

Comments of BING on the recast of Directive 2002/91/EC on the Energy Performance of Buildings (COM(2008) 780)

BING is the European association representing the polyurethane insulation industry. Rigid polyurethane foam (PUR/PIR) is the premium insulation material used in a wide variety of applications in buildings, district heating, cooling and refrigeration, and industrial systems.

Introduction

Directive 2002/91/EC is one of the most ambitious pieces of legislation ever adopted at European level. Although the national implementation turned out to be long and difficult, one can already see today the profound changes in national building regulations and construction practices triggered by the directive. Hence, in spite of all problems, the directive should be considered a success story.

Buildings account for about 40 % of the overall energy end use in the EU and, with 27 % for residential and 30 % for commercial buildings¹, offer the highest cost-effective savings potential of all end use sectors.

Based on a thorough analyses and a detailed impact assessment, the European Commission has presented a recast draft which remedies the shortcomings of the current version and adds certain complementary measures. The implementation of the proposal would lead to at least 60 – 80 Mtoe/year energy savings in 2020, (reduction of 5-6% of the EU final energy consumption in 2020), 160 to 210 Mt/year CO2 savings in 2020 (i. e. 4-5% from EU total CO2 emissions in 2020), and 280,000 to 450,000 new jobs.²

In doing so, the directive would also greatly contribute to achieving Europe's climate targets and reducing the union's import dependency.

BING welcomes and fully supports the Commission proposal. The following complementary proposals aim to clarify certain articles and ensure a holistic approach.

¹ Commission Communication "Action Plan for Energy Efficiency: Realising the Potential" COM(2006)545 final (page 7)

² Commission staff working document: Impact assessment for the EPBD recast (COM(2008) 755), 2008

Specific comments

RECITAL 3

Commission proposal

Reduction of energy consumption in the buildings sector constitutes an important part of the measures needed to reduce greenhouse gas emissions and comply with the Kyoto Protocol to the United Nations Framework Convention on Climate Change, and with further European and international commitments to reduce greenhouse gas emissions beyond 2012. Reduced energy consumption also has an important part to play in promoting security of energy supply, technological development and providing opportunities for employment and regional development, especially in rural areas.

BING proposal

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Following "trias energetica" in its various versions, energy efficiency considerations should start from reduced energy demand of buildings, followed by the use of renewable sources of energy and topped up by efficient building equipment.

Reason:

It should be clarified that the reduction of a buildings energy demand must be the starting point in the energy efficiency discussion. The principles of the trias energetica optimise the cost effectiveness of energy efficiency improvement measures.

RECITAL 10

Commission proposal

The energy performance of buildings should be calculated on the basis of a methodology, which may be differentiated at national and regional level, and that includes, in addition to thermal characteristics, insulation, other factors that play an increasingly important role such as heating and airconditioning installations, application of renewable energy sources, passive heating and cooling elements, shading, *indoor air quality*, adequate natural light and design of the building. The methodology for calculating energy performance should not only be based on the season where heating is required, but should cover the annual energy performance of a building.

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Reasons:

Indoor air quality is not related to the energy performance of building, but to the health of building occupants. As such, it is covered by the current Construction products directive (essential requirement 3) and the future Construction products regulation (basic works requirement 3). Duplication should be avoided.

ARTICLE 2 - Definitions

Commission proposal	BING proposal
For the purpose of this Directive, the following definitions shall apply:	For the purpose of this Directive, the following definitions shall apply:
	New 5 (a) "Component" means an individual part of the building which influences the energy performance of the building and which is not covered by the technical building system, e.g. roof, walls, floor, foundations, doors and windows.

Reasons:

This term is frequently used in the directive. A definition should hence be added to Article 2 to avoid ambiguous interpretations by Member States.

ARTICLE 6 - New buildings

Commission proposal	BING proposal
1. Member States shall take the necessary	Member States shall take the necessary measures
measures to ensure that new buildings meet the	to ensure that new buildings meet the minimum
minimum energy performance requirements set in	energy performance requirements set in
accordance with Article 4.	accordance with Article 4.
For new buildings, Member States shall ensure	
that, before construction starts, the technical,	
environmental and economic feasibility of the	
following alternative systems is considered	
and taken into account:	
(a) decentralised energy supply systems based	
on renewable energy;	
(b) cogeneration;	
(c) district or block heating or cooling, if available; (d) heat pumps.	
2. Member States shall ensure that the analysis	
of alternative systems referred to in paragraph 1	
is documented in a transparent manner in the	
application for the building permit or for the	
final approval of construction works of the	
building.	

Reasons:

The requirement to assess the benefits of a small number of specific technologies should be removed as it distorts the market. Furthermore, these technologies are already covered by the future Renewables directive.

The EPBD should simply demand a CO₂ and a primary energy target and then let the market prevail. The will stimulate creative and innovative solutions and put the focus on lowering a building's energy demand.

ARTICLE 9 - Buildings of which both carbon dioxide emissions and primary energy consumption are low or equal to zero

The phrasing regarding carbon dioxide emissions has been chosen with care to avoid that buildings with poor insulation and inefficient technical building systems but using electricity generated by nuclear power plants can be considered as energy efficient. Hence, the wording relating to these buildings should not be changed.

Commission proposal

1. Member States shall draw up national plans for increasing the number of buildings of which both carbon dioxide emissions and primary energy consumption are low or equal to zero. They shall set targets for the minimum percentage which those buildings in **2020** shall constitute of the total number of buildings and represent in relation to the total useful floor area.

Separate targets shall be set for:

- (a) new and refurbished residential buildings;
- (b) new and refurbished non-residential buildings;
- (c) buildings occupied by public authorities.

Member States shall set the targets referred to in point (c) taking into account the leading role which public authorities should play in the field of energy performance of buildings.

- 2. The national plan referred to in paragraph 1 shall include inter alia the following elements:
- (a) the Member State's definition of buildings of which both carbon dioxide emissions and primary energy consumption are low or equal to zero;
- (b) intermediate targets expressed as a percentage which those buildings shall constitute of the total number of buildings and represent in relation to the total useful floor area in 2015;
- (c) information on the measures undertaken for the promotion of those buildings.

BING proposal

1. Member States shall draw up national plans for increasing the number of buildings of which both carbon dioxide emissions and primary energy consumption are low or equal to zero. They shall set targets for the minimum percentage which those buildings in **2015** shall constitute of the total number of buildings and represent in relation to the total useful floor area.

Separate targets shall be set for:

- (a) new and refurbished residential buildings;
- (b) new and refurbished non-residential buildings;
- (c) buildings occupied by public authorities.

From 2020 onwards, all new buildings must meet the requirements of buildings with zero carbon dioxide emissions and primary energy consumption.

Member States shall set the targets referred to in point (c) taking into account the leading role which public authorities should play in the field of energy performance of buildings.

Member States shall ensure that the cost effective improvement measures of the energy performance of a building or parts thereof, as referred to in article 10.2, shall be implemented for the buildings referred to in point (c) within 5 years from issuing the energy performance certificate.

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- (a) the Member State's definition of buildings of which both carbon dioxide emissions and primary energy consumption are low or equal to zero;
- (b) intermediate targets expressed as a percentage which those buildings shall constitute of the total number of buildings and represent in relation to the total useful floor area in 2015;
- (c) information on the measures undertaken for the promotion of those buildings.

Reasons:

The Commission proposal is clearly a step in the right directive but needs to be strengthened to specify that these targets are meaningful and are guaranteed to lead to a significantly higher

market uptake of such buildings. Many Member States (including A, D, DK, F, FIN, NL, UK etc.) have already taken similar measures. As similar construction products and technologies are available across the EU, all Member States should be able to follow these examples. The prices for zero or very low energy houses are only slightly higher and the pay-back periods are reasonable. With a wider market uptake, economies of scale will lead to lower prices.

Public authorities should be forerunners in realising the savings potential of buildings. An obligation to implement cost-effective measures within a given period of time will make this leading role meaningful. The reference to cost-effectiveness will ensure that public money is spent wisely.

ARTICLES 10 and 11 – Energy performance certificates

Current practice shows that the certificates are often not handed over to the buyer / tenant or the recommendations for improvement are not included. Hence, BING fully supports the amendments in this article which will ensure that the certificates become a powerful and market driven tool in promoting energy efficiency.

Commission proposal

Article 10 Energy performance certificates

2.1. Member States shall lay down the necessary measures to establish a system of certification of the energy performance of buildings. The energy performance certificate shall include the energy performance of a building and reference values such minimum energy performance requirements in order to make it possible for owners or tenants of the building or parts thereof to compare and assess its energy performance.

BING proposal

Article 10 Energy performance certificates

2.1. Member States shall lay down the necessary measures to establish a system of certification of the energy performance of buildings. The energy performance certificate shall include the energy performance of a building expressed in primary energy demand and CO₂ emissions, and reference values such minimum energy performance requirements in order to make it possible for owners or tenants of the building or parts thereof to compare and assess its energy performance.

Reasons:

This amendment clarifies the content of the energy performance certificate and brings article 10 in line with the requirements of annex 1 of this directive.

Brussels, 28 December 2008