)
- Garcia Teruel, R.M. (2019), *La sustitución de la renta por la rehabilitación o reforma de la vivienda en los arrendamientos urbanos*. Tirant lo Blanch. Valencia.
- Hamilton I. *et al.*, (2015), "Health effects of home energy efficiency interventions in England: a modelling study", *BMJ Open* 5:e007298. <https://10.1136/bmjopen-2014-007298>
- IDAE (2020), *Estado de la certificación energética de los edificios* (9<sup>th</sup> report). Available at: [https://energia.gob.es/desarrollo/EficienciaEnergetica/CertificacionEnergetica/Documentos/Documentos%20informativos/2021\\_Informe\\_seguimiento\\_9\\_CERTIFICACION\\_ENERGETICA.pdf](https://energia.gob.es/desarrollo/EficienciaEnergetica/CertificacionEnergetica/Documentos/Documentos%20informativos/2021_Informe_seguimiento_9_CERTIFICACION_ENERGETICA.pdf)
- Janda, K. *et al.*, (2016), "The evolution of green leases: towards inter-organizational environmental governance", *Building Research and Information*, Vol. 44, No. 5-6, pp. 660-674. <https://doi.org/10.1080/09613218.2016.1142811>
- Hasnaoui, Y. and Hoops, B. (2021), "Verplichtingen om huurwoningen te verduurzamen: klem tussen privaaten publiekrecht?", *WR, tijdschrift voor huurrecht*, No. 11, pp. 841-852.
- Kholodilin, K. A. (2022), "Rent control effects through the lens of empirical research", *DIW Roundup*, No. 139. [https://www.diw.de/documents/publikationen/73/diw\\_01.c.833177.de/diw\\_roundup\\_139\\_en.pdf](https://www.diw.de/documents/publikationen/73/diw_01.c.833177.de/diw_roundup_139_en.pdf)
- Konistis, T. (2014), "National report for Greece", *Tenancy Law and Housing Policy in Multi-level Europe*. [https://www.uni-bremen.de/fileadmin/user\\_upload/fachbereiche/fb6/fb6/Forschung/ZERP/TENLAW/Reports/GreeceReport\\_09052014.pdf](https://www.uni-bremen.de/fileadmin/user_upload/fachbereiche/fb6/fb6/Forschung/ZERP/TENLAW/Reports/GreeceReport_09052014.pdf)

- Melvin, J. (2018), "The split incentives energy efficiency problem: Evidence of underinvestment by landlords", *Energy Policy*, No. 115, pp. 342-352. <https://doi.org/10.1016/j.enpol.2017.11.069>
- Molina, E. and Garcia Teruel, R. M. (2015), "El abandono de la vivienda por el inquilino: ¿cómo afecta a su acceso al mercado de alquiler?", Belzunegui, A. (Ed.), *La vivienda en la crisis: la promoción del alquiler y el alquiler social desde una perspectiva comparada*. Publicacions URV, Tarragona, pp. 17-38.
- Moon, C. G., and Stotsky, J. G. (1993), "The effect of rent control on housing quality change: a longitudinal analysis", *Journal of Political Economy*, Vol. 101, No. 6, pp. 1114-1148.
- Nasarre-Aznar, S. (2014), "Leases as an alternative to homeownership in Europe. Some key legal aspects". *European Review of Private Law*, Vol. 22, No. 6, pp. 815-846. <https://doi.org/10.54648/erpl2014064>
- Nie, H. *et al.*, (2020), "Split incentive effects on the adoption of technical and behavioral energy-saving measures in the household sector in Western Europe", *Energy Policy*, Vol. 140. <https://doi.org/10.1016/j.enpol.2020.111424>
- Parejo-Navajas, T. (2017), "The Energy Improvement of the Urban Existing Building Stock: A Proposal for Action Arising from Best Practice Examples", *24 N.Y.U. Env't L. J.*, No. 353.
- Polanska, D. V. and Richard, A. (2021), "Resisting renovations: Tenants organizing against housing companies' renewal practices in Sweden", *Radical Housing Journal*, Vol. 3, No. 1, pp. 187-205.
- Poortinga W. *et al.*, (2018), "The health impacts of energy performance investments in low-income areas: a mixed-methods approach". *Public Health Res* 6(5). DOI: 10.3310/phr06050
- Schmid, C., *et al.*, (2016) *Mietrecht und energetische Sanierung im europäischen Vergleich*. Bundesinstitut für Bau-, Stadt- und Raumforschung (BBSR) im Bundesamt für Bauwesen und Raumordnung (BBR).
- Singhal, P., *et al.*, (2023), "Split-incentives in energy efficiency investments? Evidence from rental housing", *Ruhr Economic Papers*, No. 992.
- Sunstein, C. (1986), "Legal Interference with Private Preferences", *University of Chicago Law Review*, Vol. 53, No. 4, pp. 1129-1174.
- Weatherall, D. McCarthy, F. and Bright, S. (2018), "Property law as a barrier to energy upgrades in multi-owned properties: insights from a study of England and Scotland", *Energy Efficiency*, Vol. 11, No. 7, pp. 1641-1655. <https://doi.org/10.1007/s12053-017-9540-5>
- Weber, I. and Wolff, A. (2018), "Energy efficiency retrofits in the residential sector – analysing tenants' cost burden in a German field study", *Energy Policy*, Vol. 122, pp. 680-688. <https://doi.org/10.1016/j.enpol.2018.08.007>

	<b>Possibilities of the landlord to undertake energy efficiency works unilaterally</b> (Incentive for landlords)	<b>Possibilities of the tenant to undertake energy efficiency works unilaterally</b> (Incentive for tenants)	<b>Rent increase due to energy efficiency improvements</b> (Incentive for landlords)	<b>Duration of the contract</b> (important to recover the investment) (Incentive for tenants)	<b>Person in charge of paying utility bills</b> (Incentive for tenants)
<b>France</b>	Yes	Yes, subject to a written request. The tenant may also pay the price of the rental contract by undertaking energy efficiency works, if agreed with the landlord ( <i>clause-travaux</i> )	Yes, provided that it was agreed in writing, or through a unilateral fixed surcharge imposed by landlords	Time-limited contracts (minimum duration 3/6 years)	The tenant
<b>Greece</b>	Not possible (only if required by a public authority)	Not regulated; the landlord's consent is needed	Not possible	Open-ended contracts are possible	The tenant

<b>Germany</b>	Yes	Only minor works; otherwise, the landlord's consent is needed	Yes, up to 8 per cent of the total energy efficiency expenditure	Open-ended contracts are possible	The tenant (even with an advance payment in a reasonable amount)
<b>Spain</b>	Not possible (only if required by a public authority)	Only minor works; otherwise, the landlord's consent is needed. However, the tenant may pay the price of the rental contract by undertaking energy efficiency works, if agreed with the landlord	Yes, after 5 or 7 years of the contract elapsed	Time-limited contracts (minimum duration 5/7 years)	The tenant
<b>Italy</b>	Not regulated	Not regulated	Not possible	Time-limited contracts (minimum duration 4 years, renewable for 4 years)	The tenant

<b>Portugal</b>	Not possible (only if required by a public authority)	Only minor works	Not possible	Open-ended contracts are possible	The tenant
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**Table 1.** Legal measures affecting landlords' and tenants' incentives to carry out energy efficiency works.

**Source:** own elaboration.