

# Recast of the Energy Performance of Buildings Directive

October 2009

Northgate Public Services Response

## Response

### Introduction

1. Northgate warmly welcomes the opportunity to respond to the Department of Communities and Local Government consultation on the government's response to the recast of the Energy Performance of Buildings Directive (EPBD).
2. The Energy Performance of Buildings Directive was designed to tackle climate change by reducing the amount of carbon produced by buildings. It provides a requirement for the production of energy performance certificates (EPC) whenever a building is sold, constructed or rented out; the production of a display energy certificate (DEC) for public buildings larger than 1,000m<sup>2</sup>; the inspection of air-conditioning installations above a certain size on a regular five year basis; and the inspection of boiler installers above a certain size.
3. The European Commission wishes to recast the Directive to:
  - extend the scope of the original Directive;
  - strengthen certain provisions and clarify other aspects; and
  - give the public sector a lead role in promoting energy efficiency.
4. The key proposals in the recast include:
  - DECs to be displayed in buildings larger than 250m<sup>2</sup> that are occupied by a public authority;
  - EPCs to be displayed in commercial buildings larger than 250m<sup>2</sup> which are frequently visited by the public and where an EPC has previously been produced on the sale, rent or construction of the building;
  - the energy performance of existing buildings of any size that undergoes major renovations to be upgraded in order to meet minimum energy performance requirements;
  - the Commission to establish common principles for the definition of low and zero carbon (LZC) buildings and targets for increases in LZC buildings;
  - Member States to aim for cost optimal levels of energy performance of their buildings using a methodology.

The Commission proposes that the Directive should be implemented by 31 December 2010 where proposals affect the public sector, and 31 January 2012 for other buildings.

## Comment

5. This response draws upon our experience of working for over fifteen years in innovative partnerships designed to promote energy efficiency and develop sustainable communities, as well as working with a range of stakeholders in the field of energy efficiency including local authorities, surveyors, architects and most recently domestic energy assessors.
6. The government has broadly welcomed the contents of the proposed recast and says that it is pleased that, to a large extent, the proposals reflect existing policy.
7. We agree with the government and warmly welcome proposals that support and further enhance energy performance requirements for property and buildings. Energy use in residential and commercial buildings represents about 40 per cent of the European Union's (EU) total final energy consumption and CO<sub>2</sub> emissions.
8. We further support the view that the public sector must play a leading role in improving the energy efficiency of our building stock, providing an exemplar to the private sector.
9. We believe that the recasting of the Directive provides an opportunity to create a more coherent, streamlined, simplified and consistent system for measuring the energy performance of buildings.
10. Throughout Europe there are significant variations in EPBD implementation, with big differences in impact, compliance and control. Whilst we think some variation is justified because of diversity between the Member States, we believe that there is a huge opportunity to improve energy efficiency in buildings throughout the EU, whilst delivering cost savings to public and private bodies.

## Clarification of terms

11. We agree with the government that there is a need for clarification of certain terms contained within the proposed recast Directive. These include: "building", "major renovations", "low carbon", "zero carbon" and "cost optimal levels".
12. Lack of clarification and consistently applied definitions in the current EPBD (1) has implications for the current operation and assessment of schemes within Europe. If Member States are not consistently or clearly applying definitions within their schemes or assessors are unclear and inconsistent, then comparisons between Member States becomes less meaningful.

#### Methodology for calculating the energy performance of buildings

13. Article 3 requires Member States to adopt a methodology for calculating the energy performance of buildings which includes the requirement to measure primary energy consumption. The software in the UK does not currently take into account the calculation of primary energy efficiency emissions from a building.
14. We agree with the government that it would be desirable to measure primary energy and that amending the current software would not involve great costs. It is important, however, that there is a clear roadmap for implementing the revised methodologies into software specifications and that this takes into account the time required for development to be fully tested and operational.
15. We also think that to simplify the system and improve communications, it would make great sense for the government to use the opportunity posed by the recast of the Directive to harmonise the current sets of numeric indicators amongst different EPC types. For example, the Standard Assessment Procedure (SAP) is currently based on a rating of 0-100 (bad to good) whereas the Simplified Building Energy Model (SBEM) for commercial properties uses ratings of 100-0.

#### Setting of minimum energy performance requirements

16. The key change to Article 4 is that minimum energy performance requirements must now be set with a view to achieving cost optimal levels of performance. We agree with the government that it would be useful to have greater clarification on how it is proposed that it should be calculated. We discuss this in more detail below.
17. Article 4 also provides that from June 2014 Member States may not provide incentives for the construction or renovation of buildings that do not comply with the minimum energy performance requirements. The government does not support this because it suggests that there may be situations where it wishes to support in particular the renovation of such buildings, for example to stimulate employment.
18. We do not accept this argument which suggests that economic demands must necessarily take priority over environmental ones. As government has suggested elsewhere, it is vital that the public sector takes a lead in promoting the energy efficiency of properties and rejecting this change implies an inconsistent approach to tackling climate change. We believe that the lead-in time provides the government with ample time to ensure that job opportunities and the stimulation of employment are linked to the promotion of a low carbon economy rather than connected to undermining it. (Question 1)

#### Calculation of cost-optimal levels of energy performance requirements

19. Article 5 is a new article which provides that the Commission will establish a broad framework for a comparative methodology for calculating the energy performance of building. It will provide for the calculation of cost-optimal levels as discussed above. Member States will be required to compare the results of this calculation with the minimum energy performance requirements that they have laid down. They will be required to report to the Commission every three years.
20. We wholeheartedly support a cost optimisation approach particularly in the current economic climate. As the European Commission points out the potential for cost-effective energy savings is substantial and could lead to significant economic, social and environmental benefits. The inclusion of the calculation will help to spread awareness and encourage a more holistic and integrated approach to energy efficiency, linking it to improved economic performance and sustainability.
21. We believe that the European Commission is right to ensure that there is a framework for cost optimisation and that their objectives need further clarification for these comparisons to be made within Member States. Whilst a single methodology will be developed by the Commission, this will be the framework from which the Member States will retain the freedom to prescribe the detailed methodology. We think it unlikely that this will raise issues of subsidiarity. (Question 2)

#### New buildings

22. Article 6 provides that before the construction of any building starts, regardless of size, that the technical, economic and environmental feasibility of alternative energy systems must be considered. The analysis must be documented in a transparent manner and include any application for planning permission or when demonstrating compliance with the Building Regulations.
23. We warmly welcome this Article. It will help to ensure that energy requirements are incorporated at an earlier stage in the development of a construction. It is also essential that there is a process whereby "alternative" can be effectively mainstreamed both in terms of hands on experience in design and implementation, and with increased use, reduced cost. This provision will help to shape that process which needs to be accelerated by other policy mechanisms available to the UK government. (Question 3)

#### Existing buildings and technical building systems

24. We welcome Article 7 which requires the energy performance of all buildings is upgraded when there is major renovation. Whilst no additional impact is expected in

the UK as the UK government already has such a requirement, this Article will help to ensure greater consistency across the EU.

25. We also welcome Article 8 which provides that Member States shall set minimum energy performance requirements for technical building systems that are installed in buildings. Again, whilst no additional impact is expected in the EU, this will help to ensure greater consistency across the EU.

#### **Low and zero carbon and primary energy buildings**

26. Article 9 requires Member States to set targets for an increase in the number of buildings of which both CO<sub>2</sub> emissions and primary energy consumption are low or equal to zero. Whilst Member States will be able to set their own definition of low and zero carbon, they will need to comply with the common principles laid down by the Commission.
27. We understand that the government rejects the need for targets, however we believe that the European Commission should provide further clarification on the nature of those targets before ruling these out entirely. (Question 4)

#### **Energy performance certificates**

28. We warmly support the amendment to Article 10. This provides that, in future, the recommendations which form part of the EPC shall be more precise and detailed. In our experience, this precision is what many householders and organisations expect from their EPC and are often disappointed by the omission. As part of the process of implementation, additional training for Domestic Energy Assessors (DEA) will be required.

#### **Issuing of energy performance certificates**

29. Article 11 provides that DEC's must, in future, be issued for buildings where a total useful floor area over 250m<sup>2</sup> is used by a public authority. The government does not accept this proposal.
30. Whilst we accept that the impact assessment shows that the total energy used in those additional buildings represents only 1.4 per cent of the total energy used in the public sector, we note that many of the buildings are in the education, local government and health sectors. Where there is public access to such building the display of energy certificates may help to increase awareness of the importance of energy efficiency in responding to climate change, and again demonstrate that the public sector is an exemplar and taking a lead on this issue.
31. The government suggests that the emphasis should be on ensuring that the larger buildings carry out the recommendations in their report. We think that by the time

that new proposals are introduced, there would have been two clear years for organisations to begin the major improvements to improve energy and (hopefully) taking cost efficient measure to realise changes. Therefore, we support this as a means of ensuring that the public sector stock increasingly works consistently towards energy efficiency levels irrespective of size of building. (Question 5)

32. Amongst other things, Article 11 also provides that the energy performance indicator is stated in all advertisements for sale and that the energy performance certificate is shown to the prospective buyer, as well as making similar provision in the rent of a property.
33. We warmly welcome this. We believe that It will by default highlight non-compliance and poor performance, and help to increase the value that energy efficiency could contribute to the price of property for rent and sale. It will also help to encourage comparisons to be made by prospective buyers or renters, helping to put pressure on landlords and existing owners to make energy efficiency improvements. (Question 6)

#### **Display of energy performance certificates**

34. Article 12, amongst other things, provides that an EPC should be displayed in buildings larger than 250m<sup>2</sup> that are occupied by an organisation other than a public authority, and that are frequently visited by the public.
35. We welcome and support this as a means of raising public awareness and demonstrating poor practice. As the impact assessment indicates it is possible that this requirement may encourage greater take up of the energy improvement recommendations amongst occupiers. (Question 7)

#### **Inspection of heating systems, air conditioning systems**

36. Article 13 extends the requirements of inspection of heating systems with boilers and ensures that there must be regular inspection of heating systems larger than 20KW. We support this proposal.
37. We also support the extension of the existing provisions on the inspection of air-conditioning system contained within Article 14.

#### **Reports on the inspection of heating and air-conditioning systems**

38. Article 15 specifies the type of advice to be included in an air-conditioning report. We support this. It will help to provide additional information that could lead to energy savings. (Question 8)

#### Independent experts

39. Article 16 provides that only those with expertise should be energy assessors. Only those who are both qualified and accredited may produce EPCs or air-conditioning reports.
40. We warmly welcome this amendment. Whilst this will have no impact in most parts of the UK where these requirements reflect the current situation, it will help to ensure consistency within the EU as a whole. However, the Scottish Government will need to review its position as assessors in Scotland currently must be either qualified or accredited.

#### Independent control

41. Article 17 requires Member States to establish an independent control system for EPCs and air-conditioning inspection reports. We support this and believe that it is essential that the results are publicised and disseminated as part of the process of raising public awareness.

#### Review

42. We support Article 18 that provides that the Commission shall evaluate the effectiveness of the Directive and make proposals regarding methodologies to determine the energy performance of buildings and incentives for further energy efficiency measures in buildings. (Question 9)

#### Information

43. We also support the amendment of Article 19 which says that Member States shall provide information to owners and tenants of buildings on the different methods and practices that can improve the energy efficiency of buildings. This will help to ensure consistency throughout the EU. Information is helping to shift cultural perceptions to view energy inefficiency as a social harm which needs to be eradicated through individual and collective behaviour. (Question 10)

#### Thermal characteristics

44. We agree with the amendment to Article 20 which enables the Commission to modify thermal characteristics taken into account in the methodology. It is essential that the methodology is robust and that requires a flexibility which enables it to reflect changes in reality. (Question 11)

#### Committee and penalties

45. We support Articles 21 and 22 which provide respectively that the Commission is supported by a committee, and that Member States shall introduce penalties for failing to comply with the Directive.

46. Article 21 reflects the current Directive. Article 22 is new and whilst it is likely that the UK will be compliant, it will help to ensure consistency throughout the EU. (Question 12).

#### Timetable

47. The government seems to suggest that it believes that the European Commission timetable is unrealistic by its phrasing of question 13. We do not take this view. We believe that it is a challenging timetable which is, however, achievable and which recognises the imperative to take firm action throughout the EU.
48. EPBD 1 already exists. It has been operational for over two years. So long as the software, technical and educational arrangements are clearly set out and implemented and there is a political determination to implement the Directive we believe that the timetable is feasible.