

Proposals for amending Part L of the Building Regulations and implementing the energy performance of Buildings Directive

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Sustainable
Development Commission

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Dear Sir/Madam,

RE: Proposals for amending Part L of the Building Regulations and implementing the Energy Performance of Buildings Directive

The Sustainable Development Commission (SDC) is committed to positioning sustainable development as the central organising principle underpinning all other goals, policies and processes. Sustainable development provides a framework for integrating economic, social and environmental concerns over time through the pursuit of mutually reinforcing benefits and promoting good governance, healthy living, innovation, life-long learning and all forms of economic growth which secure the natural capital upon which we depend.

The Part L Consultation clearly outlines the huge carbon and GHG footprint produced yearly by buildings both during construction and management. Without the means to fully internalise the wider externalities of buildings, reforming the energy efficiency specifications of building regulations is the best means to reduce the ecological footprint and move the UK towards a lower carbon economy.

As a result, the Part L review is an important step forward and it is encouraging that major efficiency gains can be made immediately through relatively small investments in new build properties. However, the 2005 Regulations need to signal the Government's intention to make progressive improvements in CO2 emissions from new build which will require a cultural shift within the building industry, in addition to the incremental changes in the current proposals.

2005 & 2010 Review

We welcome the undertaking to hold five yearly reviews coupled with forward looking position papers. Regular review will clearly reflect that building standards will need to be continuously updated to make the most of technological advances and guarantee that the Government meets their climate change and fuel poverty objectives. Regular reviews are also essential to ensure the building industry are given a clear indication of how and when new and challenging standards will be introduced. This will give the industry sufficient time to prepare for more stringent regulations and encourage innovation through investment in energy efficient technologies and new skills.

We suggest that alongside the 2005 review the Government announce a number of significant step changes in the regulations for introduction in 2010. For example, solar hot water systems might be made compulsory for all new homes and a commitment that new homes progressively improve thermal efficiency to a level that meets or exceeds energy efficiency standards of our European climatic counterparts e.g. Denmark. There also need to be significant measures introduced in 2010 for energy efficiency improvements to existing homes and buildings, as an extension to the refurbishment requirements.

Comprehensive measures need to be taken to support the implementation of the revised Regulations. Raising public awareness of the value of energy efficient homes will help to increase the market value

of energy efficiency classification that will come into force shortly after the Regs (2006/7). Raising awareness of the new Regs will also stimulate new skills training, information dissemination and education within the heating and building industries, especially via trade bodies. The 2010 review should set the bar at a level that will encourage the construction and building sectors to undergo a cultural shift.

Three steps to achieve a cultural shift in the construction and building industry:

1. There needs to be an effective and on-going engagement and communications strategy that changes the perception of building regulations from being a static standard towards being a continuously rising floor. The UK needs to move to the situation where buildings that purely meet regulations are recognised as being built to the lowest and barely acceptable standards so home consumers will see the value of buying an energy efficient home that will reduce running costs.
2. The costs of construction need to be linked more closely to the future costs of management and running of buildings. Constructors have little incentive to build above the minimum regulation energy efficiency standards if the costs/benefits of doing so do not accrue to them in the final price. The Government should use differential fiscal measures to back up the EU EPBD and Home Condition Report energy efficiency ratings coming into force in 2006/7.
3. There needs to be a new and better system of cost/benefit accounting for buildings that take account of all the externalities of building and refurbishment. There is already stamp duty tax relief for construction in disadvantaged areas, similar forms of tax relief should be available to home buyers who buy homes constructed over and above the minimum Part L standards. This would then provide the market pull that builders need to invest further in energy efficiency measures.

Thermal Efficiency Standards

We welcome the suggested 25% improvement in thermal efficiency standards as a leap in the right direction, this will act as an important signal to the building industry that small and unchallenging modifications are insufficient to meet the demanding climate change and fuel poverty targets. The building industry have been anticipating higher standards for several years and should quickly be able to adjust to them. We recognise that the 25% saving has largely been met by enforcing air-tightness standards and by the very welcome requirements for all boilers to be A and B rated condensing boilers where possible.

However, we would like to see higher "back-stop" U-value standards for walls. Despite the fact that the Carbon Target levels mean walls cannot be built to backstop U-values without also installing extensive renewable technology, we are concerned that the relative permanence of walls (100-200 years) compared with renewable technologies (perhaps 10-20 years) could mean that the renewable technologies are removed in the future and not replaced with something equally sustainable. This would leave walls (with relatively low U-values) leaking energy.

We recommend raising the back stop level to a 0.27 U-value. Without increasing the wall standard in this way, there is a danger that the UK will continue to fall further behind not only the Nordic countries, but also our climate equivalents in Europe such as Denmark and the Netherlands, who will be introducing even more stringent U-values in 2005. If only for competitiveness reasons the UK should aspire to at least match the standards on the Continent.

Finally, we need to ensure that building regulations are not watered down. The building sector has serious environmental and social impacts and obligations. Therefore, we hope decisions following the consultation will confirm the strong sustainability message which has framed the consultation.

Air Pressure Testing

We are very much in favour of the requirement for developers to perform sample pressure testing on homes. A recent small OPDM survey revealed that 65% of homes failed to be airtight. As well as counteracting energy efficiency measures, poor air tightness worsens energy poverty and reduces occupant comfort.

Existing Homes

The single biggest contribution to GHG emissions are the low energy efficiency standards of the existing UK building stock, as a result this is an area that needs to be covered more explicitly. In particular the consultation would benefit from a more detailed analysis of the challenges faced in this area and it would be helpful to include a breakdown of costs and benefits of investment in retrofit measures to improve energy efficiency.

The Sustainable and Secure Buildings Act clears the way for introducing energy standards to refurbishments of existing private homes. We support the proposal for an £8,000 trigger point when the owner will need to commission an energy audit that outlines cost effective measures to improve the energy rating of the property. We suggest that after 2010 home owners with low SAP rated properties should then be required to act on some or all of the measures before they are granted planning permission.

Home Air Conditioning

The hot summer of 2003 has increased demand for domestic air conditioning, and more frequent hot summers, as are forecast in UK climate change projections, could stimulate a rapid increase. If Government want to stay on track for the 2010 and 2050 CO₂ reduction targets it needs to act now to avert this potential obstacle. If the installation of home air conditioning becomes a norm, this will wipe out most of the existing and projected carbon savings from homes.

Government has an opportunity to act now, before the home air conditioning industry becomes a strong lobby voice. It would be useful to look into requiring home owners to gain permission from BCO before installing air conditioning (in the same way as an extension or refurbishment). The BCO could require homeowners to carry out measures to minimise environmental damage. These could include an energy audit, and requirement to implement cost-effective energy efficiency measures (or achieve the highest efficiency rating) and pass an air-tightness pressure-test. This could also be coupled with yearly machinery inspections.

Window Glazing

We are surprised that higher glazing standards on windows have been delayed until 2010. The building industry have been expecting these improvements to be implemented from 2007 and there are no shortages of skills or resources that would adequately explain this delay. We would recommend therefore that window glazing standards remain on the original timescale for introduction in 2007. There is also no mention of the value of secondary glazing as a lower cost alternative to the option of replacement.

Water Efficiency

The Sustainable Buildings Task Group recommended that the Government should also enshrine in Regulations by 2005 a 25% saving on average per capita water consumption. The final report stated that this could be achieved at very little or no marginal cost by using existing good design and specifications. The SBTG also recommended that information on water efficiency be included in the Home Information Pack from 2006. We are keen that there is progress made on these recommendations, potentially through regulation arising from the Sustainable and Secure Buildings Act.

Signed



Sara Eppel
Policy Director
Sustainable Development Commission