

## **Energy performance of buildings evidence and feedback**

**Lord Marland of Odstock & Andrew Stunell MP**

**8 December 2010**

**Seeking your views on how to improve the energy performance of buildings regime**

**The following response is supplied by Linn Rafferty of JTec Energy and Automation Services: <http://jtectservices.co.uk/default.aspx>**

Linn was responsible for project managing the industry team that developed the original RdSAP methodology between 2000 and 2007, and provided technical support to the Focus Group market research into the format of the current EPC. She now operates as a freelance consultant.

Some of these suggestions will have cost implications; the cost of improving the effectiveness of the EPC should be borne by the industry, including a contribution from the Green Deal providers who will eventually benefit from it.

**Question a) The content, format, accessibility and coverage of EPCs and DEC's, and the extent to which consumers act on their recommendations.**

The specific issue to be addressed is that currently, very few consumers act on their recommendations. There are a number of possible reasons for this, including that the recipient may not see the EPC; as the estate or letting agent only provides the coloured page 1 graphics, the impression is given that this is the entire EPC. Other reasons are that the recommendations are not seen or understood, and the timing of the EPC, produced for the person who is about to vacate the property and has no incentive to improve the buildings efficiency. These possibilities are further explored in the NHER report, *Seizing the Opportunity*, available from <http://www.nesltd.co.uk/news/can-we-seize-opportunity>

The review of the EPC and EPBD should therefore:

1. Recognise the inherent faults in the current EPC and address them. These are:
  - Ignores location (and therefore, the heat losses due to the local climate) and energy used for cooking and appliances. Together, these introduce an unacceptable systemic difference between the EPC's predicted fuel bills and those experienced by the occupier, which cannot be explained by the use of standard occupancy.
  - Provides a confused mixed message – e.g. the two coloured graphics on page 1. The focus must be on the energy efficiency rating, ie how much output (in terms of heat, light, & other energy uses) do you get per £ spent on energy.
  - The validity is too long, currently 10 years, which is too long to ensure that when reused they are not dismissed as out of date and irrelevant. The valid lifetime must be reduced, perhaps to the three years that was agreed following consultation after the RICS challenge to the 1 year validity then in force under HIP regulations.

A better approach would be to require a new certificate every time the property was resold or relet.

**Question b) How effectively EPC and DEC assessments are conducted, both in terms of the practical process/methodology used by assessors while on site, and the underpinning calculation methodologies/software they employ.**

The comments above also relate to this, plus, the review of the EPC and EPBD should:

2. Recognise the difference in situations when an EPC is created (a) on property transfer (sale or let) when the energy audit must ignore the circumstances of the current occupier; and (b) for a current occupier, when the energy audit must reflect the circumstances of the current occupier. This difference does not mean that the same methodology can't be used in both situations, but it must be set out as a two-stage process. Stage 1 provides for situation (a) and stage 2 covers the extra work required in situation (b); for an EPC on property transfer, only stage 1 applies.
3. Carry out a thorough review of the recommendations produced by the EPC. Again, the precise logic by which recommendations are made will differ between situations (a) & (b). For example, the acceptability of a recommendation for insulating lofts or roof rooms if there is no access would depend on the opinions & circumstances of the occupier, so this is appropriate to consider in situation (b), but not (a).
4. Ensure the recommendations are based on cost effectiveness, not carbon reduction effectiveness, in order to appeal to the majority. For a future version, consider allowing the DEA to switch between cost and carbon effectiveness, so allowing the householder who is motivated by saving carbon to receive recommendations based on this preference. Future tariff projections could be included, showing how the cost effectiveness of measures increases with increasing energy prices. Finally, consider giving less emphasis to payback time (whoever asks for the payback time for a new kitchen?) and more emphasis on improved comfort, enjoyment of the home, and financial return on investment.
5. To allow the EPC to provide the foundation for recommendations within Green Deal, ensure that the savings from installing the proposed recommendations are estimated sufficiently accurately. Thus the running cost estimates pre- and post-installation must not use standard occupancy and three year old fuel prices, as used in the EPC rating. They must instead reflect how the occupier uses their installed systems and appliances and be based on current fuel prices.

**Question c) The adequacy of the existing qualification and accreditation arrangements for energy assessors, and whether the current numbers of assessors matches the likely future demand for EPCs and DECs.**

6. The training regime that delivered the current cohort of DEAs did not always produce sufficiently well trained practitioners. Whilst the reasons for this are

varied, the present situation is not satisfactory and should be addressed. A programme of improving the skill level of DEAs could be initiated, starting with re-training requirements for those DEAs who fail audit inspections, and possibly extending to all DEAs in the future. To support both Green Deal and the Renewable Heat Incentive, this could include training to deliver Home Energy Advice, and/or to equip DEAs to carry out energy audits using the full SAP. It is arguable that in order to provide for those properties that cannot adequately be assessed using RdSAP, all DEAs should be trained to offer EPCs using SAP when appropriate.

7. The current number of assessors is likely to be sufficient to meet future demand, both for property transfers and for use within Green Deal, if it remains steady. However, action is needed now to address the loss of DEAs from the profession, which could lead to insufficient numbers in future.

**Question d) How effective the quality control and assurance arrangements are in ensuring the production of high quality EPCs and DEC consistently across the country and, in particular, the performance of the accreditation schemes and auditing processes.**

8. The current accreditation regime suffers from inconsistencies between accreditation schemes. All schemes must be required to apply the current audit schemes effectively, in order to identify and de-register the assessors whose work is below standard. An overall QA body, such as was originally proposed to CLG by Faero Ltd, should be established, with no alternative available; allowing schemes to “opt out” would simply enable some schemes to deliver lower quality EPCs with no repercussions.
9. It must be acknowledged that very low cost EPCs are not compatible with achieving the quality standard. While market forces dictate the price accepted by the DEA, there is a temptation to deliver sub-standard work to lower the price charged. Whilst Government cannot set a minimum price for an EPC assessment carried out on property transfer, consideration should be given to how such a minimum price could be required as a condition of acceptance of a Green Deal Provider into the Green Deal scheme.

**Question e) How effective the current provisions are for ensuring compliance (and for enforcing against non-compliance) with EPC, DEC and air conditioning inspection report requirements.**

10. There is a significant problem with non compliance, although this is worse in the non-domestic, public building and airconditioning sectors. Since the suspension of the HIP legislation, non compliance in the domestic sector appears to have increased. Regulation to require an EPC prior to marketing (for sale or let), together with the requirement to include more of the EPC detail in marketing materials, would give visibility to the process and allow compliance authorities an easy route to identify non compliance and take action.

**Question f) What scope there might be for making better use of EPC/DEC data to support the initiatives of public and private organisations to reduce carbon emissions from buildings.**

11. The data should be publicly available to support such initiatives.