European Commission

JRC SCIENCE FOR POLICY REPORT

# Assessment of progress made by Member States in relation to Article 19(1) of the Directive 2012/27/EU

*Actions taken to remove barrier of split incentives and boost green procurement*

ECONOMIDOU, MARINA
SERRENHO, TIAGO

2019

Joint Research Centre

EUR 29653 EN

**JRC Science Hub**
https://ec.europa.eu/jrc

JRC115314

EUR 29653 EN

PDF ISBN 978-92-79-99649-8 ISSN 1831-9424 doi:10.2760/070440

Luxembourg: Publications Office of the European Union, 2019



How to cite this report: Economidou, M., Serrenho, T., *Assessment of progress made by Member States in relation to Article 19(1) of the Directive 2012/27/EU - Actions taken to remove barrier of split incentives and boost green procurement*, EUR 29653 EN, Publications Office of the European Union, Luxembourg, 2019, ISBN 978-92-79-99649-8, doi:10.2760/070440, JRC115314.

# Contents

# 1 Introduction

The building sector consumes more energy than any other economic sector in Europe and numerous studies in the literature have demonstrated its significant energy saving potential and benefits (Ryan & Campbell, 2012; BPIE, 2011; Ürge-Vorsatz, et al., 2013). Even in the face of increasing pressure to reduce energy consumption, studies have shown that a substantial part of the energy efficiency potential in the building sector is unrealised and many otherwise profitable energy efficiency investments remain unexploited. Modernising the building sector is associated with a number of barriers, including the issue of split incentives. Stemming from transactions whose benefits do not accrue to the person who pays for it, split incentives affect various building segments: privately rented homes, multi-apartment buildings, social housing units and leased commercial or public premises.

Article 19(1)(a) of the Energy Efficiency Directive (Directive 2012/27/EU) recognises the importance of addressing the barrier of split incentives in the building sector. It, specifically, states:

*Member States shall evaluate and if necessary take appropriate measures to remove regulatory and non-regulatory barriers to energy efficiency, without prejudice to the basic principles of the property and tenancy law of the Member States, in particular as regards:*

*(a) the split of incentives between the owner and the tenant of a building or among owners, with a view to ensuring that these 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, including national rules and measures regulating decision- making processes in multi- owner properties.*

The public sector is often called to take a leading role in accelerating the uptake of energy efficiency improvements. This is demonstrated by various provisions in the Energy Efficiency Directive, including renovation of central government buildings (Article 5) and green procurement by public bodies (Article 6). However, various legal, administrative and regulatory barriers may hinder actions in this sector. For this reason Article 19(1)(b) calls Member States to take any measures regarding:

*(b) legal and regulatory provisions, and administrative practices, regarding public purchasing and annual budgeting and accounting, with a view to ensuring that individual public bodies are not deterred from making investments in improving energy efficiency and minimising expected life- cycle costs and from using energy performance contracting and other third-party financing mechanisms on a long-term contractual basis.*

This report assesses the progress made by Member States in removing the regulatory and non-regulatory barriers referred to in Article 19(1)(a) and (b). The assessment is carried out using mainly information identified in the National Energy Efficiency Action Plans (NEEAPs) submitted by Member States in 2014 and 2017 to comply with the reporting requirements stipulated in the Energy Efficiency Directive. In some cases, additional sources were consulted to complement the collected information. The structure of the report is as follows. Section 2 provides definitions of various key terms in the context of split incentives and public procurement. Evidence on the extent to which the building sector is exposed to split incentives in the EU is presented in Section 3. An EU-wide overview of how Member States are addressing is presented in Section 4, followed by individual country summaries in Section 5. Conclusions are drawn in Section 6.

# 2 Terms and definitions

## 2.1 Split incentives

Split incentives refer to any situation where the benefits of a transaction do not accrue to the actor who pays for the transaction. In the context of energy efficiency in buildings, split incentives are linked with cost recovery issues related to energy efficiency upgrade investments due to the failure of distributing effectively financial obligations and rewards of these investments between concerned actors. This can ultimately result in inaction from either actor's side, despite the fact that many of these upgrades are of positive net present values. Below the main terms and definitions are provided.

***Split incentives***

| | |
|---|---|
| Split incentives | Split incentives refer to any situation where the benefits of a transaction do not accrue to the person who pays for the transaction. In the context of energy efficiency in buildings, split incentives are linked with cost recovery issues related to energy efficiency upgrade investments due to the failure of distributing effectively financial obligations and rewards of these investments between concerned actors. |
| Efficiency-related split incentives | These refer to situations where the end user is in charge of the energy bills but cannot choose the technology needed to improve the energy efficiency of their property and thereby has limited power in reducing their energy bills or negotiating an energy efficiency upgrade. |
| Usage-related split incentives | These have also been referred to as the "reverse" split incentives in the literature (Bird & Hernandez, 2012). They occur when occupants are not responsible for paying their utility bills and thereby have little or no interest to conserve energy. In other words, the occupants do not face the marginal cost of their own energy use and are not given any incentives in using energy efficiently. They occur under "warm rent" and gross rent structures where utility costs for heating, other operating and capital expenses are all borne by the landlord. The requirements for individual metering and billing in the Energy Efficiency Directive aim to mitigate or minimise this problem. |
| Multi-actor split incentives | Multi-tenant and multi-owner buildings face an additional challenge associated with collective decision making between various actors. Energy efficiency projects in these buildings can only be realised if consensus or a sufficient majority is reached among all decision-making parties. Current decision structures act as a barrier in collective agreements between owner-occupants of many existing buildings such as condominiums (Matschoss, et al., 2013). In both multi-tenant and multi-owner buildings, the benefits and costs of an energy efficiency upgrade may vary from apartment to apartment, which further complicates the situation. |

| | |
|---|---|
| Temporal split incentives | These refer to situations where the energy efficiency investment does not pay off before the property gets transferred to its next occupant/owner. In this situation, the occupant (tenant or owner-occupier) does not have a clear idea of how long they will live in their property or simply plan to move relatively soon. An energy efficiency upgrade attached to a high upfront capital cost will not be an appealing investment in this situation and may be perceived as risky (Bird & Hernandez, 2012). |

***Lease models***

| | |
|---|---|
| *'Green lease'* | 'Green lease' is a lease between a landlord and tenant of a commercial building which provides obligations on both parties to minimise adverse environmental impact in areas such as energy, water and waste. |
| 'Gross lease' | *'Gross lease' is a lease whereby all operating expenses are borne by the landlord. Any capital expense that reduces operating expenses is solely in the landlord's domain.* Sometimes referred to as 'Inclusive rent' or "warm rent". |
| 'Net lease' | 'Net lease' is a lease in which the tenant is responsible for some of the additional costs associated with the property. There are three types of net leases: single net, double net and triple net. Under a single net lease, the tenant pays rent plus property taxes. Under a double net lease, the tenant pays rent plus property taxes and insurance. Under a triple net lease, the tenant pays for rent plus property taxes, insurance and maintenance. |
| 'Modified gross lease' | 'Modified gross lease' is a lease in which the tenant pays base rent at the lease's inception but in subsequent years pays the base rent plus a proportional share of some of the other costs associated with the property. In building-related energy terms, tenants may be required to pay their proportional share of the heating expenses under a modified gross lease. |

***Majority rules***

| | |
|---|---|
| Simple majority | Simple majority refers to majority of those voting that reaches more than half of the total number of votes cast. |
| Qualified majority | Qualified majority refers to majority of those voting that reaches a pre-set threshold larger than 50%. |
| Absolute majority | Absolute majority refers to majority of all members, not just those choosing to vote. |

***Ownership models***

| | |
|---|---|
| Unitary Ownership | Unitary ownership refers to an undivided apartment building, of which owners own shares. |
| Composite Ownership | Composite ownership refers to a system where the owners own their apartment and all owners jointly own the common parts and land. |

***Building actors***

| | |
|---|---|
| Housing association | A housing association is a non-profit making organisation that provides low-cost "social housing" for people in need of a home. |
| Homeowner association/ community | A community of private homeowners in an apartment building. They may elect a board of directors to represent them. They may or may not have a legal personality. |
| Building management company | Building management company is an external professional company hired by building owners to carry out maintenance duties and handle day-to-day operations in apartment buildings. They perform duties decided by the board of directors. |
| Board of directors of homeowners | A group of elected/appointed homeowners of an apartment building whose role is to serve the homeowner community and take decisions regarding the operation and management of common areas of the building. |

## 2.2 Public procurement

Public authorities are major consumers in Europe and they spend approximately 1.8 trillion euro annually, representing around 14 % of the EU's gross domestic product (utilities excluded). By using their purchasing power to choose goods and services with lower impacts on the environment, they can make an important contribution to sustainable consumption and production.

| | |
|---|---|
| Award criteria | Award criteria are the criteria on which the contracting authority will compare offers and base its award. Under EU procurement rules, only two award criteria can be used 'the lowest price' and 'the most economically advantageous tender'. Where the criteria of the 'economically most advantageous tender' is chosen, relevant environmental criteria can be inserted either as a benchmark to compare green offers with each other (in the case where the technical specifications define the contract as being green) or as a way of introducing an environmental element and giving it a |

| | |
|---|---|
| | certain weighting. |
| Contracting Authorities | 'contracting authorities' means the State, regional or local authorities, bodies governed by public law or associations formed by one or more such authorities or one or more such bodies governed by public law; |
| Contract Performance Clauses | Conditions that must be met in the execution of a contract, for example as to how the goods or services are to be supplied or minimum performance standards to be achieved under the contract. Under EU procurement rules, these conditions may include environmental or social requirements, provided that these are compatible with Community law and are indicated in the contract notice or in the specifications. |
| Public Procurement | The process used by governments, regional and local public authorities or bodies governed by public law (financed, supervised or managed for more than 50% by public authorities) to obtain goods, services, and works. |
| Green Public Procurement (GPP) | A process whereby public authorities seek to procure goods, services and works with a reduced environmental impact throughout their life cycle when compared to goods, services and works with the same primary function that would otherwise be procured. |
| GPP criteria | GPP criteria are environmental criteria that address environmental impacts and are designed to be used in procurement procedures. |
| Life cycle assessment | Life-cycle assessment (LCA) is a process of evaluating the effects that a product has on the environment over the entire period of its life thereby increasing resource-use efficiency and decreasing liabilities. It can be used to study the environmental impact of either a product or the function the product is designed to perform. LCA is commonly referred to as a "cradle-to-grave" analysis. |
| Life cycle costing | Assessment of the costs of a good or service over its entire life cycle. |
| Tenderer | economic operator that has submitted a tender |

# 3 Setting the background

This section presents evidence on the extent to which the building sector is exposed to split incentives in the EU. We first provide estimations of the share of building stock affected by the barrier of split incentives and then discuss each segment individually. Due to data availability restrictions, we primarily focus on the quantification of split incentives found in residential buildings. Eurostat is the source of data, unless otherwise stated.

In 2016, there were over 150 million tenants in the EU, representing 31% of the total population. The share of tenants at EU level has experienced a small 5% increase over the last 6 years: in 2016 there were an additional 9 million tenants compared to 2010. The countries with the largest share of tenants in 2016 were Germany (48%), Austria (45%), Denmark (38%), UK (37%), France (35%) and Sweden (35%) and the Netherlands (31%). Together, these countries represent two thirds (66%) of the total tenant population in the EU. On the other end of the spectrum, the countries with the highest share of owner-occupier population and therefore smallest share of tenants are Romania, Lithuania, Croatia, Slovakia, Hungary and Bulgaria. Following the fall of communism in Central and Eastern Europe, mass privatisation of the housing stock led to the high levels of home ownership in these countries.

In 2016, more than 4 out of 10 Europeans lived in flats (42%). Of the EU28 population living in flats, more than half (56%) lived in flats located in buildings with ten or more dwellings. The share of population living in flats was the highest in Spain (66%), Latvia (66%), Estonia (62%), Lithuania (58%), Germany (57%), Greece (57%), Malta (55%) and Italy (53%). On the other hand, less than a quarter of the population of Ireland, UK, the Netherlands, Croatia, Belgium and Cyprus lived in apartments. Semi-detached houses are prominent in Ireland, the Netherlands and the UK, where 52.4%, 58.4% and 60.1% of the population lived, respectively. While single family owner-occupied do not face any traditional types of split incentives, collective decision problems between owners in flats and semi-detached houses are a critical barrier to the deployment of energy efficiency measures in multi-family buildings.

A quarter (24.8%) of the EU28 population lived in flats located in cities. Despite the fact that the highest share of flats is found in cities, a 10% drop in the amount of people living in flats in cities was observed over the last 6 years. Instead the share of the population living in flats in towns and suburbs has increased by more than 50% from 8% in 2010 to 12.1% in 2016. Houses, however, remain the predominant type of dwellings outside cities, with over 60% of population in towns and suburbs and 80% in rural areas living in houses.

**Highlights**

- More than 4 out of 10 Europeans lived in flats in 2016. In Spain, Latvia, Estonia, Lithuania, Germany, Greece, Malta, Italy, Czech Republic and Slovakia, more than half of the population lived in apartments.
- There were over 150 million tenants (31% of EU28 population) in 2016
- Western European countries tend to have the largest tenant populations. Two thirds (66%) of the total EU tenant population in 2016 lived in Germany, Austria, Denmark, UK, France and Sweden.
- While homeownership rates in Eastern Europe are among the highest across the EU, these countries have a relatively large share of apartment owner-occupiers, especially in cities.
- Despite a 50% increase in the population living in flats in in towns and suburbs in 2010-2016, a quarter of the EU28 population lived in flats located in cities.

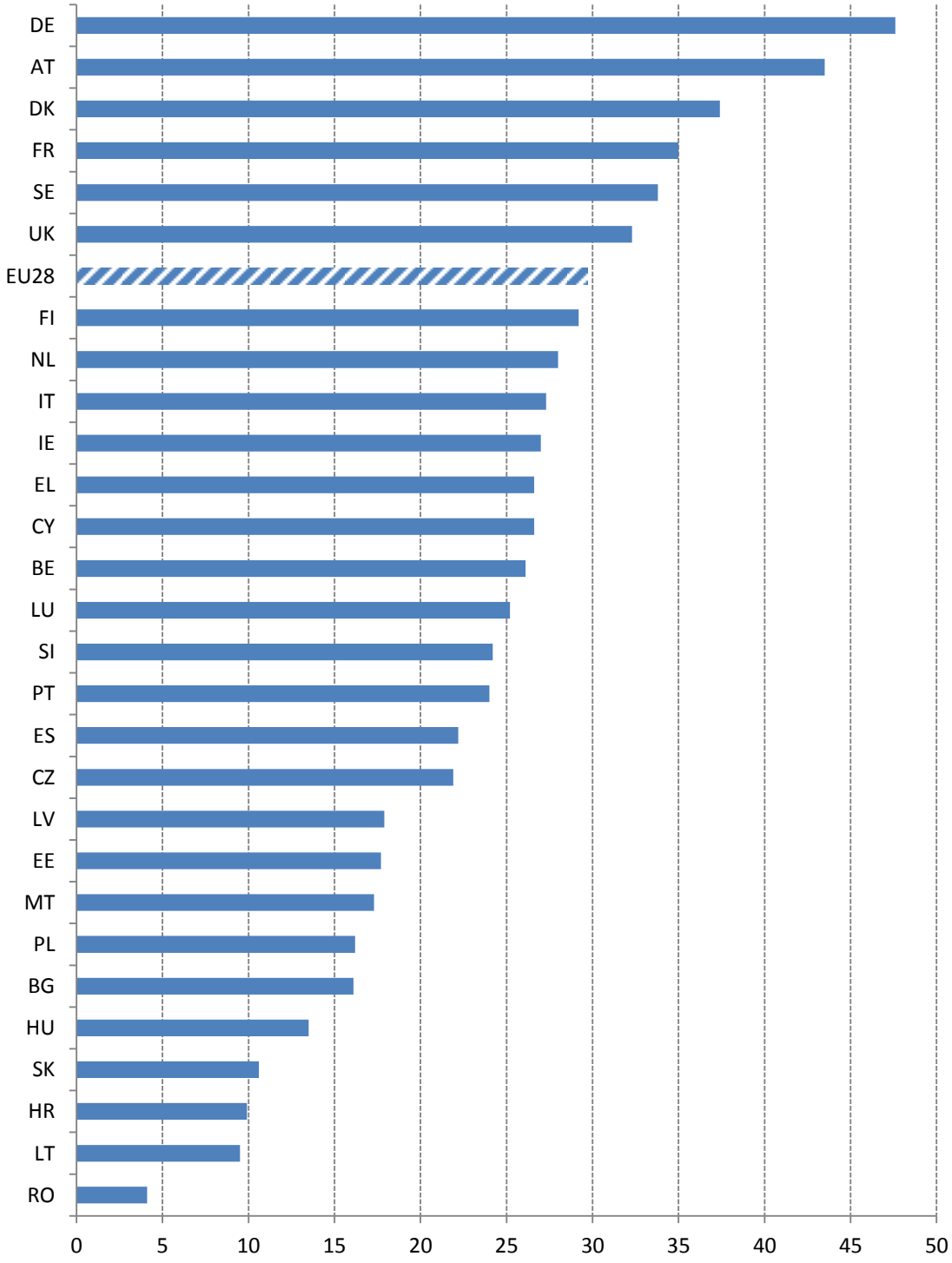


Figure 1. Share of tenant population in EU Member States in 2016

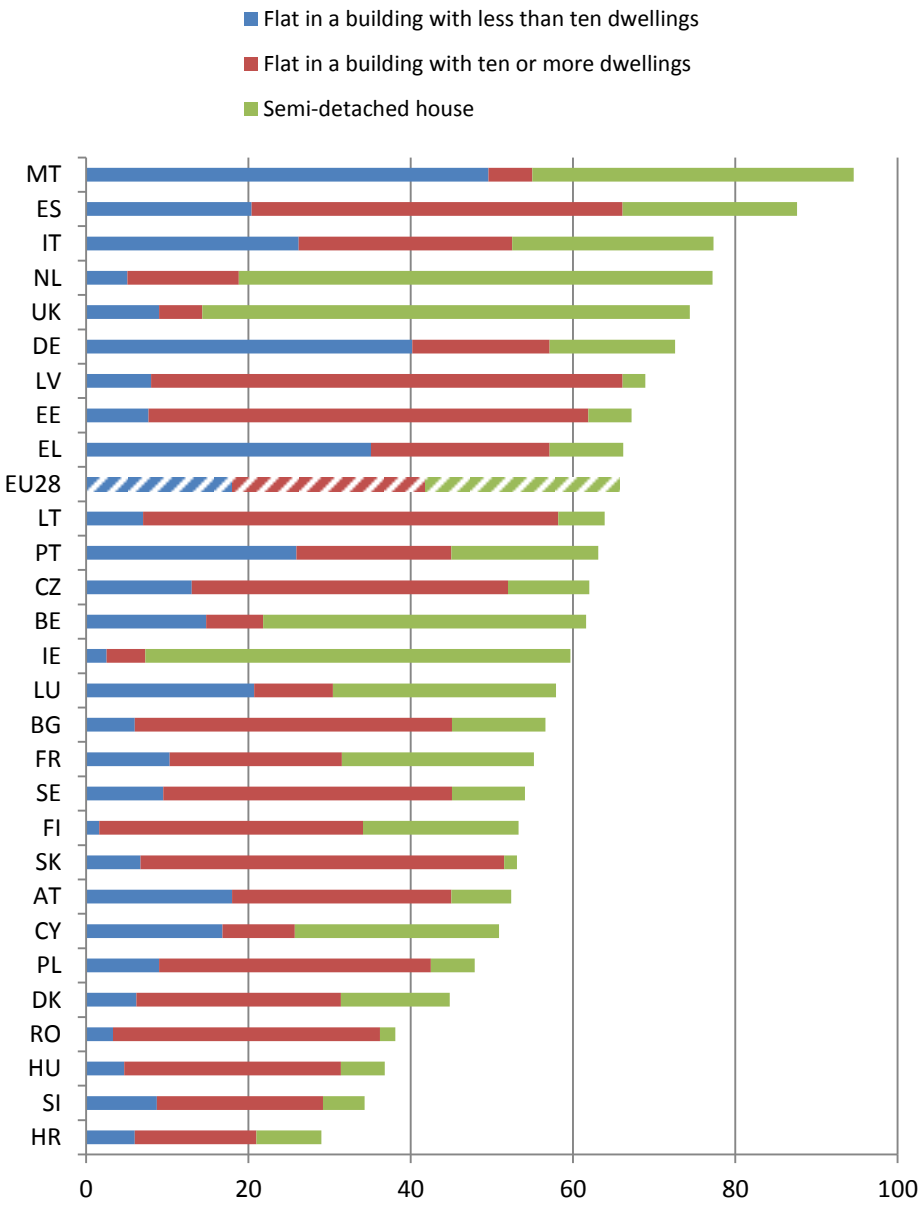


Figure 2. Share of population in 2016 living in flats or semi-detached homes

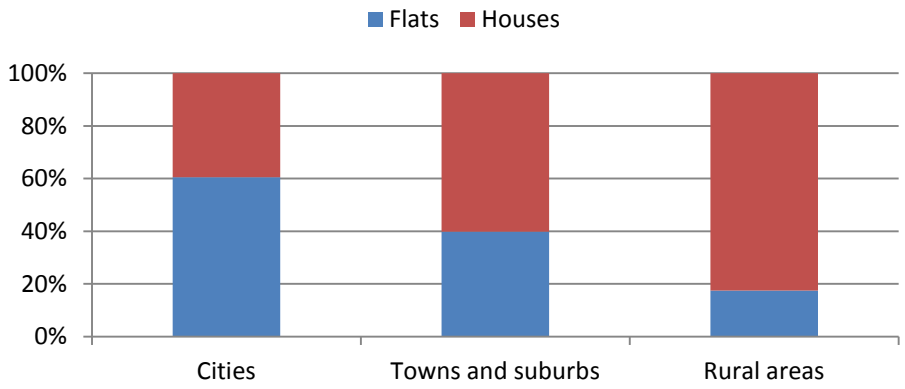


Figure 3. Share of EU 28 population living in cities, towns/suburbs and rural areas in 2016

# 4 Overview of progress made by Member States

## 4.1 Addressing split incentives

Various policy actions (regulatory measures, information tools, financial measure or voluntary approaches) have been taken by governments to help unlock the energy efficiency potential of the building segments affected by the split incentive barrier. Table 1 presents an overview of various solutions identified in the National Energy Efficiency Action Plans submitted by Member States in 2014 and 2017. This is complemented with supplementary information provided bilaterally by national authorities to the European Commission in 2017-2018.

It should be noted that 10 Member States have declared that split incentives are not a barrier in their national context: Czech Republic, Greece, Estonia, Croatia, Hungary, Malta, Poland, Portugal, Romania and Sweden. While some of these countries indeed have a small share of rented properties – which would, in turn, imply that the traditional split incentive issue between tenants and owners is of relevance to a limited share of the population[1] – national governance structures in multi-owner apartment buildings may still pose a barrier to energy efficiency upgrades in this segment of the building stock.

Below we summarise the actions identified according to the type of policy measure.

### 4.1.1 Legislative action

*Minimum Energy Performance Standards in rented properties*

Mandating minimum standards for rented properties (or a specific segment of rented properties) is a powerful measure which can address the problem of widespread energy inefficiency typically associated with this sector. This can primarily protect social tenants or tenants facing efficiency-related split incentives, who would otherwise have no power to negotiate an energy efficiency upgrade in their rented properties. Under such regulation, the responsibility rests with the owners, who are called to ensure a reasonable level of energy efficiency in rental units, thereby sending a clear signal to the market. Minimum performance levels in rented or multi-tenure buildings may apply to both residential and commercial properties, target specifically vulnerable groups or can extend to both public and private landlords. The measure can complement existing requirements set in the building codes for minimum energy performance levels which currently apply only for new and major renovated buildings. To ease the burden of compliance by landlords, the availability of financial incentives or the use of models that overcome the barrier of the upfront costs can be considered alongside this regulation (see section on Financial incentives & models).

This practice is not widespread in EU Member States. A few noteworthy examples include the United Kingdom where all private rented dwellings had to achieve a minimum EPC rating of E (where this is physically and economically possible) by April 2018. That is, since then no landlord can let out a commercial or residential property with an energy performance label F or below. While sale transactions of buildings with label F or below can still be undertaken after 2018, these properties can only be owner-occupied. In Ireland, a working group on setting minimum thermal efficiency performance standards in properties offered for rent or lease in the residential and commercial sectors has

[1] It should be stressed that even if the percentage of tenants in a given MS is low, split incentives can pose a serious problem for those tenants

developed an evidence base on the likely positive and negative impacts of such a policy in the rental sector, along with a report in 2017 on the potential impacts in the social housing sector. A new Rental Sector Energy Efficiency Advisory Group was subsequently set up and mandated to deliver recommendations in the course of 2019.

*Rent law amendments*

For rented properties, flexibility introduced in rental law that would enable the tenant and landlord to come to an agreement for an energy efficiency upgrade in the rented property is identified in certain cases. This could include laying out specific conditions for the redistribution of investment cost and energy cost savings of an energy efficiency upgrade between the landlord and the tenant or between multiple owners. Additional issues that need to be addressed include the extent to which the rent can be increased and conditions under which the tenants can reject rent rises.

In Germany, the revision of the Tenancy Law Amendment Act has been made in order to address the legal obstacles regarding split incentives. Under this provision, the tenant has to bear the costs of heat supplies as operating costs where the heat is delivered with greater efficiency either from a new plant erected by the contractor or from a heat network and the costs of heat supplies after the switch to contracting do not exceed the operating costs for the previous independent supplies of heat or hot water.

The mechanism of passing on part of the cost of energy saving works to the tenant has been tested in Brussels, Belgium through a pilot project under the PACE programme. Its implementation began in September 2015[2]. The aim was to validate the principle of this mechanism and identify the tools that must be made available by the regional authorities to enable the mechanism to deliver its effects.

In Denmark, a legal act has been amended in 2014 to ensure that gains deriving from energy improvements in private rented properties will be split between the landlords and the tenants. Specifically, a landlord can demand an increase in rent for completed energy saving measures, e.g. concerning the building envelope which results in energy savings for the tenants in the property. This increase must be based on the total expenses which have reasonably been incurred in carrying out the work and may not exceed the saving that the measure entails for the tenants.

The French tenancy law was amended in 2009 to facilitate the redistribution of the financial benefits of an energy efficiency upgrade. Under this amendment, a landlord has the right to ask the tenant to make a contribution to an energy efficiency investment by participating in the cost recovery of the work. The contribution is separate from the rent paid by the tenant and cannot exceed 50 % of the cost of energy savings. This contribution can however only be asked if substantial work has been done or if the dwelling reaches a minimum level of energy performance. The participation, limited to a maximum 15 years, is specified in the rent agreement. In addition to the example of France, other examples include the Italian region of Emilia Romagna, where a law was approved in December 2013 that permits the use of energy cost savings for investment repayments of energy efficiency interventions.

[2] The closing of the pilot project and the resulting recommendations were expected in May 2017

**Table 1. Overview of policies and measures reported to address Article 19(1)(a) barriers**

| | NB* | LEGAL | FINANCIAL | OTHER |
|---|---|---|---|---|
| AT | | Commonhold Act; Amendment of non-Profit Housing Act; Decision-making process in the residents' meetings | | |
| BE | | Brussels region: "Energy saving investment" rent charge mechanism | | |
| BG | | | Grants - National Programme for energy efficiency of multi-family buildings | |
| CY | | Law on Energy Efficiency in End Use and Energy Services | "Save and Upgrade Programme" | |
| CZ | | | Integrated Regional Operational Programme; New Green Savings programme | |
| DE | | Tenancy Law Amendment Act | | |
| DK | | Legislation amendment to make energy savings measures more attractive – Energy gains split by owner and tenant | | |
| EE | X | | | |
| EL | X | | | |
| ES | | Law 19/2009 of 23 November 2009 amendment (change of voting to 3/5 of owners in multi-owner buildings) | | |
| FI | | | | Green lease commercial property action plan |
| FR | | Amendment of Construction & Housing Code on rules for works made in jointly owned properties; Legislation (2009) on landlord requests to tenants for EE investment contributions | | |
| HR | | Energy Efficiency Act (Article 29) | Call 4c2.2 'Energy renovation of multi-apartment buildings' | |
| HU | X | | | |
| IE | | | | Working group on setting minimum e standards in rented residential/commercial properties |
| IT | | Article 1592 of the Civil Code | Tax relief on energy performance upgrades of buildings | Adjustment of EPC model to investments in rented properties (planned) |
| LT | | Law No I-2455 on State Support for renovation of multi-apartment buildings | | |
| LU | | Introduction of inclusive rent (planned); Rent increase ban in certain subsidy programs for energy retrofits (planned) | | |
| LV | | Law on the administration of residential buildings; Law on residential tenancy | | |
| MT | X | | | |
| NL | | Amendment of housing valuation system | National Energy-saving Fund; Fund dedicated for landlords | Green Lease Guidelines; Green Lease Menu online tool |
| PL | X | | | |
| PT | X | | | |
| RO | X | | | |
| SE | X | | | |
| SI | | Legal basis for decision making in multi-apartment buildings: distribution of incentives among owners and tenants (planned) | Eco fund specific calls | Trainings with multi-apartment building managers |
| SK | | Obligation to separate energy bills for large building tenants; Regulation on decision process on investments in multi-apartment buildings | | |
| UK | | Minimum energy efficiency standards for privately rented properties (England & Wales); Private Tenancies Order 2006 (Northern Ireland); CRC Energy Efficiency Scheme (Northern Ireland) | Landlords Energy Saving Allowance | - |

*NB (Not Barrier): The barrier of split incentives is declared as insignificant in official reporting to EC by national authorities

In the Netherlands, the updated National Covenant on Energy Saving in the rental sector aims at an average energy label B by the end of 2020. This represents an energy saving target of 33% between 2008 and 2021 and concerns building- and installation-related energy consumption for space heating, hot water and ventilation. Prior to 2011, the rent ceiling was evaluated using a point system established in order to take into account various criteria such as the dwelling quality, location and size. This ceiling defined the maximum rent social landlords could charge. A bill, however, which was approved in March 2011, enabled the incorporation of the energy performance of the dwelling in the criteria list used in the evaluation. This change now offers landlords the opportunity to increase the rent if the energy label improves and thereby an opportunity to recuperate part of the investment costs for energy efficiency upgrades.

*Revisions in governance structure of jointly-owned apartment buildings*

Lifting regulatory barriers that inhibit energy efficiency investments in rented and multi-ownership buildings includes revision of condominium laws, which need to clearly define the obligations with regards to necessary maintenance of common parts of the buildings, the democratic rules and process with which maintenance work is undertaken as well as the roles of involved actors. Lowering the degree of consensus that needs to be reached in decisions regarding energy efficiency upgrades can often be useful in simplifying the process.

In Austria, the Commonhold Act specifies the extent of allocation of funds to reserves, which should make it easier to perform renovations. In addition, the Austrian Affordable housing section refers to the decision-making process in the residents' meetings that relates, for example, to arrangements that must be agreed unanimously by all apartment owners, concerning for example the mortgage collateral for a renovation loan.

France introduced amendments in its Construction and Housing Code, regarding the rules related to the decisions of the works to be carried out in the case of jointly owned properties, applying a majority voting system as the main decision making procedure on the performance of work in the common interest in private parts, at the expense of the joint owner concerned. A majority vote was also introduced of the joint owners on the installation of heat meters or heat cost allocators[3] and the majority inclusion, on the agenda of the joint owners' general meeting following an energy performance diagnosis – or, where applicable, an energy audit – in any building equipped with a block heating or cooling system, of an item relating to an energy saving work plan or an energy performance contract.

In Lithuania, Law No I-2455 on State Support for renovation of multi-apartment buildings ensures the implementation of a renovation project in the presence of approval from the majority of apartment owners. That is, approval of investment plans, terms and conditions of the lending contract, supervision of project implementation, expert examination of renovation project are adopted by the apartments owners by a majority vote, i.e. 50% plus one vote.

In Spain, Article 17(3) of the Horizontal Property Act states that the installation or removal of equipment or systems which improve the energy efficiency of a property shall require a vote in favour from three fifths of the owners who, in turn, represent three

[3] It should be noted that the obligation under the Energy Efficiency Directive to introduce individual meters or heat cost allocators is subject only to technical feasibility and cost-effectiveness conditions and applies regardless of any national or building specific rules governing the decision-making within a multi-occupancy building.

fifths of the shares in the building. This new draft facilitates the adoption of agreements, where previously adopted in unanimity.

In the UK, the Energy Efficiency (Private Rented Property) (England and Wales) Regulations 2015 established a new right for domestic private rented sector tenants, whereby tenants can request consent from their landlord to install energy efficiency improvements in the property they rent, and the landlord cannot unreasonably refuse consent.

*Other*

A few other measures of legal nature have been identified. In Luxembourg, it was decided to analyse, on the basis of pilot projects, the introduction of a rent including heating costs ("Warmmiete")[4] and introduction of a ban on rent increases in certain subsidy programs for energy retrofits.

According to the 2017 Austrian NEEAP, a new legislative measure was approved, by the amendment, in 2015, to the Non-Profit Housing Act, allowing the use of energy saving contracting in the non-profit housing sector. Costs for reducing consumption can be covered from rent components dependent on energy consumption. The energy costs saved can be used for the financing of EE actions. The savings are permitted to be used for refinancing over a period of at most 15 years, which after that, the savings must benefit the tenants.

In Slovakia, Section 11(3) of Act No 321/2014 makes it an owner's duty to bill a tenant separately for energy in rental buildings with a floor area of more than 1000 $m^2$, using designated meters. This obligation ensures how energy costs are billed and the tenant, who has to pay separately for the energy consumed, monitors energy consumption. This ensures that tenants monitors their own energy consumption and is therefore encouraged to conserve energy. The obligation is additional to the wider rules transposing the requirements for individual metering and billing under Articles 9-11 of the Energy Efficiency Directive.

### 4.1.2 Financial measures

Energy-efficiency incentives offered by governments, energy suppliers and other bodies are intended to overcome upfront costs barriers. While upfront cost and split incentive barriers are closely linked, economic incentives that are not specifically designed to meet the unique challenges faced by multi-owner buildings often fail to have an impact on this segment of the building stock.

Various financial and fiscal incentive schemes can be designed to support specific segments of the building sector in which involved parties would refrain from improving the energy efficiency of the building under normal circumstances due to misaligned incentives. The Netherlands has established two revolving funds on the basis of the Housing Agreement. A National Energy-saving Fund (Nationaal Energiebespaarfonds (NEF)) has been created with Rabobank and ASN Bank for owner-occupiers and owners' associations. A fund for landlords has also been launched, which launched at the end of 2014. Both funds assume a ratio of one-quarter public funds to three-quarters private sector money, providing a total incentive of €600 million. The government is also providing landlords in the social rental sector with a subsidy of € 400 million for investments in energy-efficiency in the period 2014-2018 with the aim of contributing to the objectives of the Energy-saving Agreement for the Rental Sector (Convenant Energiebesparing Huursector).

Other notable examples include

[4] See footnote 3

- the Landlords Energy Saving Allowance in the UK, a financial incentive that allows landlords of domestic rented properties to claim tax relief of up to £1,500 per property for the costs of buying and installing energy-saving products,
- the national programme for energy efficiency of multi-family buildings in Bulgaria, which has been designed in a way to ensure that responsibilities are clearly defined/distributed between executing parties, and
- the Call 4c2.2 'Energy renovation of multi-apartment buildings' in Croatia.

In Flanders (Belgium), a reform has been introduced to enable multi-apartment building owners' associations to apply for grants related to the retrofit of buildings' communal parts.

The Eco Fund in Slovenia announced a public call on 12 August 2016, titled '41SUB-OBPO16 Non-refundable financial incentives for new joint ventures to improve the energy efficiency of older multi-dwelling buildings', i.e. buildings with three or more flats, in the territory of the Republic of Slovenia.

### 4.1.3 Other measures

Measures going beyond legislative and financial actions have also been identified.

Finland and the Netherlands have taken steps to promote the concept of green leases in the non-residential sector. Green leases can play an important role in establishing a dialogue between tenants and landlords which can enable both parties to minimise adverse environmental impact in areas such as energy, water and waste. This type of leases has gained increasing popularity in the past few years in the U.S. and Australia, but they are not yet widely used in Europe. In Finland, some contracts in the public sector with positive results have taken place. To set an example in the public sector, Senate Properties developed the first Green Lease contracts in 2011, under which the landlord (Senate Properties) and tenants (state-owned public bodies) have had no obstacles to implementing energy efficiency measures. In 2015 the State stopped using Green Lease agreements in central government, and moved to a single model agreement in which Senate Properties (the lessor) and the tenant (a ministry, agency, or institute) mutually agree on the energy-efficient use of the property and reporting. In the Netherlands, the Sustainable Housing Platform has created the Green Lease Guidelines and the Green Lease Menu online tool to promote sustainable leases for buildings.

Measures targeting information raising and education are also important. In Slovenia, training courses for managers of multi-dwelling buildings were organised by the ZRMK Building and Civil Engineering Institute, which offered six free courses for managers of multi-dwelling buildings who prepare projects for comprehensive energy renovations of buildings. The training covered the field of regulations governing the technical and architectural properties of buildings, the measures for efficient energy use, the use of renewable resources, the preparation of project/technical documentation and the financing of energy renovation measures.

## 4.2 Public procurement

Measures addressing various legal, administrative and regulatory barriers that may hinder public purchasing and annual budgeting and accounting in the public sector, as reported in compliance with the EED Article 19(1)(b), are presented in Table 2. These may deter individual public bodies from making investments in improving energy efficiency and minimising expected life-cycle costs and from using energy performance contracting and other third-party financing mechanisms on a long-term contractual basis. Measures to remove barriers may include providing incentives, repealing or amending legal or regulatory provisions, or adopting guidelines and interpretative communications,

or simplifying administrative procedures. The measures may be combined with the provision of education, training and specific information and technical assistance on energy efficiency.

Most countries have informed the European Commission about legislative actions, specifically focusing on the promotion of energy efficiency in public procurement. This includes Austria, Bulgaria, Cyprus, Denmark, France, Lithuania, Latvia, Poland, Portugal, Romania and Slovenia.

In Portugal, measures were taken through the National Strategy for Green Public Procurement 2020, Decision No 38/2016 of the Cabinet of Ministers of 29 July 2016, which promotes resource efficiency, minimised environmental impacts, boost of supply in the goods and services market and public works projects with a lower environmental impact at all stages of their lifecycle.

In Bulgaria, a new legislation in December 2016 introduced rules and requirements for the supply of high-efficiency products relating to the consumption of energy, as a condition for the award of public procurement contracts by public bodies when the contract amounts exceed certain thresholds. A list of the products in question has been published on the website of the Ministry of Economy.

Denmark revised its Danish circular on energy efficiency in state institutions in order to expand the requirement for energy efficient procurement in the public sector and encompass the procurement of services where profitable based on an assessment of socio-economic and environmental factors.

Information, awareness-raising and educational measures have been reported by Cyprus, Germany, France, Italy and Sweden:

- Cyprus has been holding information campaigns towards public authorities with training on best practices and giving out support documents from other Member States on energy efficiency contracting.
- In Germany, the Alliance for sustainable procurement provides for a systematic exchange of experience between major public procurement bodies and contributes to greater use of uniform national and international sustainability standards. The Alliance is supported by the Competence centre for sustainable public procurement, set up as a department within the Procurement Office of the Federal Ministry of the Interior. The competence centre assists public contracting authorities with specific issues through a comprehensive web site, a telephone and e-mail hotline and on-site training.
- The Italian National Agency for New Technologies, Energy and Sustainable Economic Development (ENEA) drafted the latest version of the model contract and the energy performance contracting guidelines for government bodies in accordance with Article 14(4) of Legislative Decree No 102/2014 in 2017. The document consists of guidelines for preparing Energy Performance Contracts (EPCs) for buildings, a model Energy Performance Contract (EPC) for buildings and model technical specifications for buildings.
- In France procurement guides have been developed by the Public Purchasing Economic Observatory with the aim to give recommendations for several types of products and encourage all public bodies towards a more energy efficient procurement policy.

**Table 2. Overview of policies and measures reported to address Article 19(1)(b) barriers**

| | NB* | LEGAL | FINANCIAL | OTHER |
|---|---|---|---|---|
| AT | | Article 19(5) of the Federal Procurement Act. Environmental aspects must be included in procurements process | | |
| BE | | | | |
| BG | | New 2016 legislation introducing rules and requirements for the supply of high-efficiency products as a condition for the award of public procurement contracts | | |
| CY | | Law on Energy Efficiency in End Use and Energy Services | | Information campaigns towards public authorities |
| CZ | X | | | |
| DE | | | | "Alliance for sustainable procurement" enabling experience exchange between major public procurement bodies |
| DK | | Revision of Danish circular on energy efficiency in state institutions "No 9477 of 2 July 2014 | | |
| EE | NA | | | |
| EL | NA | | | |
| ES | NA | | | |
| FI | X | | | |
| FR | | National Action Plan for sustainable public purchasing | | Public purchasing economic observatory; |
| HR | NA | | | |
| HU | X | | | |
| IE | NA | | | |
| IT | | | | EPC guidelines for government bodies; EPC contract that meets the requirements for the public sector |
| LT | | Resolution No 1480 amendment | | |
| LU | X | | | |
| LV | | Public procurement law; Energy efficiency law; Cabinet Regulation No 353 of 20 June 2017 on requirements for green public procurement | | |
| MT | X | | | |
| NL | NA | | | |
| PL | | Public-Private Partnership Act | | |
| PT | | National Strategy for Green Public Procurement | | |
| RO | | Law No 98/2016 on public procurement; Law No 99/2016 on sector procurement; Government Decision No 395/2016; Government Decision No 394/2016 | | |
| SE | | | State aid for improving energy efficiency in local authorities | Information initiatives for energy-efficient procurement; |
| SI | | Green Public Procurement Decree Amendment | | |
| SK | | - | - | - |
| UK | X | | | |

*NB (Not Barrier): Barriers in relation to Article 19(1)(b) have been declared as insignificant
NA (Not Addressed): Article 19(1)(b) is not addressed in official reporting to EC by national authorities

Financial-related measures were mentioned only by Sweden where the State aid for improving energy efficiency in local authorities in Sweden has been put in place since 2010.

More than a third of all countries (namely, Belgium, Croatia, Czech Republic, Estonia, Greece, Spain, Finland, Hungary, Ireland, Luxembourg, the Netherlands, and the UK) have reported no measures under Article 19(1)(b). This is either because Article 19(1)(b) was not addressed in the official reporting submitted to the European Commission or because it was specifically concluded that there are no specific legal or regulatory provisions, or administrative practices, regarding public purchasing and annual budgeting and accounting that act as a barrier to investment in energy efficiency measures. The latter group included Czech Republic, Finland, Hungary, Luxembourg, Malta and the UK.

It should be also noted that some Member States have not addressed the issue of public procurement under Article 19 as all public procurement information was reported under the reporting requirements of Article 6 of the EED.

# 5 Country sheets

**Important note**

The following country sheets are based on the information submitted by Member States. Any assessment given or view expressed in the text reflects the assessment or view of national authority officials and **not** the Commission's own interpretation.

## Austria

### Article 19(1)(a)

***Commonhold Act***

On the split incentive barrier removal, Austria has indicated the development of its Work Programme of the Austrian Federal Government 2013-2018 in its 2014 National Energy Efficiency Action Plan. In its Affordable housing section, the Commonhold Act specifies the extent of allocation of funds to reserves, which should make it easier to perform renovations. The legislation specifies that the apartment owners may set the level of periodic payments but it does not mention any specific amount to be allocated to reserves.

***Non-Profit Housing Act***

According to the 2017 Austrian NEEAP, a new legislative measure was approved through the amendment, in 2015, to the Non-Profit Housing Act, allowing the use of energy saving contracting in the non-profit housing sector. Costs for reducing consumption can be covered from rent components dependent on energy consumption. The energy costs saved can be used for the financing of EE actions. The savings are permitted to be used for refinancing over a period of at most 15 years, which after that, the savings must benefit the tenants.

***Decision-making process in residents' meetings***

The Affordable housing section refers to the "decision-making" process in the residents' measures, that relates, for example, to arrangements that must be agreed unanimously by all apartment owners, concerning for example the mortgage collateral for a renovation loan.

### Article 19(1)(b)

Regarding the EED Article 19 (b), a legal provision is outlined in Article 19(5) of the Federal Procurement Act. This provision stipulates that environmental compatibility must be taken into account in the public procurement process. This may be achieved, in particular, by including environmental aspects (such as final energy efficiency) in the performance or technical specifications or by defining concrete environmental criteria for awarding contracts.

# Belgium

## Article 19(1)(a)

### Belgium Brussels

***"Energy saving investment" rent charge***

In the 2017 NEEAP of the Belgium Brussels capital, concerning Article 19, no specific reference is made on how possible regulatory and non-regulatory barriers are removed. However the building renovation strategy enclosed in the NEEAP (EED Article 4) makes a reference to the following mechanism: based on the system of rental charges, this mechanism aims to pass on part of the cost of energy saving works to the tenants, as long as this impact remains lower than the economy on the tenant's energy bill. In the short term, the pass-through principle will be realized via a new "energy saving investment" charge. The addition of a rental charge during the lease is possible as long as there is mutual agreement between the parties (tenant and owner). The benefit of such investments will ultimately be passed on to the tenant who will be subject to a new charge for "energy saving investment" decrease through additional financial support.

The PACE programme plans to test this mechanism through a pilot project. Its implementation began in September 2015. This project aims to validate the principle of this mechanism and identify the tools that must be made available by the regional authorities to enable the mechanism to deliver its effects. The closing of the pilot project and the resulting recommendations are expected in May 2017.

### Belgium Flanders

The Belgian Flanders NEEAP concerning Article 19(1)(a) does not extensively address the removal of regulatory and non-regulatory barriers. The description of measures implemented to remove these barriers focuses on a reform allowing multi-apartment building owners' associations to apply for grants related to the retrofit of buildings communal parts. However, the Flemish "Action Plan Energy Renovation" also includes a section 3.3.6 on "Action plan for the problem-solving of the tenant-lessor problem", where various recommendations are set out.

### BE Wallonia

The Walloon Energy Efficiency assessments, both the NEEAP 2014 and the NEEAP 2017 do not address the issues of the removal of barriers for both split incentives.

## Article 19(1)(b)

None of the regional energy efficiency action plans mention any measures regarding the removal of barriers stipulated in Article 19 (1)(b).

## Bulgaria

### Article 19 (1)(a)

***National programme for energy efficiency of multi-family buildings.*** According to the Bulgarian 2017 NEEAP, the national programme for energy efficiency of multi-family buildings has been designed in a way to ensure that the distribution of responsibilities are clearly defined between the executing parties. The National programme is aimed at providing better living conditions to occupants of multi-family buildings, heat comfort, and higher quality of living environment. Under the Programme, financial and organisational support is provided to registered owners' associations. Buildings with approved applications conclude contracts with municipalities and can receive up to 100 % grant paid from Municipality.

The share of rental properties is relatively low (around 15%), with the share of mainly owner-occupied properties remaining stable. In this sense, Bulgaria sees no conflict between the interests of owners and tenants in relation to energy efficiency upgrade actions of residential buildings.

With an amendment made in the legislation in December 2016, when a building or self-contained units within a building are rented, the lessor must provide to the lessee a copy of the certificate attesting to the energy characteristics of the building. The specific annual consumption of primary energy in kWh/m2 indicated in the certificate must be published in all rental advertisements. The awareness of the tenant of the energy characteristics of the building/property rented, should lower demand for buildings/properties with inefficient energy characteristics and acts as an incentive for lessors to improve the energy efficiency of the buildings/properties they wish to let.

### Article 19 (1)(b)

In terms of the measures that have been taken to ensure that public purchasing rules do not deter public bodies from improving energy efficiency, also with a new piece of legislation in December 2016 which has introduced rules and requirements for the supply of high-efficiency products relating to the consumption of energy, as a condition for the award of public procurement contracts by public bodies when the contract amounts exceed certain thresholds. A list of the products in question has been published on the website of the Ministry of Economy.

## Cyprus

In the 2014 and 2017 National Energy Efficiency plans, no new measures addressing split incentives and procedures ensuring that individual public bodies can make energy efficiency investments are mentioned.

### Article 19 (1)(a)

***Law on Energy efficiency in End Use and Energy Services.*** The draft law on Energy Efficiency in end use and Energy services addresses split incentives between the owner and the tenant of a building or among owners, with a view to ensuring that these parties are not deterred from making efficiency-improving investments 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.

The EC JRC report entitled 'Split incentives and energy efficiency in Cyprus', provides an analysis of the roadblocks to the energy upgrading of buildings due to the current structure of the real estate market. Several proposals have been proposed to overcome the roadblocks, which can be implemented in Cyprus like, strengthening the application of the legislation on the issuance of energy performance certificates when buildings are rented, fostering the installation of energy meters in each apartment and fostering policies for simplifying the decision-making process for buildings owned by several owners.

The ***Save & Upgrade Programme*** is a co-financed grant scheme for the 2014-2020 period that aims of the improvement of energy performance of the building stock. This programme has attempted to provide solutions to the barriers identified of preventing the energy upgrading of rented or multi-owner buildings. Buildings that were rented could also be included in the scheme. As for SMEs, the SME using the rented building or owning it and rented it out to another party can be the applicant and beneficiary of the grant.

### Article 19 (1) (b)

***Law on Energy efficiency in End Use and Energy Services.*** The same amending law on Energy Efficiency in end use and Energy services addresses the procedures to be applied with a view to ensuring that individual public bodies are facilitated to make investments in improving energy efficiency and to outsource a part of the services included in long-term energy performance contracting.

***Information campaigns.*** Cyprus has also been holding information campaigns towards public authorities, like the Union of Cyprus Municipalities and the Union of Cyprus Communities (to inform its members), with training on best practices and giving out support documents from other Member States on energy efficiency contracting. Energy efficiency contract templates have been posted on the website of the Ministry of Energy, Commerce, Industry and Tourism for potential users to adapt.

## Czech Republic

### Article 19 (1) (a)

On measures addressing the split of incentives between building owners and tenants or among owners in accordance with Article 19(1)(a) of the EED, the Czech authorities refer that the barriers on split incentives were not identified based on the results of the analysis carried out during the preparation of energy efficiency strategic documents, so for this reason, no concrete actions were needed.

Czech authorities have two relevant investment schemes that have been running since 2014. The first one is the Integrated Regional Operational Programme financed from the ESIF and the second is a national programme New Green Savings, financed from the profits from the sales of emission allowances. Both of these schemes provide public financing for multi-apartment building owners associations for complex building renovations including those with rented apartments.

### Article 19 (1) (b)

In regard to the measures being taken to ensure that public purchasing rules and annual budgeting and accounting practices do not deter public bodies from improving energy efficiency, minimising life cycle costs and energy performance contracting, after an evaluation in accordance with Article 19(1) of the Directive, the Czech authorities affirm that the barriers referred to by the Directive were not identified in practice, and no concrete measures were needed to be implemented by the Czech authorities.

## Germany

### Article 19(1)(a)

The revision of the Tenancy Law Amendment Act in 2013 has been made in order to address the legal obstacles regarding split incentives. Under this provision, the tenant has to bear the costs of heat supplies as operating costs where the heat is delivered with greater efficiency either from a new plant erected by the contractor or from a heat network and the costs of heat supplies after the switch to contracting do not exceed the operating costs for the previous independent supplies of heat or hot water.

### Article 19(1)(b)

To support the increased incorporation of sustainability (and hence also energy efficiency aspects), the Federal Government, Länder and municipalities have been collaborating since 2010 in the 'Alliance for sustainable procurement'. The Alliance provides for a systematic exchange of experience between the major public procurement bodies and should contribute to greater use of uniform national and international sustainability standards at all three levels – national, regional and municipal. Energy efficiency aspects are also taken into account here. The Alliance is supported by the 'Competence centre for sustainable public procurement' [Kompetenzstelle für Nachhaltige Beschaffung – KNB], set up as a department within the Procurement Office of the Federal Ministry of the Interior. The competence centre assists public contracting authorities with specific issues through a comprehensive web site, a telephone and e-mail hotline and on-site training. The German authorities believe that is no reason to think that German public procurement law imposes specific legal or other barriers to considerations of energy efficiency.

## Denmark

### Article 19(1)(a)

In May 2014, the Rent Act was amended through the 'Act amending the Act on rent, the Act on temporary regulation of housing conditions, the Act on urban renewal and the development of urban areas and various other acts'. This was amended in order to make energy savings measures more attractive for both landlords and tenants as required by Art. 19 of the EED. The Act aims at ensuring that gains deriving from energy improvements in private rented properties will be split between the landlords and the tenants. Specifically, a landlord can demand an increase in rent for completed energy saving measures, e.g. concerning the building envelope which results in energy savings for the tenants in the property. This increase must be based on the total expenses which have reasonably been incurred in carrying out the work and may not exceed the saving that the measure entails for the tenants.

### Article 19(1)(b)

In terms of Article 19(1)(b) and public procurement barriers, the revision of the Danish circular on energy efficiency in state institutions "No 9477 of 2 July 2014", the requirement for energy efficient public sector procurement was expanded to also encompass the procurement of services where this is profitable based on an assessment of socio-economic and environmental factors.

## Estonia

### Article 19(1)(a)

The Estonian NEEAPs stated that split incentives between the owners and the tenants is not a major issue due to the proportion of rented house being only around 15% of the total housing arrangements. No measures are planned to remove regulatory and non-regulatory barriers to energy efficiency.

In the case of commercial property, Estonia refers that a functioning market is key to solving the issues of split incentives and the Government's economic and fiscal policy aims to encourage investment and prevent market failures in the offering of commercial real estate. The Ministry of Economic Affairs and Communications monitors changes in the commercial real estate sector through the market surveys of real estate companies and to date has not identified barriers that might be a problem in terms of improving energy efficiency.

### Article 19(1)(b)

No reference on the removal of barriers regarding public purchasing and annual budgeting and accounting, as stipulated in Article 19(1)(b), is found in Estonia's National Energy Efficiency Action Plans (2014/2017)

## Greece

Greece has not identified any barriers to energy efficiency both in relation to split incentives and public procurement, as stipulated in Article 19(1)(a)/(b).

## Spain

### Article 19(1)(a)

***Law 19/2009 of 23 November 2009.*** Regarding the removal of barriers impeding split incentives initiatives, Spain has implemented the Law 19/2009 of 23 November 2009 on measures to promote and speed up building rental proceedings and energy efficiency, which introduced several changes to the wording of the Horizontal Property Act 49/1960 of 21 July 1960. Article 17(3) of the Horizontal Property Act states that the installation or removal of equipment or systems which improve the energy efficiency of a property shall require a vote in favour from three fifths of the owners who, in turn, represent three fifths of the shares in the building. This new draft facilitates the adoption of agreements, where previously they had to be adopted by unanimity.

### Article 19(1)(b)

Spain has stressed its disagreement with the accounting treatment applicable to energy efficiency contracts entered into by the public sector. As described in the Spanish NEEAP 2017, the current accounting rules for energy performance contracts (EPCs) in the public sector make it obligatory to enter the entire energy efficiency investment into the accounts as public expenditure, even where that investment is undertaken and financed, wholly or in part, by the private sector, except where the investment represents 50 % of the value of the asset after the action. According to the Spanish authorities, this is currently acting as a significant brake on implementation of energy efficiency measures by the public sector and, therefore, it is impeding the development of the energy services market in countries which, like Spain, are subject to very strict fiscal controls. Spain has requested to increase the flexibility of European rules on national accounting applicable to the EPCs undertaken by the public sector. The undertaking of new energy efficiency commitments is therefore subject to clarification of the accounting rules that will become applicable.

## Finland

### Article 19(1)(a)

***Green Leases.*** Finland has stated in both its EED NEEAPs (2014/2017) that it does not have legislative barriers preventing landlords and tenants from agreeing to implement energy efficiency measures. The "Green Lease" is pointed out as a measure to be noted, where costs are passed through the service charges. To set an example in the public sector, Senate Properties developed the first Green Lease contracts in 2011. With regard to state-owned properties, the landlord (Senate Properties) and tenants (state-owned public bodies) have had no obstacles to implementing energy efficiency measures. In 2015 the State stopped using Green Lease agreements in central government, and moved to a single model agreement in which Senate Properties (the lessor) and the tenant (a ministry, agency, or institute) mutually agree on the energy-efficient use of the property and reporting.

***Commercial Properties Action plan -*** Another measure directly associated to split incentives is promoted in the Commercial Properties Action Plan that is associated with the energy efficiency agreements for the property sector and obliges the promotion of energy-efficient tenancy and service agreement practices.

No limitations have been placed on the application of agreements. Finland has a far-reaching system of freedom of contract on the basis of which parties can, by mutual agreement, agree on the division of costs and benefits as they wish. General provisions on leases are set out in the Act on Residential Leases (481/1995) and the Act on Commercial Leases (482/1995). In practice, the interested parties mutually agree on the key terms in the rental contract.

### Article 19(1)(b)

Finland has declared, in its EED NEEAPs to not having legislative barriers preventing the public sector from acquiring energy-efficient technology or from implementing energy efficiency investments when these are technically and economically feasible. Finland also considers not having any barriers that would limit access to ESCO services.

## France

### Article 19(1)(a)

Regarding the removal of barriers impeding the improvement of split incentive initiatives, France introduced amendments to the Construction and Housing Code[5] in order to make energy efficiency measures more attractive for both landlords and tenants and to facilitate the renovation of houses removing current obstacles as required by Art. 19 (1)(a). The amendments concern the rules related to the decisions of the works to be carried out in the case of jointly owned properties. These include a majority voting system as the main decision making procedure on the performance of work in the common interest in private parts, at the expense of the joint owner concerned. A majority vote of the joint owners was also introduced for the installation of heat meters or heat cost allocators. In any building equipped with a block heating or cooling system, the amendment makes it mandatory to include an item relating to an energy saving work plan or an energy performance contract on the agenda of the joint owners' general meeting following an energy performance diagnosis – or, where applicable, an energy audit

In order to establish a win-win situation between the landlord and the tenants, a Law adopted in 2009 allows the landlord to request the tenants to make a contribution of up to half of the cost savings achieved (over 15-year time period) in case the landlord implement a package of energy efficiency work with at least two measures or permitting the achievement of a minimal performance level and has consulted its tenant.

### Article 19(1)(b)

Regarding public procurement, in order to encourage all public bodies towards a more energy efficient procurement policy, procurement guides have been developed by the Observatoire économique de l'achat public (OEAP) (Public purchasing economic observatory). Not specifically tackling the removal of regulatory barriers, these guides give recommendations for several types of products and among the latest publications, a guide to public purchasing as a response to climate challenges and an introduction to taking account of the life cycle cost in a consultation was published in 2016.

In addition, the PNAAPD (plan national d'action pour les achats publics durables – national action plan for sustainable public purchasing) 2015-2020 identifies sustainable public purchasing as a genuine instrument for supporting environmental policies and sets targets for 2020. These include 25 % of contracts concluded during the year containing at least one social provision; 30 % of contracts concluded during the year containing at least one environmental provision; at the requirement definition stage, 100 % of contracts being the subject of a comprehensive analysis intended to define whether sustainable development objectives can be taken into account in the contract.

[5] Article L.111-9 of the Code on Construction and Housing introduced by the law dated 13 July 2005

## Croatia

### Article 19(1)(a)

A regulatory obstacle to the implementation of energy renovation of multifamily housing stems from the provisions of the Act on Ownership which regulates that the consent of all residents (100 % consent) is required for the renovation of a building. Such a regulation hinders the implementation of energy efficiency measures, especially for large buildings which have the largest potential.

Since 2014, energy renovation of multi-apartment buildings is not based on the Property Ownership Act but on the Energy Efficiency Act, defining the energy renovation of buildings as an energy efficiency measure aimed at improving energy performance of buildings or their elements, and the basic requirement – energy management and preservation of heat, where energy efficiency measures include:

- energy audit and energy certification of buildings required for energy renovation,
- elaboration of project documentation for energy renovation of buildings proving energy savings,
- increase of heating protection of the building envelope,
- upgrading of technical systems of buildings including technical equipment for heating, cooling, ventilation, air-conditioning and preparation of hot water, the system of illumination, and the system of automatization and the management of buildings or their elements, and
- introducing renewable sources of energy.

In addition, Article 29 of the Energy Efficiency Act prescribes that the decision on concluding energy performance contracts in multi-apartment buildings with energy services providers is made on the basis of the majority (more than one half) of the co-owners' votes. The majority is based on the co-ownership shares and the number of co-owners. Article 30 of the Energy Efficiency Act equally prescribes that the decision on concluding the works contract for energy renovation in multi-apartment buildings is made on the basis of the majority (more than one half) of the co-owners' votes based on the co-ownership shares and the number of co-owners.

The Call 4c2.2 'Energy renovation of multi-apartment buildings' between 7 October 2016 and 31 January 2017 was based on the criteria of the majority votes of co-owners. A decision of co-financing multi-apartment buildings was made following this call.

### Article 19(1)(b)

No information has been provided on steps taken to ensure that public purchasing rules and annual budgeting and accounting practices do not deter public bodies from improving energy efficiency, minimising life cycle costs and energy performance contracting.

## Hungary

### Article 19(1)(a)

In Hungary, the overwhelming majority of homes are owned by the occupants. As relatively short-term lease contracts are typical of the residential property market, splitting the incentives, costs and benefits of energy efficiency projects is relevant in the case of owners of co-owned properties rather than between owners and tenants.

The main ownership models in Hungary are: (1) joint ownership, (2) co-ownership and (3) housing cooperatives.

***Under a joint ownership model,*** each joint owner has proprietary rights over the entire property, without prejudice to the rights of other joint owners, to the extent of his/her specific incorporeal interest. In practice, the division of possession and use is governed by the relevant agreement between the parties. Regarding expenses that do not go beyond possession, use, exploitation and the normal management of property, joint owners shall take majority decisions in which the voting rights of each joint owner correspond to their share in the property. Decisions regarding expenses beyond the normal management of property require unanimous resolution by the joint owners. Projects that do not go beyond the normal management of property include works, expenses and investments not intended to prevent deterioration or damage and, therefore, while not being absolutely necessary, they are useful and do not require disproportionate expenditure compared to the method and circumstances of the management of the property.

In accordance with the above, the Hungarian authorities view that the decision-making procedures and the provisions regarding the splitting of costs and benefits are sufficiently and adequately regulated, and therefore, there is no need to remove regulatory gaps or barriers in buildings under joint ownership in Hungary.

***Under the co-ownership model,*** apartments are separately owned by the co-owners while parts, equipment, rooms or apartments of the building that are not specified as being separately owned are placed in the joint ownership of co-owners. Such unity of joint and separate proprietary rights give rise to the special character of buildings under co-ownership and the need for special legislation. Special provisions regarding buildings under co-ownership are set out in Act CXXXIII of 2003 on buildings under co-ownership, including the provisions concerning the organisation of buildings under co-ownership and the exercising of proprietary rights over co-owned and separately owned parts of the building. The rules concerning the use and exploitation of apartments in separate ownership are set out in the internal rules of operation of the building under co-ownership.

As a general rule, costs of the maintenance of co-owned parts of the building, equipment constituting part of the building, rooms for non-residential purposes and co-owned apartments and expenditure beyond the normal management of property are borne by the co-owners as joint expenses in proportion with the share of each co-owner.

The general meeting of co-owners, as the main decision-making body of the community, shall have exclusive discretion over the use, exploitation and maintenance of co-owned parts of the building, expenditure beyond the normal management of property and obligations borne by the community. At the general meeting, co-owners have voting rights in proportion with their share in the property and take decisions by the simple majority of co-owners turning up for the vote, based on their respective share in the property. The unanimous resolution of all co-owners is, however, required for expenses beyond the normal management of property.

The terms ‘renovation and modernisation of buildings’ and ‘expenditure beyond the normal management of property’ are defined respectively in Section 56(2)(3) and

Section 56(3) of the Act on buildings under co-ownership. Since, on the basis of the above definitions, the renovation and modernisation of buildings in order to improve energy efficiency are not expenses beyond the normal management of property, such projects do not require unanimous consent by co-owners.

On the basis of the above, it is established by the Hungarian authorities that decision-making procedures in connection with buildings under co-ownership and the rules of splitting costs and benefits do not hinder energy efficiency and, therefore, no regulatory deficiencies or barriers need to be removed in that respect either.

***For housing cooperatives,*** the rules concerning the organisation, operation and property management and legal relationship between housing cooperatives and its members are provided for in Act CXV on housing cooperatives.

Housing cooperatives are economic entities established for the construction and maintenance of residential buildings whose members may include natural persons and incorporated and unincorporated entities. Housing cooperatives do not pursue a profit and carry out their activities for itself, its members and owners who are not members of the housing cooperative.

The financing of the activity of a housing cooperative is generated from payments by members for construction, payments by members and non-member owners for maintenance (operation, maintenance and renovation) and from other revenues of the housing cooperative. The initial general meeting sets out the conditions of construction and maintenance-related payments by members, whereas the rules of financing and splitting construction and maintenance costs are specified in the statutes of the housing cooperative.

In the housing cooperative, apartments are in the ownership of members, non-member owners or the housing cooperative. Where the apartments are in the ownership of members, the plot pertaining to the building, the building structures, common areas and rooms of the buildings, the central equipment, the caretaker's apartment and other buildings and assets serving the needs of the housing cooperative are in the ownership of the housing cooperative. The general meeting takes its decisions by open ballot, by the votes of more than 50 % of members turning up for the vote. Considering that the Act on housing cooperatives does not provide for the need of a unanimous vote regarding renovation, including renovation and modernisation in order to improve energy efficiency, decisions on such matters shall be made by more than 50% of the members turning up for the vote.

Having assessed the legislation concerning housing cooperatives, it is again established by the Hungarian authorities that the decision-making procedures in connection with buildings owned by a housing cooperative and the rules of splitting costs and benefits do not hinder energy efficiency and, therefore, in the opinion of the person submitting the report, no regulatory deficiencies or barriers need to be removed in that respect either.

**Article 19(1)(b)**

In the sphere of public procurement procedures, the Public Procurement Act provides a number of possibilities for taking environmental protection factors into consideration. Of these, it is worth mentioning the following:

- the preparation of public procurement procedures: even during the preparatory phase of the public procurement procedure, the contracting authority has to endeavour to ensure the conditions for high-quality performance, environmental protection (as applicable to the purchased object), and sustainability, as well as to prevent any contract amendments affecting the subject of the procurement [Section 28(1) of the Public Procurement Act].

- grounds for exclusion: the contracting authority may stipulate that an economic operator who has failed to comply with relevant environmental protection, labour, or social requirements, as established by a final court or administrative decision, or its review, within the past three years, may not participate in the proceedings. [Section 63(1)(a) of the Public Procurement Act]
- nullification: a tender that does not meet the applicable environmental protection, labour, and social legal requirements will be considered null [Section 73(4) of the Public Procurement Act].
- assessment: the new Public Procurement Act provides a very limited range of opportunities for using the price as the only assessment criterion; as a general rule, contracting authorities are obligated to assess tenders according to the lowest cost or the best price/benefit ratio. The best price/benefit aspects can also apply to social, environmental protection, and innovative aspects. [Section 76(1)-(5) of the Public Procurement Act]
- contractual conditions: the contracting authority may lay down specific conditions for the performance of the contract, in particular social, environmental protection, and innovation incentives [Section 132(1) of the Public Procurement Act].

The detailed rules pertaining to the above provisions are included in the implementing regulations issued on the basis of the authorisation provided by the Public Procurement Act (see point 8).

In addition to the above, there is no regulatory limit regarding accounting either that would impede the implementation of EE projects.

# Ireland

### Article 19(1)(a)

Ireland has stated in its NEEAP 2017 that the issue of split incentives is extremely challenging. Rented properties are typically less energy efficient than owner occupied housing. This situation is likely to continue in the absence of Government intervention. To encourage both property owners and tenants to undertake energy efficiency measures, there is a need to highlight the benefits of energy efficiency and complement any regulatory measures with support schemes.

In May 2014, the Irish Government published its strategy document Construction 2020 - A Strategy for a Renewed Construction Sector. Article 7 of this Strategy required DCCAE, DHPCLG and the SEAI to "establish a working group and invite public comment on the feasibility and impact of setting minimum thermal efficiency performance standards in properties offered for rent or lease in the residential and commercial sectors". This working group developed an evidence base on the likely positive and negative impacts of such a policy in the rental sector, along with a report on the potential impacts in the social housing sector.

In the autumn 2018 Ireland set up a new dedicated entity to address the challenges in the rental sector – the Rental Sector Energy Efficiency Advisory Group (with representation from the key stakeholders). This Group will further analyse the situation including on identifying appropriate approaches that would help to address the split incentive problem and will make recommendations which will be subject to public consultation in 2019.

### Article 19(1)(b)

Ireland has not stated any information on government procurement rules or annual budgeting and accounting practices that could discourage public bodies from improving energy efficiency. No measures are mentioned for Art. 19(1)(b)).

# Italy

## Article 19(1)(a)

In Italy , according to the ISTAT yearbook for 2015, 72 % of Italian families own the property that they live in. Quantitatively, the risk of split incentives may therefore be more important in multi-owner buildings than in owner-vs-tenant situations.

The most significant mechanism for promoting energy efficiency in the residential sector, which is tax relief on upgrading the energy performance of buildings, gives landlords the benefit of such measures for buildings that are let and allows them to keep that benefit even if the building ceases to be let.

In Italy, when properties are let (whether for civil or industrial use), the rules set out in Article 1592 of the Civil Code, 'Improvements', apply between tenant and landlord.

The provision in question states that if the tenant makes any improvements to the building being let and the landlord has given consent for those improvements, the landlord must pay compensation of the lesser of the cost of the work and the value of the result when the tenancy ends. The provision also states that 'Even if the tenant is not entitled to compensation, the value of the improvements may compensate for any deterioration that has occurred but that is not due to serious misconduct on the part of the tenant'.

According to the Italian authorities, the legal provision in question appears to be adequate for the purpose of ensuring any costs incurred by the tenant for energy efficiency improvements to the rented building (e.g. installation of a more modern heating system) are shared.

In addition to the above, in order to increase the number of projects carried out by ESCOs to improve the energy performance of buildings in the residential sector, the model EPC must include wordings that allow costs and benefits to be shared between user, building owner and ESCO on a triple-win basis that suits all the parties involved.

Possible solutions are being examined for the[6] following cases:

- Landlord and tenant sign the contract with the ESCO (option for public bodies in rented buildings, commercial properties, and also the residential sector)
- The landlord signs the contract with the ESCO:
    - an EPC contract with the transfer of savings (option for residential buildings, commercial office buildings);
    - an EPC contract with the costs paid by the landlord (option for residential buildings, commercial office buildings);
    - gradual upgrading of neighbourhoods (option for large social housing neighbourhoods).
- The user/tenant signs the contract with the ESCO: EPC contract with the owner's consent (option for departments in public organisations, long-term leases).

Of the regulatory barriers to energy efficiency removed with the transposition of Directive 2012/27/EU, the Italian authorities consider as the most significant the elimination of the graduated tariffs applied to domestic energy customers to cover the cost of network services (transmission, distribution and metering) and system overheads. Legislative Decree No 102/2014 contains specific provisions enabling the Authority to

[6] For more details see the project GuarantEE - Building energy services in Europe.

eliminate the current graduated structure of regulated tariff components; these provisions have been implemented by the Authority, which carried out a wide-ranging regulation impact analysis, which concluded following two consultations with Decision 582/2015/R/eel.

To sum up, the 'graduated' structure of the regulated tariff components applied to domestic users consists of the use of price bands (marginal prices) that increase as consumption decreases. This structure, which was introduced in Italy in the 1970s and maintained with few variations until its reform, constitutes a barrier to energy efficiency for two main reasons:

on the one hand, it disincentivises the spread of energy efficient technologies (such as induction hobs, heat pumps for heating and cooling and, in future, electric vehicles) that push end customers annual consumption into the upper price bands (with very high marginal prices);
on the other hand, the low marginal prices for the highest consumption bands (up to 1800 kWh/year for residential customers with a contract demand of 3.3 kW) are not an adequate incentive to promote investment in high-efficiency consumer products.

The reform was implemented gradually, as expressly provided for by Article 11(3) of Legislative Decree No 102/2014, from 1 January 2016 and will be complete as from 1 January 2018. The new tariff components for grid services have been structured so as to reflect the cost of the service.

As regards split incentives between owners in co-owned multi-occupancy buildings the Italian NEAP contains no information on measures taken.

**Article 19(1)(b)**

The Italian NEEAP stated that the scope of the EED provisions are considered very broad and their application guarantees adequate results in terms of ensuring public bodies are not deterred from improving energy efficiency, minimising life cycle costs and energy performance contracting. However, Italy has made provisions for the drafting of an EPC contract that meets the requirements for the public sector, in accordance with Annex XIII of the EED.

In March 2017 the latest version of the model contract and the energy performance contracting guidelines for government bodies was drafted by ENEA in accordance with Article 14(4) of Legislative Decree No 102/2014. The document is a complete revision of the first version of the guidelines, to bring it into line with new legislative provisions, primarily Legislative Decree No 50/2016, Italy's new public procurement code, and the Ministerial Decree of 11 January 2017 on the minimum environmental criteria. It consists of:

- Guidelines for preparing Energy Performance Contracts (EPCs) for buildings;
- a model Energy Performance Contract (EPC) for buildings;
- and model technical specifications for buildings.

A consultation with stakeholders will be held before the final text is drafted.

## Luxembourg

### Article 19(1)(a)

In developing the long-term strategy for mobilizing investments in the renovation of the building stock carried out in accordance with Article 4 of the Directive, Luxembourg has assessed the regulatory and non-regulatory barriers that hinder energy efficiency. The various obstacles identified are included in the chapter 3 of the Luxembourg Long term building Renovation Strategy, while the possible solutions developed are grouped together in Chapter 4. The problem of the "owner-tenant dilemma" has been tackled under the guise of financial barriers. The sharing of incentives between landlord and tenant is a very delicate subject and difficult to solve. Homeowners are reluctant to undertake expensive renovations in buildings they do not occupy, and tenants fear an increase in rent in case of energy renovation.

Two solutions were selected with a provisional timetable for implementation in 2019. Thus, it was decided to analyse, on the basis of pilot projects, the introduction of a rent including heating costs (Warmmiete) and introduction of a ban on rent increases in certain subsidy programs for energy retrofits.

### Article 19(1)(b)

Luxembourg has not identified any rules on government procurement or annual budgeting and accounting practices that could discourage public bodies from improving energy efficiency, minimizing expected costs across the life cycle and use of energy performance contracts. It should be noted that, in the context of the Climate Pact, the municipalities undertake a communal energy accounting system for their municipal infrastructure and facilities.

## Latvia

### Article 19(1)(a)

In Latvia, there are a number of legal provisions made regarding the governance issues in multi-apartment buildings, including on preventing the split incentives (provisions in the Law on Residential Tenancy):

- Article 1(1) of the Law on the administration of residential buildings provides that a residential house may be a building, which consists of a set of apartment properties, but Article 6(2)(1.f) provides that one of the mandatory building management activities ensuring that the minimal energy efficiency requirements are met.
- Article 10 of the Law on residential properties lays down duties of an apartment owner, including to implement decisions taken by the community of apartment owners, while the community of apartment owners is the administrative body of a residential building, that is divided into apartment properties, and the community includes all apartment owners of the residential building as set out in Article 15 of this Law.
- Article 2 of the Law on Residential Tenancy provides that the right to use a residential space (apartment) may be transferred to another person by the owner of the residential space (apartment). Article 40 of this Law provides that if major repairs or repairs are necessary to a residential building due to the fact that the residential building does not meet the requirements set out in legislation (including energy efficiency requirements), the renter and the tenant may agree that the tenant performs the necessary repairs or fully or partially covers the costs thereof. In such a case, the tenant has the right to an appropriate deduction in rent.

### Article 19(1)(b)

With regard to measures that have been taken to ensure that public purchasing rules and annual budgeting and accounting practices do not deter public bodies from improving energy efficiency minimising life cycle costs and energy performance contracting, Article 60 of the Law on public procurement provides for the possibility to conclude service contracts (including energy performance contracts). Article 14 of the Law on energy efficiency lays down special conditions for the state and local governments in energy performance contracting (the possibility for the State and local governments to conclude an energy performance contract for periods not exceeding 20 years) allowing the cost reduction during the life cycle to be taken into account in contracts. However, public authorities may undertake long-term liabilities (for a term exceeding five years) only under the conditions of public-private partnerships, leading to a time-consuming and complex administrative process[7]. In addition, the existing regulatory framework in Latvia allows municipalities to take loans only for specific purposes (e.g. renovation of nursery schools, schools, cultural buildings, implementation of EU funded projects), thus preventing the local governments to take loans for any project that achieves guaranteed energy savings. In order to promote practical involvement of public structures in the enhancement of energy efficiency, the Public Procurement Law includes the application of life cycle thinking in public procurements, while Article 19 sets out the requirements for green public procurement. Furthermore, Cabinet Regulation No 353 of 20 June 2017 on requirements for green public procurement and the procedure for their application lays down a methodology for life cycle costs, and it includes the conditions for concluding

[7] Summary paper of the National Level Round Table Discussion on Financing Energy Efficiency in Riga, Latvia, 26 April 2018.

energy performance enhancement contracts for management services contracts for buildings and IT systems.

## Lithuania

### Article 19(1)(a)

In Lithuania 95.6% of the apartments are owner-occupied. In accordance with Article 5 of Law No I-2455 of the Republic of Lithuania on State Support for the Renovation (Modernisation) of multi-apartment buildings, decisions on the implementation of a renovation project – such as approval of the investment plan, the borrowing of funds for preparing a part of the renovation project (technical detailed design), supervision of renovation project implementation, expert examination of the renovation project and the terms and conditions of the lending contract – are adopted by the owners of apartments and other premises by a majority vote, i.e. 50% plus one vote. The existing regulation ensures the implementation of renovation projects provided the majority of apartment owners approve.

### Article 19(1)(b)

The State Enterprise Energy Agency performed an assessment within the scope of Article 19 of the Directive and issued conclusions regarding regulatory and non-regulatory barriers to the promotion of energy efficiency. In the course of the assessment the existing legal framework was analysed and studies in the area of ESCO model implementation were performed and proposal were made to remove the barriers identified.

In order to remove legal and regulatory barriers in public procurement procedures an amendment was made to Resolution No 1480 of the Government of the Republic of Lithuania of 11 November 2009 which extended the time limit for acquiring public services for the renovation of public buildings using the ESCO model from three years to twenty years. This amendment enabled public building managers to renovate buildings with the help of the ESCO.

# Malta

## Article 19(1)(a)

According to the Maltese authorities as set out in the NEEAP 2017, the issue associated with split incentives is limited. About 76% of the occupied residential dwellings are owner-occupied (with or without ground rent). Such a high percentage is primarily motivated by the fact that owning property is seen as a good investment given the limited land available, and secondly the short commuting distance across the territory, which enables the purchasing and owning of one's own dwelling to be considered as a once in a lifetime investment, with people seldom moving house more than a few number of times during their lifetime. The increase in legal migration in the past two years is expected to bring a raise in percentage of the renting market. However, these leases are usually for short periods of less than 3 years and investing by the tenant would not be considered. Despite this, the NEEAP 2017 indicated the possibility of study in this sector, which will be conducted in 2018.

## Article 19(1)(b)

According to the Maltese authorities, the annual budgeting and accounting practices applied do not deter public bodies from improving energy efficiency, minimising the life cycle costs and energy performance contracting. This is because, when the Ministry for Finance compiles the budgetary forecasts for any forthcoming year, one of the indicators used is past expenditure trends and only under specific and material instances are budgets for expenditure or a recurrent nature reduced with respect to any forthcoming year. Hence, the public bodies do not experience any reduction in the recurrent budget, which could serve to deter the introduction of efficiency measures, in such cases. For example, the budget for utilities, which relates directly to energy efficiency, is either not decreased or else any decreases are generally allocated within the same category for operational expenditure, to be used by the departments on other initiatives.

Green Public Procurement (GPP) is applied in purchasing procedures, whereby public authorities seek to procure goods, services and works with a reduced environmental impact throughout their life cycle when compared to goods, services and works with the same primary function. GPP requires that all Contracting Authorities refer their tenders to a process of mandatory screening prior to publication.

## Netherlands

### Article 19(1)(a)

The Netherlands has taken the following measures to address the issue of split incentives:

**1. Housing Valuation System amendment**

The problem of the split incentive in social housing is tackled by the Housing Valuation System, in which investments in improving energy efficiency are encouraged by means of a points system based on the energy label. Prior to 2011, the rent ceiling was evaluated using a point system established in order to take into account various criteria such as the dwelling quality, location and size. This ceiling defined the maximum rent social landlords could charge. A bill, however, which was approved in March 2011, enabled the incorporation of the energy performance of the dwelling in the criteria list used in the evaluation. This change now offers landlords the opportunity to increase the rent if the energy label improves and thereby an opportunity to recuperate part of the investment costs for energy efficiency upgrades.

From 2016, the Central Government Real Estate Agency will also always take energy costs into account in housing costs.

**2. Green lease promotion**

For other buildings, the Sustainable Housing Platform has created the Green Lease Guidelines and the Green Lease Menu online tool to promote sustainable leases for buildings.

**3. National Energy-saving Fund and fund dedicated for landlords**

The Netherlands has established two revolving funds on the basis of the Housing Agreement (Woonakkoord) (Parliamentary papers II, 2012/2013, 32 847 no. 42) for the purposes of fleshing out the alternative policy measures pursuant to Article 7 of the Directive. A total of €150 million in public funds has been made available for them. A **National Energy-saving Fund** (Nationaal Energiebespaarfonds (NEF)) has been created with Rabobank and ASN Bank for owner-occupiers and owners' associations. The banks came on board through a public process and the fund, which was launched in 2014, is doing well. A **fund for landlords** has also been launched, which launched at the close of 2014 and where there is still room for improvement. The government is providing landlords in the social rental sector with a subsidy of € 400 million for investments in energy-efficiency in 2014-2018 with the aim of contributing to the objectives of the Energy-saving Agreement for the Rental Sector (Convenant Energiebesparing Huursector). Both funds assume a ratio of one-quarter public funds to three-quarters private sector money, providing a total incentive of €600 million.

### Article 19(1)(b)

No measures are mentioned for Art. 19(1)(b)).

## Poland

### Article 19(1)(a)

The Polish authorities have noted that the rental market in Poland is among the smallest in Europe, so it is believed that the scale of the potential problem of split incentives between building owners and tenants is small. It is also noted that current programmes, financial resources, and information centres competent for supporting improvement of the energy performance of buildings are widely and publicly available and can be used by both building owners and tenants, who – depending on the contractual clauses entered into when the rental relationship was established – can derive proportional benefits from measures taken to improve the energy performance of a building/part of a building. Matters related to the rights and obligations of tenants and building owners are governed by the Civil Code, and as such do not require additional legislative intervention in this respect.

### Article 19(1)(b)

As regards ensuring that energy performance contracts are entered into, a crucial role is played by the Public-Private Partnership Act. Under the Act, public bodies implement energy performance contracts through public-private partnerships they enter into. The Act sets out detailed rules for cooperation between public bodies and private partners (including ESCOs) to deliver joint projects.

Article 18a of the Public-Private Partnership Act stipulates that obligations stemming from PPP agreements are not included in the public debt and the public finance sector deficit in situations when the private partner assumes most of the risk associated with the construction, availability or demand, taking into account the impact on these risks of factors such as guarantees and financing by the public partner, or asset allocation after the expiry of the agreement.

Irrespective of the above, Poland also promotes integrating environmental aspects, including energy efficiency, into the core public procurement procedure, which is reflected in the 4th National Action Plan for Sustainable Public Procurement for 2017-2020, adopted on 7 April 2017 by the Committee for European Affairs. The plan includes a guide on "Life Cycle Costs (LCC)", which provides contracting authorities with information about how they can integrate the life-cycle cost criterion (as seen from the perspective of cost-effectiveness) into public procurement procedures. The guide includes energy-related products. It is available on the website of the Public Procurement Office:

https://www.uzp.gov.pl/_data/assets/pdf_file/0017/36107/Koszty_cyklu_zycia_LCC.pdf

## Portugal

### Article 19(1)(a)

No measures have been identified in relation to the split incentive issue in Portugal.

No evaluation of regulatory and non-regulatory barriers to energy efficiency has been performed. The national authorities considered that the national legislation on urban leases does not in any way limit the split of profits arising from investments in energy efficiency and therefore that there was no need to introduce any additional legislation..

### Article 19(1)(b)

Measures were taken via the publication of the National Strategy for Green Public Procurement [*Estratégia Nacional para as Compras Públicas Ecológicas - ENCPE*][8] 2020, Decision No 38/2016 of the Cabinet of Ministers of 29 July 2016, which promotes efficiency in how resources are used, minimising environmental impacts, boosting supply in the goods and services market and carrying out public works projects with a lower environmental impact at all stages of their lifecycle.

[8] 'Green public procurement' is understood to mean the purchase of goods and services considered to be of priority importance, the inclusion of environmental technical specifications and requirements in the precontractual stages, for implementation in the subsequent contract performance stage.

## Romania

### Article 19(1)(a)

The Romanian authorities have noted that there is a high rate of population living in houses in their private property and the share of tenants is far below the average in the European Union. In this context, according to the Romanian practice, the tenant's rights and obligations are set out in the tenancy agreement. No information has been provided on the current governance structure in multi-owner, multi-apartment buildings.

### Article 19(1)(b)

A number of barriers with regards to the deployment of energy efficiency measures in the public sector have been mentioned by the Romanian authorities:

**1. Energy efficiency contracts may affect the level of public debt**

According to the Eurostat recommendations[9] on identifying the accounting treatment of an investment achieved under a public-private partnership (having the same treatment as EPC), the following investment value criterion shall be taken into account: when the investment value exceeds 50% of the building value, it should be outlined off-balance sheet, while if it is below 50%, it should be listed on the balance sheet of the public authority in accordance with the legislation in force. In addition, other aspects such as risk sharing also need to be taken into account. Considering the significant risk undertaken by ESCOs, an important question to be addressed is whether the classification of the EPC as public debt or the 50% rule shall prevail.

The Ministry of Public Finance has not issued so far any direct opinion with regard to these issues.

**2. The SEAP modification**

In the field of public procurement, it is mandatory to use the electronic public procurement system (SEAP). Thus, the energy performance contracts should also be awarded in SEAP. However, SEAP is not currently adapted to complex EPCs because it predefines automatically the criterion of the "tender price" as the single financial assessment evaluation factor. As a provisional solution, in the "Description" field for the predefined assessment factor it is planned to introduce the option of "in accordance with the corresponding section in the Descriptive Documentation, the financial component of the assessment factors comprises the three assessment factors proposed", however the SEAP platform needs to be changed prospectively.

**3. Ownership**

Under Article 577 of the Civil Code, for construction works completed under a building permit obtained from the public authority, ownership is transferred when the relevant goods are integrated into the buildings covered by the EPC. Considering that the EPC is a services contract, the contribution from the public authority may be deemed advance payment for the services that are to be provided by ESCO in the Execution Phase. According to Government Decision No 264/2003, the advance payment payable by the Contracting Authority may only amount to 20 % of the EPC value.

We consider that the positive development in the period of assessment of the EPC issue was to identify the best method to implement the EPC under the public procurement procedure, i.e. competitive dialogue; however, this method is less used by the Romanian authorities. The underlying reason is that this procedure is less regulated than the other procedures and the authorities, particularly in the current circumstances, avoid taking the risk of using this method.

[9] Eurostat Guidance Note - the impact of energy performance contracts on government accounts August 2015

In terms of measures ensuring that national public purchasing rules, annual budgeting and accounting practices do not deter public bodies from improving energy efficiency, the reference regulatory framework for public procurement in Romania is mentioned. The new legislative package[10] in the field of public procurement, as adopted in May 2016 is the transposition into the national law of the applicable provisions of the new European directives[11] in the field of public procurement.

According to the conclusions of the Green Paper on the modernisation of EU public procurement policy Towards a more efficient European Procurement Market, one of the objectives of the new European legislative package is to enable procurers to use public procurement more efficiently with a view to fulfilling common objectives in the benefit of society. This major objective is transposed into the national public procurement law by Article 187(7) of Law No 98/2016 on public procurement and by Article 209(7) of Law No 99/2016 on sector procurement, according to which "the lowest cost shall be determined by the rate of return, using factors such as calculation of costs per life cycle".

The method of calculation of this award criterion is regulated by the national secondary legislation (Article 33 of Government Decision No 395/2016 approving the Detailed rules implementing the provisions on the award of public contracts/the framework contract in Law No 98/2016 on public procurement and Article 39 of Government Decision No 394/2016 approving the Detailed rules implementing the provisions on the award of the sector contract/framework contract in Law No 99/2016 on sector procurement), with the following specifications:

(1) The contracting authorities have the obligation to include in the award documentation all the necessary information for the financial calculation of each cost element included in the cost per life cycle.

(2) This information includes at least the following: the conditions, the environment and the intensity of use, the anticipated period of use and the period of use taken into account for the application of the award criterion and the comparison of tenders, the financial efforts that must be quantified for each cost element, the discount rate to be used for the financial calculation, the actual method of calculation of the cost per lifetime in the financial proposal, the contractual terms for monitoring the realization of the cost elements from the financial viewpoint and the effects generated by the realization/non-realization of the monetary quantifications of the cost elements for the purpose of comparing offers.

Moreover, a tertiary regulation has also been prepared with regard to the methodology for calculating the discount rate to be used in the award of public contracts under Order No 842/175/2016 of the President of the National Public Procurement Agency and the President of the National Prognosis Commission."

The national legislation in the field of central and local public finance does not preclude public bodies from foreseeing in their annual budget the amounts required for the improvement of energy efficiency.

[10] Law No 98/2016 *on public procurement*, as published in Official Gazette of Romania, Part I, No 390/23.5.2016, as subsequently amended and supplemented; Law No 99/2016 *on sector procurement*, as published in Official Gazette of Romania, Part I, No 391/23.5.2016, as subsequently amended and supplemented; Law No 100/2016 *on works and services concession*, as published in Official Gazette of Romania, Part I, No 392/23.5.2016, as subsequently amended and supplemented

[11] **Directive 2014/23/EU** of the European Parliament and of the Council of 26 February 2014 *on the award of concession contracts*; **Directive 2014/24/EU** of the European Parliament and of the Council of 26 February 2014 *on public procurement and repealing Directive 2004/18/EC*; **Directive 2014/25/EU** of the European Parliament and of the Council of 26 February 2014 *on procurement by entities operating in the water, energy, transport and postal services sectors and repealing Directive 2004/17/EC*

## Sweden

### Article 19(1)(a)

No measures.

Following a study on the assessment of barriers to investments on energy efficiency in existing buildings carried out in 2013[12] on behalf of the Swedish Government, it was concluded that there was no need to adopt any measures as split incentives were deemed to be a relatively minor problem. Tenancy agreements are predominantly based on the inclusive rent model in Sweden; that is, rent typically includes heating costs which are set on the basis of a model. While this type of tenancy agreement does not give rise to the traditional landlord-tenant dilemma, the tenant's incentive to conserve energy is typically undermined. To tackle the 'consumption problem' created by this type of lease model, the Swedish authorities note that there is a need to increase collaboration among stakeholders who negotiate and sign agreements on investments to improve energy efficiency and on ongoing energy costs specifically, or as part of broader negotiations.

### Article 19(1)(b)

A study commissioned by the Swedish authorities[13] with the aim to audit the public sector identified various barriers to improving energy efficiency in public bodies, including the failure to engage with administrative bodies, failure to produce steering documents for energy requirements in connection with procurement procedures, failure to give sufficient priority to such work in terms of time, lack of skills, short term approaches in budgeting methods, etc. Despite this, the Swedish Government concluded that no additional measures needed to be adopted to remove barriers associated with legislation and practice in the areas of public procurement, annual budgets and annual accounts. Instead, it is believed that a large number of existing instruments could help overcome the identified issues, including various information programmes and regulatory minimum requirements, etc. This include a broad portfolio of information initiatives aimed at energy-efficient procurement by the Swedish Environmental Management Council, a benchmarking network for authorities with a focus on measures to reduce their own energy consumption and state aid for improving energy efficiency at local authorities and county councils since 2010.

The Sustainable Municipalities project is a programme that has taken place in three stages since 2003. The programme is about exchanging experience and network partnerships in many different types of energy project, including everything from business development and social planning to energy-efficient street lighting and renewal of the environmental programme.

The Energy Efficiency Council has been established by the Swedish Government to reinforce collaboration and facilitate coordination among authorities and organisations in improving energy efficiency. A large number of authorities are also continuously developing information materials about energy consumption and improving energy efficiency at public bodies.

[12] Analysis of divided incentives for improving energy efficiency, Swedish National Board of Housing, Building and Planning report 2013:32.
[13] Audit and analysis of barriers to improving energy efficiency at public bodies, with a focus on public procurement, annual budgets and reporting, Swedish Energy Agency, report ER 2014:06.

# Slovenia

## Article 19(1)(a)

Most multi-dwelling buildings in Slovenia are owned by multiple persons, each of whom owns a specific part of the building. Each owner or tenant in a multi-dwelling building must pay the monthly utility charges (including heating and hot water) based on consumption, number of occupants or surface area, and contribute towards a common reserve fund for building maintenance (including energy refurbishment of the building envelope, roof replacement, heating system refurbishment).

The decision to implement a particular measure rests on the agreement of the majority of owners. Housing regulations provide that any decisions regarding maintenance or investment in multi-dwelling buildings be supported by at least 50% or 75% of the owners (depending on the type of measure). Therefore, Article 13 of the Rules on managing multi-dwelling buildings requires a 75% majority for any improvements which are not considered to be maintenance and which are not contingent on obtaining a building permit, but which include the installation, or replacement before the end of the expected lifetime, of new devices or equipment, e.g. early renovation (refurbishment) of boiler rooms, heating stations or substations for the purpose of conversion to a different energy product (e.g. solid fuel or heating oil to gas), air conditioners onto communal parts of the building (the outside wall or the roof), power generators, solar collectors or cells, or using insulation or materials to improve energy efficiency.

Slovenia has a well-developed rental market, with tenants also living in multi-dwelling buildings. Given the abovementioned regulations and the principle of a responsible landlord-tenant relationship, it is the tenants who usually pay utility charges (including energy costs), while the owners make a contribution to the reserve fund. It is the duty of owners to carry the cost of energy refurbishment. In this way their property gains added value. An owner's interest in energy refurbishment may also be spurred by the fact that a refurbished property is easier to let on account of lower monthly energy costs, which are usually borne by the tenant.

Slovenia has taken the following measures to address the issue of split incentives:

### 1. Training courses for managers of multi-dwelling buildings

The ZRMK Building and Civil Engineering Institute organised six free courses (in 2016 and 2017) for managers of multi-dwelling buildings who prepare projects for comprehensive energy renovations of buildings. The training covers the field of regulations governing the technical and architectural properties of buildings, the measures for efficient energy use, the use of renewable resources, the preparation of project/technical documentation and the financing of energy renovation measures.

### 2. Eco Fund

The Eco Fund, a specialised public finance institution for promoting environmental protection, has been awarding grants and loans for energy efficiency measures and the use of renewables since 2008. Grants are also available for energy refurbishment of buildings. It is possible to obtain both a grant and a loan simultaneously.

On 12 August 2016, the Eco Fund announced a public call titled '41SUB-OBPO16 Non-refundable financial incentives for new joint ventures to improve the energy efficiency of older multi-dwelling buildings', i.e. buildings with three or more flats, in the territory of the Republic of Slovenia. The public call, which is still open, provides grants up to EUR 10 million for new investments aimed to improve the energy efficiency for older multi-dwelling buildings, namely for the thermal insulation of the facade, the thermal insulation of the roof or ceiling against an unheated area, the optimisation of the heating system and the extensive energy recovery. This call for tender is the first one to which not only apartment owners who are natural persons, but also owners of apartments who are legal persons may apply. A tenant may also apply given that the relevant measure is to be carried out subject to the owner's written approval. For the first time, there are also higher incentives available for extensive and high-quality renovations of multi-

dwelling buildings. Under this public call, socially vulnerable apartment owners may apply for an incentive that covers their full share in the investment.

The Eco Fund published a public call for financial incentives for socially vulnerable people to replace old solid fuel heating appliances with new woody biomass heating appliances in residential buildings (UL RS No 63/16) in areas for which Ordinances on the air quality plans were adopted in accordance with the provisions of the Environmental Protection Act, Zakon o varstvu okolja and the Decree on Ambient Air Quality, Uredba o kakovosti zunanjega zraka (UL RS Nos 9/11 and 8/15) and where there is no possibility of connection to the district heating system or a gas pipeline. The objective of the public call is improve the quality of ambient air by reducing excessive air pollution with PM10 particles, promote the use of renewables and improve energy efficiency in residential buildings in accordance with the Programme for the use of the Climate Change Fund in areas where a decree on an air quality plan is in force.

The LIFE4CLIMATE programme lays down further activities and provides for the future development of the scheme for dividing incentives between owners and tenants. A project entitled GuarantEE (https://guarantee-project.eu), which is related to the abovementioned topic and includes a Slovenian partner, is currently under way. The project will serve as a basis for upgrading the system of energy service models (e.g. energy performance contracting), which can prove challenging where the owner and the user of a building are different parties.

In addition to the above measures, the following measures to meet the requirements of Article 19(1)(a) are reported in the Slovenian NEEAP 2017:

- Instruments for financing renovation in buildings with multiple owners (G.6)

Commercial banks are involved in the process of co-shaping financial products based on the identified market needs (in the field of multi-apartment buildings). Sufficient information, education and training are provided to banks.

- Legal basis for decision making in multi-apartment buildings (G.7)

The arrangement of legal bases for deciding in multi-apartment buildings based on the requirements of the Resolution on national housing programme 2015-2025.

- Distribution of incentives among owners and tenants in multi-apartment buildings (G.8)

In line with the Resolution on the National Housing Programme 2015-2025, a change in the rent model is foreseen in the future.

- Establishment of a guarantee scheme (G.9)

Access to financial resources that will improve the creditworthiness of natural persons (lowering the interest rate and improving other conditions for loan rental) will be enabled.

**Article 19(1)(b)**

The Decree on green public procurement (hereinafter referred to as the GPP Decree) has been amended and will enter into force on 1 January 2018. Unlike the original arrangement, according to the amended Decree, green public procurement will be mandatory for several items (12 up to now, 20 according to the new Decree). The GPP Decree determines which environmental aspects contracting authorities should take into account when awarding public contracts, as well as the objectives that must be met by contracting authorities in each procurement procedure involving items referred to in the amended Decree.

## Slovakia

### Article 19(1)(a)

Slovakia has only reported the following measures to combat the issue of split incentives:

**(1) Regulatory framework on the decision making process related to energy efficiency investment in multi-apartment buildings**

The Slovak authorities affirm, that no barriers or regulatory gaps were identified regarding split incentives between owners and tenants or between owners related to energy efficiency investments in residential buildings.

In Slovakia there is a strong culture of home ownership. More than 90 % of people live in their own dwellings versus round 9 % living in rental flats.

Act No. 182/1993 Coll. on the ownership of flats and non-residential premises sets the rights and obligations of the owners and regulates the conditions under which the Housing Community (building owners' association) can apply for grants or loans relating to the refurbishment. Specifically, two thirds of total owner votes have to agree on such loan (Art. 14b)). The owners also agree on the level of periodic payments creating the Fund of repair and maintenance that is partially used for instalments.

**(2) Obligation to separate energy billing for tenants in large buildings**

Section 11(3) of Act No 321/2014 makes it an owner's duty to bill a tenant separately for energy in all residential buildings with a floor area of more than 1000 $m^2$, using designated meters. The Housing Community or the building´s administrator is responsible for meeting this obligation. This rule ensures that energy costs are billed and the tenant, who has to pay separately for the energy consumed, monitors energy consumption. By monitoring their own energy consumption, the tenants are therefore encouraged to conserve energy. This obligation complements the provisions transposing the requirements for individual metering and billing under Articles 9-11 of the Energy Efficiency Directive.

### Article 19(1)(b)

Slovakia identified the main legislative/regulatory and non-legislative barriers for energy services as part of the European Energy Service Initiative financed under the Intelligent Energy – Europe programme. The main barriers identified included consumers' low level of awareness of energy services, their ignorance of the options for energy services, and almost no legislative support from the state. Slovakian authorities have reported that these barriers have been tackled by introducing a system for energy services that is clearly defined in Slovak legislation. This introduces a straightforward regulatory and legal framework for energy services which aims to increase the confidence of consumers using energy services.

## United Kingdom

### Article 19(1)(a)

The UK has taken the following measures to combat the issue of split incentives in the private rented sector:

**1. Minimum energy efficiency standards for privately rented housing and non-domestic property by 1 April 2018 (England and Wales)**

The Energy Act 2011 contained provisions for regulation to drive the take-up of energy efficiency improvements in the domestic and non-domestic private rented sectors. The use of these regulation-making powers is conditional on there being no net or up-front costs to landlords. According to the regulation, domestic private landlords in England and Wales will not be able to unreasonably refuse requests for consent to energy efficiency improvements from their tenants, where financial support is available, such as Green Deal finance or ECO (Energy Company Obligation) scheme, with the first tenants' energy efficiency improvements regulations coming into force by 1 April 2016. In addition, there is a minimum energy efficiency standard for privately rented housing and non-domestic property, with the first domestic and non-domestic energy efficiency regulations coming into force by 1 April 2018. To ensure there are no net or upfront costs to landlords, a property below the minimum standard may be let where all improvements possible within the Green Deal's Golden Rule are undertaken, taking into account any funding support available such as ECO.

**2. The Landlords Energy Saving Allowance**

The Landlords Energy Saving Allowance is a financial incentive that allows landlords of domestic rented properties to claim tax relief of up to £1,500 per property for the costs of buying and installing energy-saving products such as draught proofing, insulation of cavity or solid walls and insulation for hot water systems.

It should be noted that the Green Deal[14] was perceived to be an additional measure to help overcome the issue of split incentives, however this programme is no longer available.

**3. Private Tenancies Order 2006 (Northern Ireland)**

The Private Tenancies Order 2006 states that a tenant must obtain the landlord's consent to carry out any alterations to the property but this consent cannot be unreasonably withheld.

**4. CRC Energy Efficiency Scheme (Northern Ireland)**

[14] https://www.gov.uk/green-deal-energy-saving-measures

The CRC Energy Efficiency Scheme is a mandatory scheme aimed at improving the energy efficiency of large public and private sector organisations. Where a landlord receives an energy supply and provides part of that supply to its tenants (e.g. in a multi-let building), the landlord must observe the requirements of the CRC scheme and will be responsible for making energy efficiency improvements. Conversely, where the tenant has a direct agreement with the energy supplier, the CRC liability for energy use will be allocated to the CRC participant to which the tenant belongs, if any[15]. In Phase 2 of the CRC scheme, the tenant will have responsibility if their lease lasts for at least 30 years.

**Article 19(1)(b)**

A working group was established in 2012, attended by DECC, the UK Green Investment Bank, Local Partnerships and HM Treasury, to analyse the specific accounting rules governing energy efficiency improvements and look at available financing and structuring options. The group concluded that there are **no specific legal or regulatory provisions, or administrative practices, regarding public purchasing and annual budgeting and accounting** that act as a barrier to investment in energy efficiency measures, although guidance on the precise accounting treatment of energy efficiency projects may be helpful.

In addition DECC and the UK Green Investment Bank ran a financing workshop in March 2014 to investigate what more could be done to help facilitate investment in public sector energy efficiency. It was attended by senior representatives from the public sector, including local authorities, and by private sector accountants and lawyers. As a result of this workshop DECC is considering preparing a toolkit to assist public sector organisations develop business cases for energy efficiency investments.

[15] https://www.gov.uk/government/collections/crc-energy-efficiency-scheme

# 6 Summary

Market barriers, such as split incentives, have been a long-lasting impediment to energy efficiency improvements in the building sector. Traditionally used to describe the misplacement of incentives between landlords and tenants, the split incentives manifests themselves in different ways and various segments of the building sector. Beyond split incentives, legal, administrative and regulatory barriers may deter public bodies from making investments in improving energy efficiency on the basis of third-party financing mechanisms, energy performance contracts or other long-term contractual arrangements.

This report assessed the progress made by Member States in relation to Article 19(1) of the Directive 2012/27/EU, and in particular identified actions taken to remove the barrier of split incentives (Article 19(1)(a)) as well as hurdles in relation to energy efficiency procurement in the public sector (Article 19(1)(b)), as reported in the National Energy Efficiency Action Plans (NEEAPs) submitted by Member States in 2014 and 2017.

A number of Member States reported that there were no significant barriers that limit the deployment of energy efficiency improvements in relation to Article 19(1). Czech Republic, Greece, Estonia, Croatia, Hungary, Malta, Poland, Portugal, Romania and Sweden declared that split incentives are not a barrier in their national context. In addition, more than a third of all countries (namely, Belgium, Croatia, Czech Republic, Estonia, Greece, Spain, Finland, Hungary, Ireland, Luxembourg, the Netherlands, and the UK) have reported no measures under Article 19(1)(b).

For the remaining countries, various policy actions (regulatory measures, information tools, financial measure or voluntary approaches) have been taken by governments to help unlock the energy efficiency potential of the building segments affected by the split incentive barrier. The main measures were in terms of legal actions, which included rent law amendments (e.g. Germany, Denmark, French, the Netherlands), enactment of minimum **energy performance standards in rented properties** (UK, Ireland[16]), and **revisions in governance structure** of jointly-owned apartment buildings (e.g. Austria, France, Lithuania, Spain). Various **financial and fiscal incentive schemes** have been specifically designed to support investments in rented properties or multi-owner apartment buildings. These include programmes in Bulgaria, Cyprus, Croatia, Italia, the Netherlands, Slovenia and the UK. Other measures included the **promotion of green leases** (Finland, Netherlands), the facilitation of **energy performance contracts** in large residential buildings (Italy) and specific **training courses** targeting multi-apartment building managers (Slovenia).

In terms of actions taken to boost **green procurement**, most countries have informed the European Commission about legislative actions, specifically focusing on the promotion of energy efficiency in public procurement. These include Austria, Bulgaria, Cyprus, Denmark, France, Lithuania, Latvia, Poland, Portugal, Romania and Slovenia. **Information, awareness-raising and educational measures** have been reported by Cyprus, Germany, France, Italy and Sweden. It should be also noted that most Member States have addressed the issue of public procurement in more detail under Article 6 where they reported measures and actions taken to ensure that central government bodies purchase only products, services and buildings with high energy-efficiency performance.

**Overall, the assessment shows that some progress has been made in implementing Article 19, but that this progress has been uneven**. While a number of Member States have taken or planned a range of concrete measures, other have reported no such measures. In parallel to this assessment, the Commission has in the course of 2017 and 2018 reviewed the Member States' implementation of the Energy

[16] Under consideration

Efficiency Directive, including its Article 19, to assess their conformity with the requirements of the Directive. Where the Commission as part of that process has found no or insufficient evidence justifying the absence of action, it has raised this as part of the general infringement proceedings launched in 2018. The present report aims to give a general overview and is without prejudice to the position the Commission will formally take as regards each individual Member State's compliance with Article 19.

This report has not considered measures taken to implement individual metering and billing in multi-apartment and multi-purpose buildings (also known as "consumption based cost allocation") although such measures aim to mitigate "usage-related" – or "reverse" – split incentives. Such measures are specifically required under Article 9(3) of the Energy Efficiency Directive. However, where consumption based heat cost allocation has been introduced, the precise design of the cost allocation principles needs also to be considered from a "split incentives" perspective, because cost allocation rules giving exclusive or too high weight to measurements in each unit from it can result in very uneven distributions of bills within a building leading to split incentives among occupants.

Several good policy responses and case studies designed to tackle split incentive issues across Europe and beyond have been identified. A specific area of action includes the removal of specific barriers for the uptake of energy efficiency investments in the multi-family owner-occupied buildings. The set-up of majority-rules in multi-ownership buildings are required as well as the clear definitions of the obligations and/or procedures to be followed by management committees in apartment buildings with regards to energy efficiency upgrades. The democratic rules and process with which maintenance work is undertaken should be clearly defined as well as roles of involved actors. This includes responsibilities for common space maintenance. The inclusion of energy efficiency upgrade in routine maintenance work could help bring down costs and hassle associated with the execution of works (e.g. scaffolding etc.). Simple rules that deem certain parts of the building, e.g. roof as a common space, thus shared responsibility among all building owners, can help align incentives between the owners (e.g. top and mid floor apartment owners). Some useful examples are given for Denmark, Scotland and the Netherlands.

In addition to legal and organisational actions, a way around this is to offer more attractive terms for these segments of the building sector, or design specific incentive schemes that offer clear pathways to financing for multifamily building owners. In some Baltic and Eastern European countries financial schemes (e.g. loans) targeting exclusively apartment building owners have been in place for a number of years. A common feature of these schemes is the role of housing associations, which have the legal status allowing them to receive financial support (e.g. through loans) and have the decision-making power so that individual owners cannot block decisions.

For rented properties, split incentives can be addressed by attaching the loan to the property itself rather than the tenant. In addition, the introduction of phased minimum energy performance requirements for rented dwellings could act as a powerful driver for the acceleration of energy efficiency improvements in such buildings, including the removal of legal barriers inhibiting owners from passing costs to tenants or entering into a green lease. The promotion of green leases in commercial spaces (e.g. through pilot schemes) can increase awareness among interested parties of the benefits of such agreements between owners and tenants. Municipalities and public institutions can lead by example by entering into green leases for their rented premises, while the publication of standard templates, common green lease language and clauses can guide and encourage others to consider this approach.

## References

BPIE, 2011. Europe's buildings under the microscope – A country-by-country review of the energy performance of buildings, Brussels: Buildings Performance Institute Europe.

Commission, 2012. 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. Official Journal, L(315), pp. 1-56.

Ryan, L. & Campbell, N., 2012. Spreading the net: The multiple benefits of energy efficiency improvements, Paris: International Energy Agency.

## List of figures

## List of tables

**GETTING IN TOUCH WITH THE EU**

**In person**

All over the European Union there are hundreds of Europe Direct information centres. You can find the address of the centre nearest you at: http://europea.eu/contact

**On the phone or by email**

Europe Direct is a service that answers your questions about the European Union. You can contact this service:

- by freephone: 00 800 6 7 8 9 10 11 (certain operators may charge for these calls),

- at the following standard number: +32 22999696, or

- by electronic mail via: http://europa.eu/contact

**FINDING INFORMATION ABOUT THE EU**

**Online**

Information about the European Union in all the official languages of the EU is available on the Europa website at: http://europa.eu

**EU publications**
You can download or order free and priced EU publications from EU Bookshop at: http://bookshop.europa.eu. Multiple copies of free publications may be obtained by contacting Europe Direct or your local information centre (see http://europa.eu/contact).

KJ-NA-29653-EN-N

## JRC Mission

As the science and knowledge service of the European Commission, the Joint Research Centre's mission is to support EU policies with independent evidence throughout the whole policy cycle.

**EU Science Hub**
ec.europa.eu/jrc

@EU_ScienceHub

EU Science Hub - Joint Research Centre

Joint Research Centre

EU Science Hub

Publications Office

doi:10.2760/070440

ISBN 978-92-79-99649-8