Opinion of the European Economic and Social Committee on the 'Proposal for a Directive of the European Parliament and of the Council on the energy performance of buildings (recast)'

COM(2008) 780 final/2 [1] **— 2008/0223(COD)**

(2009/C 277/15)

Rapporteur: **Mr ŠIUPŠINSKAS**

On 27 January 2009, the Council decided to consult the European Economic and Social Committee, under Article 95 of the Treaty establishing the European Community, on the:

Proposal for a Directive of the European Parliament and of the Council on the energy performance of buildings (recast)

COM(2008) 780 final/2 - 2008/0223 (COD).

The Section for Transport, Energy, Infrastructure and the Information Society, which was responsible for preparing the Committee's work on the subject, adopted its opinion on 15 April 2009. The rapporteur was Mr ŠIUPŠINSKAS.

At its 453rd plenary session, held on 13 and 14 May 2009 (meeting of 14 May 2009), the European Economic and Social Committee adopted the following opinion by 147 votes to one with two abstentions.

1. **Recommendations**

1.1. The EESC endorses the Commission's proposed improvement of the Directive on the energy performance of buildings (EPBD), though with certain reservations. Under the Directive, renovations must be linked to the requirement to enhance energy efficiency, not just in order to reduce energy demand but also to reduce energy costs.

1.2. In accordance with the policy goals of the EU, the Member States must ensure that renovation of buildings in order to enhance their energy efficiency reduces not just energy demand but also energy costs.

1.3. The national legislation enacted for this Directive must take account of architectural and construction features, i.e. energy needs for heating, cooling, ventilation, lighting, mechanical installations (e.g. lifts), supply of hot and cold water, and sewage systems.

1.4. The EESC endorses the recommendation that the technical feasibility of the following be checked before construction starts:

— heating and energy production based on renewable energy,

— cogeneration and possibly trigeneration

— district heating or cooling

— heat pumps

— geothermal probes and geothermal collectors.

1.5. The EESC believes it is important for the Member States to step up their efforts to improve vocational training in the construction sector with a view to sustainable building and use of renewable energy.

1.6. The EESC particularly welcomes the emphasis in the proposal for a Directive on the key role of the public sector in developments in the construction sector as a whole.

1.7. The Member States and local authorities are called on to be more pro-active and efficient in their use of funding from the European Investment Bank for 'third-party financing' [2] by Energy Services Companies (ESCOs).

1.8. A repeat inspection of heating, ventilation and air-conditioning systems should be conducted in line with Member State rules and taking the costs of inspection into account. The inspection reports should not only contain recommendations for possible improvements but also requirements with respect to the operational safety of installations.

1.9. The recast version of the Directive requires the Member States to envisage penalties and fines. The EESC considers that these should vary depending on whether public or private parties are concerned, and that the amount of the fines should be a matter for subsidiarity. It also considers that if non-compliance with the Community prescription is a fault, then it too should have a Community dimension and be defined in the Directive.

[1] Concerns only the English version.

[2] See Directive 93/76/EC, OJ L 237 of 22.09.1993, p. 28-30.

1.10. The EESC believes that the Member States should provide technical support to their citizens for building renovation.

1.11. In the housing developments with standardised concrete-block buildings that are typical in all the new EU Member States it would be difficult for owners' associations to produce energy performance certificates for all the standardised buildings. Energy performance certification based on assessment of another representative apartment block ([3]) could reduce renovation costs and red tape.

1.12. In addition, occupiers of individual apartment blocks could be offered facilities for renovation financing, building contracts, maintenance, issue of energy performance certificates, etc., based on the principle of a 'one-stop shop' in the municipality.

1.13. The EESC believes that the recast version of the Directive will help to reduce CO_2 emissions and will have positive social effects within a relatively short time, not least by:

— reducing energy demand

— improving the living standards of disadvantaged families

— providing employment for long-term unemployed people.

1.14. The EESC recommends full coordination of the new labelling for window frames and construction products with the Directive on the energy performance of buildings.

1.15. The EESC considers that if apartment blocks are demolished because renovation to make them more energy-efficient is no longer feasible, those concerned should be contacted by the competent authorities and the occupiers must be offered alternative accommodation. More broadly, consultation of representative civil society organisations should be included in the specifications of all measures implementing the Directive, and national ESCs – at least in those countries that have them – should be consulted as a matter of course ([4]).

([3]) Addition to provisions in Article 10(5)(b) of the recast version.

([4]) This would ensure compliance with the prescriptions contained in Articles 1 (human dignity) and 34(3) (housing assistance) of the EU Charter of Fundamental Rights.

2. **Introduction**

2.1. The EESC has already drawn up several major opinions on reducing CO_2 emissions and energy-saving in conjunction with common EU policies, and on the energy quality of buildings and their installations. Tangible results are being achieved on the basis of EU legislative requirements in new buildings. These results are felt primarily by consumers, while also benefiting the country as a whole. The relevant opinions include TEN/227, 263, 283, 274, 286, 309, 269, 299, 311, 332 and 341 ([5]).

2.2. However, after their accession to the EU, the 12 new Member States began transposing legislation into practice at a much later stage, and these countries therefore lag behind the old Member States in matters relating to energy performance of buildings, with residential and public buildings not even coming close to meeting the minimum requirements of the Directive.

2.3. The EESC already commented on the Directive itself in its opinion of 17 October 2001 ([6]), and the present opinion therefore considers only the proposal for a recast version of Directive 2002/91/EC (COM(2008) 780 final), drawing attention to the particular circumstances of the new Member States in relation to issues mentioned in this directive.

2.4. It is positive that the objectives of EU policy also include the possibility of more comfort and lower energy costs for citizens.

2.5. The existing directive already sets out:

— the method for calculating the energy efficiency of new and existing buildings that are being renovated,

— minimum requirements for energy efficiency,

— energy performance certification,

— inspection of boilers and heating systems,

— inspection of air-conditioning systems.

2.6. The recast version sets out, based on the arguments of competent bodies, what can be improved through targeted approaches and how.

([5]) TEN section brochure 'What Energy Policy for Europe? Key points of recent EESC opinions', and other EESC sources.

([6]) 'Energy performance of buildings', OJ C 36 of 8.02.2002, p. 20.

3. **General comments**

3.1. Some 40 % of energy consumption and CO_2 emissions in the EU is accounted for by buildings (residential and commercial). This sector represents some 9 % of GDP (about EUR 1 300 billion) and 7-8 % (*summary of impact assessment*) of jobs in the EU (about 15-18 million of the total 225,3 million people in work according to Eurostat). 40 %of buildings are in public ownership and 74 % have a floor area of less than 1 000 m^2.

3.2. Today's society is increasingly conscious of:

— environmental protection issues,

— consumer health (e.g. ambient air quality, accessibility for the elderly),

— comfort of living conditions,

— efficiency of electrical appliances and heating systems (the sector is subject to numerous rules that are often contradictory) ([7]).

3.3. Civil society should evaluate the economic impact, adequacy and future effects of the proposals from the perspective of various parties and social groups in a specific region, with a view to longer-term developments.

3.4. Energy performance certification for buildings is not just a means of assigning a building to a particular energy-efficiency class, but also provides an incentive to seek new planning solutions.

3.5. There is substantial potential for job creation in the building sector based on required climate protection measures.

3.5.1. On the basis of Directive 2002/91/EC and the proposed recast version of it, an average of 60 000 new jobs could be created each year in the 15 old Member States and some 90 000 jobs in the 12 new Member States.

3.5.2. Implementing measures to ensure high energy performance (in buildings with an annual consumption of up to 50 kWh/m^2) could lead to 1 million new jobs being created in the EU each year ([8]) (equivalent to 10 % of employment in this sector).

3.5.3. Currently not enough workers in the building sector have the skills required in the technologies that are needed to achieve high levels of energy efficiency. The proposal for a Directive recommends training measures to ensure the availability of qualified workers who can be employed in the sustainable buildings sector.

3.6. Looking ahead is particularly important for us: in point 3.4 of its opinion INT/415 ([9]), the EESC formulated an idea relevant to all legal acts, namely that they must be comprehensible, accessible, acceptable and enforceable. From a technical point of view, a directive should also be timely, viable and achievable.

3.7. Point 2.1.3 of opinion TEN/299 ([10]) notes that for heating alone the average consumption of conventionally equipped dwellings in many regions of Europe is 180 kWh/m^2/year. According to information available to the rapporteur and his expert, the average energy consumption for heating in standardised dwellings in the Baltic States, and in dwellings of about the same age in neighbouring countries, is around 150 kWh/m^2/year. Experience shows that consumption under the same climate conditions can be reduced by half after renovation and insulation.

3.8. Relevant Community provisions relating to the current situation in the EU are cited in point 3.1 of opinion TEN/299 ([10]).

3.9. The Environment DG and Enterprise and Industry DG are in the process of drawing up important rules on the labelling of construction products; these rules will help to reduce energy consumption (windows, walls, and heating, ventilation and sanitation systems), even if the products themselves do not produce energy.

3.10. Recasting or revising the existing provisions can contribute significantly to reducing energy demand in buildings.

4. **Specific comments**

4.1. The recast version of the Directive introduces the following important changes:

— broader scope: energy performance certification becomes binding for all buildings (it should be noted that 74 % of all buildings in the EU have a floor area of less than 1 000 m^2);

— extending and promoting energy performance certification for public sector buildings;

([7]) A lead market initiative for Europe, COM(2007) 860.

([8]) Study carried out by the Environment DG (Social Development Agency).

([9]) 'The proactive law approach', OJ C 175, 28.7.2009, p. 26.

([10]) 'Energy efficiency of buildings – the contribution of end users', OJ C 162, 25.6.2008, p. 62.

— strengthening the role of the experts who issue energy performance certificates;

— requiring the Member States to introduce specific new measures to create more favourable financial conditions for investment in improving energy efficiency;

— taking more account of problems relating to air-conditioning systems;

— regular updating of the energy efficiency standards of the European Committee for Standardisation.

4.2. In recital 6, the percentage given of final energy consumption accounted for by buildings is markedly higher in countries with a cold climate. It is therefore proposed that recital 8 of the recast version of the Directive take adequate account of climate and location, especially with regard to allocation of investment.

4.3. The EESC welcomes the provisions of Article 10, under which, in the case of building complexes with a shared heating system, energy performance certificates can be issued on the basis of a general certificate for the whole building or based on assessment of another representative apartment in the same block, although the EU countries could further simplify the procedure for issuing energy performance certificates for standardised buildings.

4.4. Energy performance certification under Article 10 – whether mandatory or voluntary – makes dwellings more attractive to future owners or tenants, provided the information on the certificates is reliable. The EESC considers the proposal set out for Option B 1 of conducting random sampling checks of certificates in order to guarantee their reliability to be acceptable and recommendable. However, this should not lead to penalties being imposed in accordance with Article 22. The new energy performance certificate for a residential building should preferably become a document that guarantees long-term energy quality. The certificate for a newly installed heating system should be issued by independent experts (see Article 16) together with the fitter.

4.5. The EESC welcomes the thresholds for inspection fixed in the Directive of 20 kW of the effective rated output of boilers (Article 13) and 12 kW of the effective rated output of air-conditioning systems (Article 14). Depending on whether fossil fuels or renewable energy sources are used, the EU Member States could set different thresholds and different inspection intervals for heating systems in their regions. The quality of the inspection reports should be subject to recurring spot checks in accordance with Article 17, though it is unclear whether the recommendations of the expert for improving the system should be binding or can be ignored, or whether the 'financial consequences' mentioned in Article 19 should be regarded as penalties. Provisions enacted by the individual Member States should stipulate that inspectors must be given access to private property in order to inspect heating systems.

4.6. The energy efficiency of a boiler that is to be sold by a manufacturer is certified in a special laboratory in accordance with standard requirements and displayed on a label affixed to the boiler. This avoids misleading advertising and guarantees quality. Recommendations for subsequent regular or voluntary inspections of the boiler in situ would motivate the owner to take measures to ensure that it works efficiently in accordance with its optimum technical performance parameters.

4.7. Comparison of all the provisions contained in the recast Directive suggests they are all worthwhile and sensible, and that the proposed means of enhancing the energy performance of buildings are consistent with each other and can be implemented concurrently.

4.8. EU-wide energy performance benchmarks and a method in accordance with Article 5 of the Directive and Option D 1 (summary of the impact assessment) are required because it is difficult to compare annual consumption in kWh/m^2 between different countries owing to climate particularities. It should be possible to ascertain the energy performance of heating and cooling systems separately against regional benchmarks that have been fixed. It would make sense to set these values not according to external temperature but on the basis of the typical number of heating degree and cooling degree days in each Member State, since these reflect the effect of climate on energy consumption better than the average external temperature.

4.9. Obviously the parameters for calculating energy performance (as opposed to the actual figures) must be the same in all Member States, and a single calculation method must be used. However, these calculations are unlikely to indicate a country's actual rating, and it is still unclear whether or not the optimum cost level is reached because this is determined by many other economic variables (which are not climate-dependent).

4.10. It is easiest to see and feel the results of renovating buildings with obsolete, provisional or very poor energy indicators under Article 4 (Option D 3). However, buildings with the worst performance also tend to be old and dilapidated. There is no point in providing public subsidies for the renovation of such buildings if the amortisation period of the investment clearly exceeds the anticipated useful life of the building. Such an approach to renovation would have negative consequences. Particular care should be exercised when selecting for renovation buildings with the worst performance.

4.11. Since no houses exist that produce zero emissions (Article 9), the rules should not be too tight here. The EESC believes it is better to adopt a soft approach, leaving the Member States flexibility in their choice of optimum solutions. Zero emissions should be pursued only as a future goal.

4.12. Currently relevant to this are 'passive houses', which have an annual heating requirement of no more than 15 kWh/m^2, as well as 'Category A' houses, which have an annual heating requirement of no more than 30 kWh/m^2.

5. **Conclusions**

5.1. According to the conclusions of the impact assessment the recast Directive provides good prospects for saving energy, and the EESC is confident that broadening the scope of the Directive will help to harness the potential for energy saving in buildings.

5.2. The EESC thinks it will be difficult to achieve the target and financial impact set out in the recast Directive with the estimated yearly investment of EUR 8 billion. In the case of the new Member States alone, it can be estimated that the amount of renovation is much higher. Certain factors independent of the Directive's provisions influence the cost and extent of renovations.

5.3. The extent and need for renovation in Lithuania can be seen from the following figures. There are about 40 000 old residential buildings that are uneconomic with respect to energy efficiency. Various improvements have been made to some 600 existing buildings in order to reduce energy costs (usually by replacing windows), and about 60 buildings have been completely overhauled. Although data vary between sources, they consistently show projects to be substantially behind schedule. At this rate, renovation work will take over 100 years. Renovation under the existing Directive has not even begun.

5.4. Financial factors. A typical example: according to the company *Vilniaus energija*, which supplies heating to the Lithuanian capital Vilnius, a 60 m^2 apartment requires about 200 kWh/m^2 annually for heating and hot water, of which about 140 kWh/m^2 is for heating ([11]). By insulating a building, which would cut heating costs by half, residents would save EUR 5,07 per square metre per year, or EUR 304,20, assuming a price of EUR 0,072 per kWh. According to figures from the local authority of Vilnius, complete renovation of an apartment block costs an average of EUR 165 per square metre ([12]). If loans for renovation must be paid back within 20 years, residents of such a building would be paying at least EUR 41,30 a month. Surveys show that only 5 % of residents would be prepared to do this.

5.5. Psychological and legal factors. A drastic reduction in energy costs can only be achieved through insulation, for which the amortisation period is several decades. This is an inestimably long time scale in terms of people's life expectancy. Young people do not know where they will be living in 20 years' time and people approaching 60 are unsure whether they will even be alive in 20 years, which means that these two population groups (i.e. 20 % of the population ([14])) will not be interested in renovation. In addition, there are poor residents receiving heating subsidies. These factors undermine the argument that renovation increases the value of housing. If an old building is demolished, the owner becomes homeless and often has no right to the land on which the building used to stand, unless he or she purchased it previously. This situation is improved by Article 19 of the new version, which even provides for measures to give information to owners or tenants through information campaigns under Community programmes.

5.6. Renovation of heating systems is discouraged by the view prevailing among consumers that it burdens property owners with a long-term loan that they may in some cases be unable to repay if the economic situation deteriorates, whereas energy suppliers' income from a renovated building remains unchanged, or may even increase following tariff adjustments, which are affected by illegal lobbying and corruption. The reason for this view is partly that suppliers of district heating, which is the main source of heating in the new EU Member States, are raising heating prices across the board, including for renovated buildings, in pursuit of excessive profits. This is a difficult problem to resolve. Consumers' fears could be allayed through technical and administrative measures if transposition of the new, broadened Directive facilitates improved billing through the energy certification requirement and if penalties are applied for infringements under Article 22.

Government is not in a position to co-finance the renovation of heating systems in buildings. From adoption of the programme to modernise apartment blocks in 2004 until November 2008, EUR 37,3 million has been earmarked for such projects, amounting to 0,5 % of the national budget ([13]). Adoption of the recast version of the Directive by the European Parliament, in accordance with the proposal submitted to Parliament by MEP Silvia-Adriana Țicău (RO), should therefore give new impetus to the renovation process based on better distribution of financing through the Structural Funds.

([11]) K. Nėnius, Vilnius Local Authority Programme *Let's renovate houses – renovate the city* (in Lithuanian), http://www.krea.lt/uploads/Busto_progr_bendrijos_EAIP.ppt#22.

([12]) E. Levandraitytė, *Tough policies unavoidable*, in: Statyba ir architektûra (*Construction and Architecture* magazine) (in Lithuanian), 2008/12, pp. 26-29.

([13]) V. Martinaitis, *Energy performance of Lithuanian apartment blocks and challenges for Lithuania's economy*, 22.10.2008. Material for a workshop on *The most expensive heating season*.

([14]) Office for Statistics, Residents of Vilnius and Housing (in Lithuanian), http://www.stat.gov.lt/uploads/docs/Vilniaus_saviv.pdf.

5.7. Large-scale renovation work will bring about savings in heating costs for buildings, but the expected reduction in CO_2 emissions may not happen. Residual heat from electricity generation is used in the production of energy for heating by combined heat and power plants. Reducing heating consumption may result in part of the unused residual heat being used to heat newly constructed buildings, so that carbon dioxide emissions are lessened.

5.8. In the absence of public guarantees, support and plans, consumers feel pessimistic. Moreover, neither the existing nor the recast Directive establish the principle of a 'one-stop-shop' for the renovation process, which all stakeholders and consumers would like to see. Where energy costs are clear from bills that have been paid and both contracting parties are in agreement, consumers have reservations about the requirement in Article 11(3) and (4) that an energy performance certificate must be presented when an apartment in a block with several apartments is sold or let.

5.9. Numerous manmade building materials exist ([15]) ([16]) from which the most suitable can be chosen. However, if the market is suddenly flooded by enormous amounts of investment for renovation to revive the construction sector, there is a risk that, in the race to secure those funds, less attention will be paid to the quality of the products selected. On the other hand, the provisions of the Directive (Articles 16 and 17) concerning independent experts and the independent control system would prevent the use of poorer-quality products, if the remit of these experts were extended accordingly.

Brussels, 14 May 2009.

The President
of the European Economic and Social Committee
Mario SEPI

([15]) 'Laying down harmonised conditions for the marketing of the construction products', OJ C 218, 11.9.2009, p. 15.

([16]) This would ensure compliance with Article 1 (human dignity) and Article 34(3) (housing assistance) of the EU Charter of Fundamental Human Rights.