

## RESPONSE TO THE PUBLIC CONSULTATION ON THE EVALUATION OF THE ENERGY PERFORMANCE OF BUILDINGS DIRECTIVE

*by the European Historic Houses Association, European Landowners' Organization, European Property Federation, International Union of Property Owners and The European Group of Valuers' Associations*

*Description of each party in annex*

30 October 2015

### **6. Do you think that the aim of ensuring the same level of ambition across the EU in setting minimum energy performance requirements within the EPBD has been met? Why/Why not?**

It is very difficult to do a direct comparison across the EU without a common methodology. However it is commonly accepted that the lack of a common methodology does not favour homogenization. The report *Implementing the Energy Performance of Buildings Directive (EPBD)* published by the Concerted Action – Energy Performance of Buildings in October 2013 (Executive Editor: Eduardo Maldonado) confirms the existence of very different levels of ambition across the EU: “...in some MS, the present requirements are below cost-optimal levels, but others have minimum requirements that are already more demanding than the cost-optimal level calculated by the EPBD regulation” (pg. 46). A common methodology, as provided for by EPBD article 11(9), even if sectorial and voluntary, would certainly be an important step towards this homogenization. Indeed, it would allow a direct comparison between the energy performance of buildings in different countries, creating a favourable (and indispensable) environment for homogenization purposes.

### **10. How successful has the inclusion of Energy Performance Certificates in the EPBD been? Have the certificates contributed to improvements in energy performance of buildings?**

The articles on EPCs have been successful in their prime purpose: providing potential tenants and buyers with a ballpark ranking for the energy performance of most of the buildings on the market. Their failure lies in the certificates' provisions on recommendations for building energy efficiency improvements and the theoretical calculation of energy performance

This has happened because the legislation is fundamentally flawed: Buildings are comprised of many systems which interact with each other closely e.g. indoor climate and energy use are interrelated. Energy experts need knowledge and qualifications in many disciplines to be able to make cost-effective suggestions for enhancing energy efficiency in buildings. No expert understands all building systems. Rather, there are experts in different disciplines such as construction, heating, cooling & ventilation experts, expertise in building physics, building economics and more. To expect a single energy expert to master all disciplines and suggest cost effective measures bears no relation to reality. Even in the most energy-sophisticated states the suggestions made are general and do not correspond to the conditions prevailing in the actual building.

The certification articles need to be systematically reviewed to identify all opportunities for EPC simplification.

As for the Article 11(9) provision by which the Commission was supposed to have set up a voluntary common EU certification scheme for the energy performance of non-residential buildings by 2011, its success cannot be judged as it does not yet exist, to the great detriment of pan-European investors. This is all the more unfortunate that the development of the necessary methodology for the EU certificate will allow benchmarking of national methodologies, working as a soft tool to pressure member states to enhance their national methodologies and redefine adequate targets.

### **13. Is it (EPBD) in line with subsidiarity? What should continue to be tackled at EU level and what could be achieved better at national level?**

The Directive is only partially in line with subsidiarity. It correctly leaves the setting of renovation targets to the member states, but on the other hand the overly prescriptive detail of the provisions on energy performance certificates (EPCs) have caused needless burdens for citizens. **See answer to Q. 10**

*Subsidiarity has been respected concerning renovation targets*

**It is.** National targets for various sectors of the economy are not and should not be set at an EU level but correctly are left to the member states. This practice should certainly be maintained in the future because it helps energize national authorities in developing local thinking and techniques in order to satisfy general targets set at an EU level.

This does not mean that the EU cannot and should not make recommendations on unified and harmonized practices at national level as indicated in answering question 6. However these recommendations should stay only as a recommended guide but not as a mandatory requirement.

The EU could attempt to issue:

- a) best practices
- b) optional unified methodologies across member states
- c) standard methods to compare various methodologies across member states.

**21. Do you think the cost-optimum methodology gives sufficient evidence regarding the actual cost of renovating buildings on top of the additional cost for Near Zero-Energy Buildings?**

To some extent, the quality of the calculations under the Cost-Optimal Methodology is the preserve of national governments. In our experience, limited consultation was carried out by National Governments with industry when choosing input factors.

The last progress report on NZEBs progress in 2013 indicated partial compliance with EPBD Recast obligations by the Member States, but our understanding is that the gap has been closed since that time. However, it is imperative that clear trajectories are set out by national governments as to how they intend to ratchet energy efficiency standards over time, the risk factors that may lead to that happening organically as a result of changes in the input factors to the EPBD Recast to ensure that they remain within margins of tolerance and how that will relate to the national interpretation of NZEB definitions (which are currently incomplete). The definition of NZEBs in the Directive is clearly not a technical definition and the industry needs much more information to go on.

With regard to major renovation, the Cost Optimal Methodology does tend to assume that the recipient of the benefit of energy efficiency investments is the investor. However, this is often not the case, as recovery of all energy efficiency measures is usually constrained in that the measures are not allowed to feature as an increased rental cost or capital value. However, there is an emerging industry consensus that buildings in the prime market that fail to mitigate environmental risk may suffer financial risk as they will be less marketable or lettable.

**22. Are there any cost-effective measures for ensuring compliance at local and regional level that could be replicated and used to improve compliance on a larger scale?**

Ultimately the responsibility for ensuring compliance will always fall to national governments under the Treaty, regardless of to whom practical application and enforcement is delegated.

However, successful strategies have been deployed toward monitoring and enforcement in Northern Ireland, where Belfast City Council was made the lead authority for strategic management of enforcement based on pooling of resources among other authorities, and the appointment of dedicated enforcement officers. This was understood to substantially improve compliance with air conditioning inspections and certification requirements.

It is also notable that while the Commission has maintained the Energy Demand Working Group (Comitology Committee) and Concerted Action in order to monitor implementation of the EPBD Recast, industry representation was confined to the Commission's work on Delegated Acts such as the Cost Optimal Energy Efficiency Methodology. Closer consultation with industry (particularly end users such as ourselves) during practical application and enforcement could yield dividends as regards what is actually going on on the ground, as well as consultation directly with accreditation bodies.

**23. What do you think of the various ways of calculating building energy performance at national/regional level? Please include examples.**

Our members with pan-European experience report huge differences between energy certificates and energy performance classification of similar buildings in different EU countries. Obviously, when two methodologies evaluating the same variable (energy performance of a particular building in similar climates) lead to such different results, one of them (or both) is wrong...

It is for us clear that a common EU way of calculating building energy performance should be available (and must be, according to EPBD article 11(9)). Even sectorial and voluntary, it will inspire MS to enhance their national methodologies (and some of them are really in need of inspiration).

As an illustrative example of the large discrepancies of the EPC calculations at national level is a recent operational testing of the EPC in Germany with largely divergent results for the same asset. The German Landlords Federation commissioned ten different experts to produce an EPC for the same building. The resulting energy performance indicators varied from F to C (40% difference) when made with the asset rating assessment methodology, even for measurements made with laser devices! The result is that actualised rents after works may be damaging either for the tenant or the landlord, energy efficiency improvement not being effective in terms of the actual consumed energy billed and presumed pay back. Experts' fees are also vary greatly, from 120€ to 700€, for the certification of the very same housing. Tenants and Landlords representative associations agreed to press the German Government to allow the use of actual energy consumed instead of calculated energy performance.

Another experience to be taken into serious account is the Finnish one. The basic problem there is that almost half (43-44%) of Finnish detached houses are heated by electricity. During 1960-1980 the officials at least recommend families to choose electricity as heating system. Nationally Finland chose the calculated method to determine energy performance. This calculated figure is then multiplied by the national primary energy figure (electricity 1.7, oil 1.0, district heating 0.7, renewable 0.5 and district cooling 0.4). The actual consumption of the energy was found to be 16 084 kWh/a corresponding to a C indicator, much less compared to EPC energy consumption (42 586 kWh/a corresponding to a 'E' indicator). The Finnish citizens find this very unfair which led to a big citizen's movement taken up by Parliament and the Housing Minister against the EPC methodology used.

### **30. Are EPCs designed in a way that makes it easy to compare and harmonise them across EU Member States?**

Certainly not!

The main factors that do not allow uniformity in EPC practices across member states are as follows:

#### A. Definition of energy performance

First of all and foremost the "Energy performance" is not defined in a unified way across member states. There are at least two distinct ways of defining this term:

1. on the basis of a "reference building" which is defined as a building having the same geometrical characteristics and the same type of systems with the building under consideration, but with prescribed energy characteristics corresponding to a rather typical good quality new building.
2. on the basis of absolute limit values for energy performance, defined with energy performance indexes such as energy consumption per square meter of heated or cooled space.

#### B. Assessment methodology

Secondly, the methodology for energy performance assessment also varies among member states:

3. Asset rating, whereas energy consumption is not based on real energy consumption data, which after all do not exist for a new construction. Energy consumption is estimated through a simulation program, on the basis of a typical calculation methodology dictated by EN 13790 and on the basis of typical use hypotheses in terms of internal temperature, operating hours, lighting intensity, etc.
4. Operational ratings. Other member states also allow this approach which is based on real energy consumption data derived either by real measurements or from energy bills after they are adjusted on the basis of prevailing external temperatures, occupancy levels, etc.

#### C. Cost optimal levels of requirements

After the last revision of EPBD with Directive 2010/31/EU, member states are obliged to reset minimum requirements on individual building elements or systems on the basis of a common methodology which leads to a minimum life cycle energy cost. Despite the fact that this methodology

"unifies" to a certain extent the energy performance requirements for each building, still the new Directive does not unify issues A and B above. Consequently the conclusion is that EPBD still remains unharmonized among Member States.

The next question that naturally comes to mind is whether it is possible to "forcefully" harmonize the EPC procedures at European level : The German EPC ground test described in the answer to Question 23 demonstrates that theoretical energy performance calculations are damaging: the Commission should stop trying to harmonise calculation of Energy Performance and try instead to develop standard methods of comparison across Member States.

**33. Should EPCs have been made mandatory for all buildings (a roofed construction having walls, for which energy is used to condition the indoor climate), independent of whether they are rented out or sold or not?**

The original intent for EPCs was to impact purchase and rental decisions. It might be wise to consider carefully the political implications of imposing this burden on owners who have no intention of putting the building on the sale or rental market.

**35. What non-financing barriers are there that hinder investments, and how can they be overcome?**

*Please see our response to Question 36 to be read in parallel to the response to this question.*

Current policy failures mean that the predicted levels of emissions reductions will not be delivered.

Certain assumptions on which current policies are built do not take account of the split incentives and responsibilities of landlords and tenants in rented properties.

Two main issues need to be addressed in order for significant progress to be made: first, people need to change the way they view their use of energy, to take notice of it and act to reduce it; for that to happen, performance needs to be expressed in a meaningful way. Once they have done all that they can to reduce their energy use via management action, they need to identify if and where capital/structural improvements can be made and where alternative and more sustainable energy supplies can be obtained.

The first is a critical issue in rented properties, which we explain in greater detail below, and will require more robust measurement to render energy use transparent across the landlord and tenant divide. In the UK, such transparency has motivated reduction in wastage and identification of improvements which might require capital expenditure, and also provided the means to ensure that such improvements generate the emissions reductions they are intended to.

Once management efficiencies and waste reduction strategies in energy use have been implemented, there will be a need to carry out some retrofit in rented properties. This, however, raises the issue of who pays versus who benefits. Various supportive structures are emerging which generate roadmaps of **how** improvements might be paid for. While such roadmaps (e.g. green leases) are helpful, what may be required is a change in the variables of cost/benefit equations – namely incentivising improvements via fiscal means.

Further, there is an implication of this question that financing barriers are perhaps addressed. There are a number of challenges associated with financing energy efficiency in non-domestic buildings.

First, there are four groups of costs that are likely to manifest when considering an energy efficiency improvement:

- **Cost of funds** – these are likely to be the costs associated with obtaining funds for energy efficiency measures, and are likely to vary depending on the creditworthiness of the applicant, how highly geared a property is already, the financing model (e.g. debt funding – senior or junior, traditional or alternative; equity; grant funding). The study will examine the effect of different funding models
- **Cost of measures** – the costs of measures that have been introduced and their installation. These costs are likely to be elastic based upon the quantities procured, the purchasing power of

the organisation procuring the equipment or service relative to the provider, as well as the market forces that surround the product itself

- **Transactional costs** – These may include flexible costs such as materials, labour, standard working hours, standard preliminaries, overheads, contingency and profit. Further transactional costs may arise where works are carried out with only partial tenant consent either to a package of measures or as a result of consent only from a few tenants in a multi-let building
- **The lease horizon** – most property owners will consider the timeline to the next lease event as a barometer for the risk they are willing to accept concerning asset improvements, since much of property is bought with debt and an income stream is only received when a property is occupied

Further, BASEL II and ensuing iterations thereof are likely to make it more difficult to secure finance over timelines that are longer than 5-7 years, which will make it challenging for building owners and occupiers to secure finance for building energy efficiency measures that will take a longer period to repay. Therefore, even if the lease horizon over which a property owner is willing to look increases, there is a structural and systemic barrier to finance over a longer timeline. It may be possible to bundle energy efficiency lending of varying terms in order to spread and balance risk, but nevertheless the aforementioned rules will lead to a preference for energy efficiency finance over shorter terms, and possibly not much over the horizon that many property owners will be willing to accept in any case.

In addition, there are uncertainties to overcome with regard to the market for energy efficiency improvements:

- The market for green bonds as a source of commercial finance for energy efficiency has tended to target buildings that are in other senses prime, and therefore would have access to conventional finance at preferential rates in any case
- Both providers of and bidders for finance have difficulties articulating the offering in each case (i.e. what is the finance for precisely, how will each party benefit, and how will the cost of the investment be recouped)
- With regard to energy performance contracting as a model, many of our members will be reluctant to permit a third party to participate in the management of properties, since adjustment to conditioned hours of operation, or replacement of kit may interfere with the landlord's obligations to the tenant

More optimistically, there is an emerging consensus within industry that buildings that are not environmentally efficient may not perform as well from a financial perspective as their less environmentally efficient counterparts. However, this link has yet to be quantified and will be dependent upon the scalar data and robust denominators that we have alluded to in the previous section. The finest prospect for energy efficiency financing is for this relationship to develop; for that to happen, the Energy Performance Certificate's reliability and consistency must be improved to become 'investment grade' so as to provide a barometer of the resilience of a property to energy security and energy price risk. If a valuer determines that a property's value is affected by its energy performance, then property owners will undertake improvements, driven by market forces, but that relationship has yet to be proven across Europe, aside from some academic studies confined to particular markets within Europe based on limited samples.

In such circumstances, there may be a need for specialist energy efficiency finance, but mainly for SMEs as a form of additional funding where the owner may already be highly geared in respect of a particular asset, or either the owner or the occupier may be constrained in terms of their access to capital in other ways.

### **36: What are the best financing tools the EU could offer to help citizens and Member States facilitate deep renovations?**

It would be a serious mistake not to give cost-effective, incremental, step by step energy efficiency improvements the same attention as deep renovation, as they are the only way of achieving substantial short- to medium-term energy efficiency gains, especially in the housing stock.

Another reason for promoting cost-effective, incremental, step by step improvements is the political and economic constraints on any further EU foray into deep renovation. A deep renovation

requirement is likely to trigger a massive increase in compulsory energy efficiency renovation by vastly augmenting the number of renovations that top the EPBD 'percentage of building value' threshold. It is politically unacceptable for EU regulation to directly impose massive deep renovation at direct cost to EU citizens when even leveraged EU funding can't come near to covering the cost. It is also economically counterintuitive and counterproductive because the works will not be done, or the owners will spread the investment over time in order to avoid compulsory obligations. When EU law generates an entire 'avoidance culture' it is a sure sign that it has overreached.

Cost-effective, incremental, step by step improvement is also often the best way of approaching energy efficiency in the vast European historical housing stock. The upkeep of these pillars of European culture and tourism causes a specific form of poverty to the owners and by their nature historic homes are less receptive to deep renovation, staged or not. Strategies must be developed to underpin this sector as well.

Yet even step-by-step renovations are seldom economically profitable within a period of 5-10 years which is why incentives are necessary. In many member states, the best incentive is subsidies that decrease the investment cost born by the premises' owners.

The financial efforts made by the EU (ERDF, Juncker plan etc.) are very limited in terms of subsidies, the major part being financing loans etc. that many member state authorities dedicate to public buildings or social housing, causing discrimination and unfair competition on the housing market.

To implement in practice the existing EPBD, there is a desperate need for economic resources and, for many member states, this means especially subsidies of which a proportionate share must go to the private stock. This is a major challenge to be considered.

#### **40. What is being undertaken to solve the problem of 'split incentives' (between the owner and the tenant) that hampers deep renovations? Is it sufficient?**

No. Legal obstacles to include energy efficiency investment in common charges exist in many countries (e.g., Portugal, Italy, Germany, etc.). Just to illustrate, in Germany the law states that measurable costs have to be measured and passed to tenants at the exact value. This legal provision is so rigorous that there are professional auditing firms to audit the common expenses, whose remuneration results from the savings).

According to the document *Sustainable Shopping Centres – Energy, Performance and Value* (CBRE, 2015), energy "*improvement projects are often held back by the split incentive — where the owner invests capital however the retailer derives benefits in the form of lower service charge costs. The suggestion... that landlords charge for the improvements through a temporary addition to the service charge gets around this and provides financial benefits to both landlord and occupiers.*"

The argument that buildings with lower energy costs can ask for higher rents is also not effective. In the majority of the cases, rents can only be updated when contracts are renewed. Furthermore, rents are not flexible; they are dictated by market forces, or they are capped pursuant to rent control regulations (eg France, Germany and many other countries.)

It is not difficult to accept that this is a major obstacle to energy efficiency in renovation. This theme is addressed in the Energy Efficiency Directive (2012/27/EU), Article 19 but, as it is mainly a theme related with the building industry, it should be emphasized in any future directive related with energy performance of buildings. For the sake of energy efficiency in buildings, the Commission should encourage Member States to remove from their legislation any obstacles to the transfer of energy efficiency investment in common charges.

#### **46. What are the best policies at district and city level to increase energy efficiency in buildings? Have specific targets on renewable energies in buildings been included?**

The disadvantage of district heating is that it requires expensive investments in district heating systems, control equipment, pumps, making it economically viable only in large areas with a large heat demand. This is contrary to the requirements to be applied for new nearly zero energy buildings and even very energy efficient renovations in existing buildings where energy demand is assumed to

be very low. Moreover about 10 % of heat generated in district heating systems is lost in the supply chains to the end customers.

Experience in Sweden shows that district heating companies have been very reluctant to allow energy efficiency in the buildings and created different types of hindrances for property owners during the 1980s and onwards. An understanding between the major construction companies and district heating companies has led to district heating becoming a main source of heating and sacrificing energy efficiency measures such as heat recovery, or other measures that reduce energy use in buildings in violation of the prevailing national codes for buildings.

The important aspects that should be taken into account regarding district heating are the following:

a) It is not meant as a global solution, rather recommended to apply to new, open areas, and not in dense, over-constructed urban centers (it is preferable at the surroundings of cities close to energy production industry). The reason is that the installation of piping where it does not already exist can entail serious, unwanted degradation of the city's architectural heritage, notably the historic/ aesthetic value of old buildings.

b) In (old) buildings where usually there is not a water heating common pipe, the technical feasibility of switching to district heating is limited without assuming considerable cost (and may be, not even technically feasible).

c) Implementation of this solution should be always left to the national authorities that are better aware of the national particularities at urban level. Additionally, a number of Member States do not have at present the requisite infrastructure, either in terms of market or physical piping, thus most schemes are of a small scale.

**We are very reluctant to favour district heating as it is an infringement of the open competition rules even if we want district heating to be generated by renewables and not fossil fuels (decarbonisation target).**

**Focus on building targets instead of general targets at national level does not make sense due to the diversity of buildings and diversity of occupancy within each building.**

**51. Does the EPBD address the issue of embedded energy? If so, in what way?**

**The EPBD currently does not take account of embedded energy, and this is currently out of the scope of the Directive.**

However, the Resource Efficient Buildings Workstream is taking account of embedded energy and carbon and therefore DG Energy should resist temptation to duplicate effort and ensure that any successor to the EPBD Recast is simply complementary to the outputs of the Resource Efficient Buildings Workstream.

**52. Is demand response being stimulated at the individual building level and if so, how?**

No, but smart metering specifications under the Energy Efficiency Directive are of an order that would enable moves toward demand response.

The EPBD focuses currently on building level rather than system level energy efficiency (although system level considerations are implicit in the Nearly Zero Energy Buildings definition). Our view is that the EPBD should continue to focus on building level systems, but that complementary measures in other legislation may be necessary in order to promote the proliferation of renewable energy sources necessary for developers to connect to when building otherwise low energy buildings according to the Nearly Zero Energy Buildings Definition.

Many member states, particularly the Dutch, were keen to maintain national sovereignty as regards grid energy mixes in spite of the Nearly Zero Energy Buildings definition, therefore soft measures may be required to incentivise such a roll-out, such as encouraging local authorities to carry out heat mapping and renewable energy capacity mapping in order to encourage co-location of heat and energy customers and providers.

**57. (first sentence) Are smart meters and their functionalities contributing to meeting energy efficiency targets and the proper implementation of the EPBD?**

*Our answer concerns EPBD Article 8(2) and the developments of that in EED Articles 9-11*

*There is no one-size-fits-all solution regarding the roll-out of individual heating meters in European multi-apartments buildings:* There are major differences for example in terms of the structure of the residential building stock, the type of ownership, the structure of the internal heating networks, the market penetration of individual meters, the type of energy used or the suppliers (district or central heating, etc.). National and local progress in terms of promoting energy efficiency also differs considerably making the installation of individual meters a lower priority in certain cases.

*The cost-effectiveness and technical safeguards have proven to be crucial:*

- To include consideration of maintenance, management and replacement costs
- To take into account the difficulties raised in many existing buildings (different piping on every floor, floor heating system that prevents metering, lack of space, etc.)
- To avoid overburdening landlords who in many countries will have to pay for the installation
- To give Member States the possibility to adapt metering requirements to local conditions and practices
- To allow Member States to favour other energy efficiency measures with higher savings potential: e.g. the installation of heating controlling and management devices rather than individual meters, energy efficiency renovation, etc.

**67. Has building data harmonisation been achieved?**

No. It is obvious that it is not possible to achieve data harmonisation without a common methodology to evaluate performance. Please refer to our answer to question 6 for further details on harmonisation related to energy performance of buildings across EU.

**77. Based on existing experience, does the EPBD promote the key ways to ensure that buildings meet stringent efficiency targets in their operation**

The problem the Commission identifies is most acute in commercial buildings. In residential properties, the problem of a performance gap between the design and operational performance typically is confined to properties that are built to high energy efficiency standards (generally those built to current building standards and on the road to Nearly Zero Energy Buildings), because their building services become almost as complex as commercial properties.

There is a need for greater insight as to how buildings perform in operation in order to close the performance gap, both to inform the decisions of managers and occupiers but also to channel those insights back into design decisions and anticipations of performance that are more grounded in reality.

In both cases, this will involve the collection of actual data on building performance. In the case of encouraging better management and occupation of buildings, it will require the expression of building performance in ways that are intelligible to owners, occupiers and managers, and that invite improvement. In the case of channelling findings back into better design, it will involve the collection of repositories of scalar data to which national authorities should have access in calibrating thermal performance standards in national building regulations.

While the EPBD Recast offers flexibility as to the methodology that can be deployed to underpin energy certificates – either a rating based on theoretical assumptions or actual metered data – many member states have opted to deploy one based on the former. While such ratings are useful, they have deficiencies in that often the most cost effective ways to achieve significant savings in money and energy is for individuals and businesses to change their behaviour, but it is not always the simplest, particularly in the tenanted commercial stock. There are significant barriers to such action – chief among these is the difficulty of measuring whole building energy use due to the split responsibilities and incentives in energy purchasing and use as between landlord and tenant.

- a. EPCs based on theoretical ratings are useful as a transactional certificate allowing potential tenants to compare buildings on a like-for-like basis. In practice, however, their calculations do not capture the effects of buildings and services which do not behave exactly as designed or the complexities of the occupier's fit-out and its operation and maintenance. They also do not account for controls that do not work properly, or any lack of understanding of building services by occupiers and building managers. In the experience of many of our members, asset ratings are expensive to deliver, are of limited accuracy, offer limited insight and report only predicted improvements. Essentially, the EPC does not measure actual energy use or emissions: it provides theoretical information based solely on the design of a building. Unlike a calculated (asset) rating, a certificate based on measured energy consumed captures the energy use by non-building related items, such as office equipment and electrical appliances and forces management to pay attention to these, as well as the building itself and the emissions from uses governed by national calculation methodologies. For those property owners that have already undertaken improvements to the areas of buildings that are within their control, the concern will be to ensure that the investments made in energy efficient kit deliver on their anticipated promise through effective use of the building (by the tenant) and management of the building. Asset ratings will be of limited insight in such circumstances. For those that are just starting out on their energy efficiency journey, the light touch and low cost efficiency savings that can be yielded by interrogating the actual energy performance of a building (i.e. in commercial buildings through ensuring that building services are not coming on at 5am when the building is not occupied until 8am at the earliest) can provide a demonstration of commitment from landlord to tenant or tenant to landlord to broker engagement in joint energy efficiency programs. Simple energy bills will not provide such insights as in rented properties across Europe with complex energy procurement arrangements, seldom will one single party receive all the relevant energy billing data for the building by default. For example: landlords use energy to provide services in the shared parts of the building, plus exclusive use services to the tenanted areas;
- b. however, the extent of such provision varies, particularly for heating and air-conditioning;
- c. the annual service charge accounts tell tenants how much of the cost of these landlord services they bear, but seldom include the associated amounts of energy and carbon. Agreed measures or sub-metering can assist here;
- d. some tenants pay for their own metered electricity supply for their lighting, office and kitchen equipment and any extra air conditioning installed during their fitout, for example to server rooms, and can choose suppliers; and
- e. some tenants also purchase other fuel directly, such as gas for kitchens and oil for generators.

The advantage of operational ratings is that they could:

- Expose the effect of management on building energy performance and hence motivate managers and users to make improvements;
- Tackle existing as well as new non-domestic buildings;
- Give incentives for low and zero carbon on-site renewables that would act as an incentive for local generation from renewables;
- Offer a comparison with the rating for the building's EPC that would act as a neat barometer of potential versus actual energy performance, driving improvement and promoting understanding of this issue; and
- Assist in the generation of true building energy performance, which would lead to better policy.

We would not suggest that the current EPCs deployed in the market be replaced, but since operational ratings and measurement can offer more sophisticated insights for those that are interested, there should be an option open to those that wish to benefit from them to do so.

Clearer synergies between the smart metering elements of the Energy Efficiency Directive and the EPBD could permit this to occur. It should be possible with appropriate metering strategies and contextual data to automate the production of 'live' ratings for buildings. Essentially, this would permit the expression of energy performance on a day-to-day basis to owners, occupiers, managing agents

and, critically, to external investors that are increasingly demanding performance data from property owners and fund managers. Increasingly too, legislative demands that are not EU driven are demanding actual energy and emissions reductions among larger companies, and they would like the means to track their progress.

Essentially, the default position would remain that the prevailing national methodology would be used to complete certificates where either the owner preferred or was unable to be in a position to put the infrastructure in place to conduct live ratings, and existing EPCs would continue to be valid, but for those that wished to go further, this would be an open option.

We are aware that the Commission has found understandable difficulties in bringing to fruition the common agreed EU EPC under the EPBD Recast. A specification based on metering and contextual data would likely be simpler to generate, but could be transformational in providing in-use data to owners and occupiers, providing a common basis for joint action in rented properties. Where the benefits of ownership and occupation are aligned, such as in the case of owner occupiers, we would have thought that such an approach would also be attractive.

**78. Based on existing experience, does the EPBD promote the best way to close the gap between designed and actual energy performance of buildings?**

Please see our response to Question 77 in relation to the gap between theoretical predictions of building performance and operational performance of buildings and some methods for tackling those problems.



## About the Parties to these Representations

*Name followed by Commission Register of Interest Representatives identification number*

### **European Historic Houses Association (EHHA) 594015610806-90**

An umbrella organisation for national historic houses associations, promoting the interests of Europe's privately-owned historic houses, parks and gardens and their contents. The organisation promotes European cooperation in the conservation of historic houses which are most of the time SME's. The Association brings together 18 national members and represents more than 50,000 historic houses in Europe and supports actively its members' interests on several European issues such as culture and education, VAT, energy and environment, tourism, and security.

[www.europeanhistorichouses.eu](http://www.europeanhistorichouses.eu)

### **European Landowners' Organization (ELO) 36063991244-88**

Created in 1972, ELO promotes a prosperous and attractive European Countryside. ELO is a unique federation of national associations from the EU27 and beyond which represents the interests of landowners, land managers, rural entrepreneurs and family businesses. It targets its actions on land use and housing, via seven major areas of European importance: environment, renewable energy, agriculture and rural development, status of private property and companies, forest, enlargement and trade. Owing to the rural nature of property ownership and as a result of planning restrictions in member countries, the ELO is acutely aware of issues linked to Solid Walled properties. [www.elo.org](http://www.elo.org)

### **European Property Federation (EPF) 36120303854-92**

EPF represents all aspects of property ownership and investment: residential landlords, housing companies, commercial property investment and development companies, shopping centres and the property interests of the institutional investors (banks, insurance companies, pension funds). Its members own property assets valued at € 1.5 trillion, providing and managing buildings for the residential or service and industry tenants that occupy them. [www.epf-fepi.com](http://www.epf-fepi.com)

### **International Union of Property Owners (UIPI) 57946843667-42**

UIPI is a pan-European not-for-profit association comprising 30 organisations from 28 countries. Jointly, they represent more than 5 million private property owners and some 20 to 25 million dwellings. Founded in 1923, the UIPI aims at protecting and promoting the interests, needs and concerns of private landlords and owner-occupiers at national, European and international levels. The UIPI is involved in many issues, including general housing; taxation and inheritance concerns; technical matters and new regulations such as energy saving in buildings; the private rented agenda; as well as universal consumer rights and social responsibilities. [www.uipei.eu](http://www.uipei.eu)

### **The European Group of Valuers' Associations (TEGoVA) 070444714545-60**

TEGoVA is the European organisation of national valuers' associations, covering 63 professional bodies from 34 countries comprising specialist consultancies, major private sector companies and government departments both local and national. Its main objectives are the creation and spreading of harmonised standards for valuation practice, for education and qualification as well as for corporate governance and for ethics for valuers. It speaks with a common voice on valuation to European legislators and policy makers. [www.tegova.org](http://www.tegova.org)