EU consultation on the review of the Energy Performance of Buildings Directive

About EBC

Established in 1990, the European Builders Confederation - EBC - is a European professional organisation representing national associations of micro, small and medium-sized enterprises working in the construction sector. Through its national members, EBC represents 2 million construction microenterprises and SMEs.

The construction sector is of vital importance to the European economy. With 3 million enterprises, an annual turnover of around € 1600 billion and a total direct workforce of 13 million, the construction sector contributes at around 10% to the GDP of the European Union.

99.9% of the European construction sector is composed of small and medium-sized companies, which produce 80% of the construction industry's output. Small enterprises (less than 50 employees) are responsible for 60% of the production and employ 70% of the sector's working population.

A. Overall Assessment

The Energy Performance of Buildings Directive (EPBD) aims to:

1. improve the energy performance of buildings in the EU, taking into account outdoor climatic and local conditions, as well as indoor environment requirements and cost-effectiveness.
2. require Member States to set energy performance standards for buildings,
3. require Member States to issue buildings with energy performance certificates, and
4. require Member States to ensure that, by the end of 2020, all new buildings are 'nearly zero energy' buildings

It sets out concrete ways of achieving the great untapped potential for energy savings in buildings and reducing the large differences in results that exist in energy saving outcomes between Member States.

1. How successful has the EPBD been in achieving its goals?

The EPBD has been key in making improvements at the European level, but the situation is very different from one Member State to another. The EPBD has forced Member States defining objectives for new buildings and ways to achieve the objectives but there is still a huge potential in existing buildings.
Regarding objectives, EBC believes, that it is important that the objectives remain realistic and that adequate tools are in place to achieve the objectives.

2. Has it helped to improve energy efficiency in buildings?

In some countries, yes the EPBD, helped to improve energy efficiency in buildings. One very positive impact of the EPBD is that it has increased awareness of energy performance of buildings.
In France, the EPBD contributed to improve energy efficiency in buildings.
In Italy, although suffering from the economic crisis affecting the construction sector, there were already in 2013 more that 3.5 million energy certified buildings, 50% more than in 2012.
To improve further energy efficiency in buildings it is important to address the lack of knowledge and information by clients and financial institutions.

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7. Has the EPBD effectively addressed the challenges of existing buildings' energy performance?

It is important to recall that the EPBD does not set any goals for the renovation of existing buildings but mentions that "when buildings undergo major renovation, the energy performance of the building or the renovated part thereof is upgraded in order to meet minimum energy performance requirements". This means that not all existing buildings are covered by the EPBD.

This said, yes the EPBD helped improving the energy efficiency of existing buildings.
In France for example, there is a thermal regulation for each element of an existing building. The overall objective of this regulation is to ensure a significant improvement of the energy performance of an existing building when a building owner undertakes renovation works.

In Italy, if an existing building is to be renewed, it will have to increase its energy performance to satisfy the minimum requirements.

In the UK, as from the 1st April 2018 there will be a requirement for any properties rented out in the private rented sector to normally have a minimum energy performance rating of E on an Energy Performance Certificate (EPC). This measure will help raise the energy performance of the existing building stock.

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

Energy Performance Certificates have not shown to be successful are widely used in all the Member States. The situation varies from country to country but in general EPCs are not a success– there are significant and frequent discrepancies in EPCs. The full potential of EPCs has not yet been achieved. MS should be encouraged to continue to focus on quality assurance of the EPC, and improve public trust in and understanding of the meaning of an EPC and what to do with it.

In Italy, there is not yet a clear framework of reference, since the Italian regions have only recently started monitoring EPC activities. The implementation of energy performance certificates (EPCs) for existing buildings is a slow process and the real obstacles are created by cultural barriers: many property owners believe that EPCs are useless, which has a strong negative impact on the quality of EPCs themselves.
Within new buildings, the market aims , even in this moment of crisis, to build more and more energy efficient buildings. EPCs here are considered useful and have an important role to make new buildings more attractive to the market.

In France, the French Energy Performance Diagnosis have enabled to deliver an energy label which helped to improve the energy performance of buildings.

11. What has worked well in the EPBD? What needs to be improved?

<u>Positive effects:</u>
One of the main achievements of the EPBD is awareness raising.

Before the EPBD was implemented, France already had targets for buildings but the EPBD supported these objectives.

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In Italy, one of the positive effects concerns the implementation of energy certification: the training system has allowed a professional to upgrade his skills. The whole system has been upgraded, not just for the professionals involved in the building sector, but also for designers and certifiers.

What needs to be improved:
The current EU renovation rates are very low and the vast majority of the square meters is in existing housing stock. The EPBD needs to improve this side of the renovation market. Please refer to our answer 28 on targets for renovation rates.

Training:
The EPDB does not really tackle training issues.
In Italy, at national level there can be great discrepancies of information and vocational training among the different stakeholders that operate in the field of energy efficiency.

Information and financing:
The lack of knowledge and information by clients and financial institutions is still an issue and so are upfront costs. One of the main obstacles to the implementation of energy efficient technologies remains that the return on investment requires a fairly long time, therefore incentive mechanisms should be strengthened to overcome the issue of the lack of private financing. Tax incentives policies like reduced VAT rates have proved to work, but still are not used by all the MS.
Financial measures must be easily accessible since very often, the difficulty to access financial support leads to unwillingness of the clients to take the necessary administrative actions to obtain this support.

13. What should continue to be tackled at EU level and what could be achieved better at national level?

Both at EU and national level the legislative framework should stabilise to avoid uncertainties and fragmentation. Both the industry and the consumers need long term measures to gain confidence in the market and have time to adapt.

15. Has the EPBD created any unnecessary administrative burdens? If so, please provide examples

In France, it has not.
In Italy, on the contrary the directive has slowed down the proliferation of regional laws in favour of energy efficiency, by providing a common energy legislation for all the regions. The regions still have room for manoeuvre to reduce administrative burdens or propose alternative solutions in case of excessive costs.

16. Has the EPBD created any unnecessary regulatory burdens? If so, please provide examples
It seems that it did not.

B. Facilitating enforcement and compliance

The 2010 recast EPBD introduced **targets for Near Zero-Energy Buildings (NZEBs) and more ambitious minimum energy performance requirements for new buildings**. The EPBD defines NZEBs as a building that has a very high energy performance as determined in accordance to Annex I of the directive. The nearly zero or very low amount of energy required should be covered to a very significant extent by energy from renewable sources, including energy from renewable sources produced on-site or nearby. The EPBD sets the target for Member States to ensure that by **31 December 2020, all new buildings are nearly**

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zero-energy buildings, and after 31 December 2018, new buildings occupied and owned by public authorities are nearly zero-energy buildings.
The EPBD also considerably reinforced the provisions for existing buildings, broadening the scope to all existing buildings (removing the 1000 m2 threshold). It set and applied minimum energy performance requirements for the renovation of parts of the building envelope (roof, walls, etc.) with a view to achieving cost-optimal levels. It also set and applied minimum energy performance requirements for technical building systems (large ventilation systems, air conditioning, heating, domestic hot water system or combination of these) whenever they are installed, replaced or upgraded. It applied minimum energy performance requirements to all types of building works.

18. Is the definition of NZEBs in the EPBD sufficiently clear?

No, there is no consensus on the definition therefore it is not clear and it lacks of specific requirements.

19. Is the NZEB target in the EPBD sufficiently clear to be met?

Technically it is already possible to build passive houses, with a thermal index close to 0 or producing an energy surplus. Nevertheless since there is no consensus of the definition of a "zero energy house", it is not possible to achieve the NZEB target.

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

The calculation of the energy performance of a building does not have the same impact in the Member States since the implementation varies according to the country.

In France, the calculation method has introduced the need of a third party (thermal study unit). As a consequence, the costs are higher.

24. What measures are missing that could simplify the implementation of building regulations to make sure that buildings meet the required high energy performance levels?

Member States should fix minimum requirements for energy performance of buildings in order to achieve an optimal balance between costs for investment and energy savings during the entire life-cycle of a building.

C. Energy Performance Certificates (EPCs) and stimulating energy efficient renovation of the building stock

To reap the benefits of energy efficiency and the use of renewables in buildings, the biggest challenge is to accelerate and finance upfront investments and speed up the renovation rate of the existing stock to above 2% annually. The aim of EPCs is to transform the building sector by setting ambitious energy efficiency standards and incentivise investment in renovating buildings to improve their energy efficiency, and facilitate a single market in and the free circulation of highly specialised workers, solutions and technologies and investments in energy efficiency and renewables in buildings. These aims have been identified as drivers for investment in renovation.

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25. Are the available data on the national/regional building stock sufficient to give a clear picture of the energy performance of the EU's building stock, as well as the market uptake of energy efficiency technologies and the improvement of the energy performance of buildings in the EU?

At the moment, data stock is insufficient. Since the importance of such data to have a useful view of market potentials and needs, it is important to improve it. In some countries data collection is improving. Several countries have engaged in developing registries of energy performance certificates, which in theory should provide information on the energy performance of the buildings stock.

For example, in Italy, with the adoption of the new energy performance (Attestato di Prestazione Energetica - APE), all data related to energy performance will be gathered in a single system (SIAPE) that all the Regions will have to use. The SIAPE will be created within 90 days after the entry into force of the decree. At the beginning it will report information on thermal installations, but it is foreseen that it will be extended to the registration of all buildings.

27. Have EPCs played a role in increasing the rate of renovation, the extent of renovation, or both? For instance, are EPC recommendations being defined as the most effective packages of measures to move the performance of buildings and/or their envelopes to higher energy classes?

EPCs helped increasing the awareness of contractors.
EBC believes that EPCs must remain an information tool on the current energy performance of the building by using clear and understandable classes of performance. EPCs should not guide or prescribe households on the type of renovation works to undertake, including "staged deep renovation".

28. Is setting a minimum renovation target for Member States to undertake (e.g. each year; percentage of building stock) important and requires further attention in the context of meeting the goals of the EPBD?

Renovation rates are too low and must be improved, however, EBC believes that if objectives are to be set, these must be realistic and must be compatible and coherent with economic constraints. The problem does not necessarily come from the supply-side but from the demand-side .

29. Are obligations or binding targets for renovation or any other mandatory measure (e.g. mandatory minimum thermal efficiency standards for rental properties) missing from the EPBD to ensure that the directive meets its goals? If, yes, what kind of obligations and targets?

EBC believes that it is better to encourage and to put in place long term incentives measures rather than obligations.

31. Do you think that the 'staged deep renovation' concept is clear enough in the EPBD?

The concept of "staged deep renovation" is not part of the EPBD, but of the EED.
Anyways, the concept in itself is quite straightforward, but it may be difficult to be applied on the ground.
On the other hand, details and advice on the staged deep renovation should not be part of an EPC (please refer to answer 27).

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32. Have EPCs raised awareness among building owners and tenants of cost-efficient ways of improving the energy performance of the buildings and, as a consequence, help to increase renovation rates across the EU?

EPCs have raised awareness about energy issues in buildings but not sufficiently to considerably increase renovation rates.

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?

NO

D. Financing energy efficiency and renewable energy in buildings and creation of markets

34. What are the main reasons for the insufficient take-up of the financing available for energy efficiency in buildings?

EBC still perceive a lack of substantial financial means to tackle the massive needs of renovating and retrofitting the existing built stock.

However, where there was an insufficient take-up of the financing available for energy efficiency in buildings, this may be due to a bad financial engineering structure, which made financing difficult to access.

The Green Deal in the UK is unfortunately a good example of this bad financial engineering structure. The Green Deal proposed a very interesting third party financing but with interest rates higher than 8%, the low financial attractiveness of the device seems to be one of the main explanations for the abortion of the mechanism.

On top of this, there is a great lack of information on the support schemes already created. It is urgent not only to reinforce the financial support in place, but also to better communicate on this at national and local levels.

Finally, the significant incentive measures related to energy efficiency are constantly changing therefore households are concerned that the conditions may change during renovation works and hence prefer not to start any works. Long term measures are needed.

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

Households lack of confidence and lack of information to undertake energy renovation works.
The owner / tenant issue has not yest been solved: whose responsibility is it to renovate, and to whom it benefits.
Companies must face excessive red-tape -: investments, support schemes, and verification need to be made as simple as possible

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

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Reduced VAT rates have proved to be an efficient tool for households to undertake energy efficient renovation works. 0% interest loans for renovation work are also a good tool.

Third-party financing is a very interesting tool, but the only concrete example was a failure due to its bad financial engineering structure. The failure of the Green Deal should be further analysed to understand where it failed and how it should be improved to become a success story.

37. What role do current national subsidies for fossil fuels have in supporting energy efficient buildings?

National subsidies for fossil fuel play a counterproductive role for the development of energy efficiency policies.

39. How is investment in high-performing buildings stimulated and what is being undertaken to gradually phase out the worst performing buildings? Is it sufficient?

The situation varies according to Member States.
In Italy, investment in high energy performance buildings are encouraged through tax incentives (e.g. Ecobonus)

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?

In Italy, the currently discussed new financial law foresees tax incentives energy efficiency renovation works also for the tenant .

E. Energy poverty and affordability of housing

42. What measures have been taken in the housing sector to address energy poverty?

Measures vary among countries.

In France, a number of specific measures have been put in place: the white certificates, the programme "Habiter Mieux" financed by ANAH and the energy check.

In Italy the problem of energy poverty has not been significantly tackled. No real measures have been adopted to address this issue.

43. Should have further measures tackling energy poverty been included in the EPBD?

YES. Since measures have not been included in the European directive, not all Member States are taking measures to address the issue.

H. Awareness, information and building data

63. What do you think of the quantity and quality of information on the importance of energy efficiency provided to consumers by:
1. the European Commission?
2. national authorities?

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3. regional authorities?
4. local authorities?
5. local companies?

Generally speaking, it is essential to inform households through large information campaign. This point can and must be improved both at European and national/regional levels.

64. Has the directive promoted information on opportunities for consumer-friendly smart meters and interoperable energy efficient appliances?

Not really.

65. What relevant building data has been collected at EU and Member State level, and city and district level? Who has access to this data?

In general little information is available at EU and MS level.

66. How can data on the energy performance of a building and its related renovation work, across its life cycle, best be managed and made available?

Digital databases should be used, through the use of "digital building books".

In France, a digital book has been put in place, and so far the experience is rather positive.

67. Has building data harmonisation been achieved?

No.

68. Is there a need for a central EU database of EPCs and qualified experts?

No.

I. Sustainability, competitiveness and skills in the construction sector

69. How does the construction sector cost-effectively demonstrate and check compliance with the EPBD while also upgrading the skill and knowledge of tradespeople and professionals?

New forms of training/qualification have proven very useful (e.g., on-site training), however it is not always necessary to establish completely new schemes; a structural improvement may be all it takes. It is important that informal training schemes are in some cases considered equally important to formal qualification requirements. EBC members think that through continuous vocational trainings, qualification and certification of professionals and skilled technicians, the construction sector can check compliance with the EPBD.

The current EPBD does not cover the quality of the works, therefore schemes to upgrade the quality of the works have been developed on other grounds (eg. Build Up Skills, national, private, trade associations initiatives, etc.)

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A good training example comes from France with the FEEBAT initiative. FEEBAT "Energy saving training for construction craftsmen and enterprises" was established to train several kinds of professionals in the building sector with the purpose of encouraging reduction in energy consumption. The initiative is set up in the framework of "Grenelle Environnement" with the financial support of "Electricité de France" (EDF), the main French electric utility company, which participates in the Energy Saving Certificates scheme. Public authorities, trade unions and employers' organisations were brought together in order to define the programmes dedicated to vocational training. Up to now close to 60,000 construction workers and craftsmen have been trained. Also in France, eco-conditionality rules for have fostered upskilling, training and the quality of audited works.

In any case, the qualification of craftsmen alone is insufficient to obtain a better building quality, and complementary measures are necessary. Financial incentives appear as one important driving force for improved quality of energy efficient buildings, if adequate requirements are included in the conditions for accessing the incentives.

J. Buildings systems requirements

74. Based on existing experience, do you think in the EPBD requirements is missing for regular inspections of the technical building systems to ensure:

a. that systems' performance is maintained during their lifetime?

b. that owners/occupiers are properly informed about the potential improvements to the efficiency of their systems?

c. that replacement/upgrading of the technical building systems is triggered?

In some countries, there is an obligation of inspections therefore no further requirements are needed. However, the impact of inspection is uncertain, as it is not known in how many cases the owner will have taken action on the improvements recommended in the inspection report. The impact of inspection schemes does not have to be assessed by MS.

K. Operational management and maintenance

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

Yes

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