INSTITUTE OF HISTORIC BUILDING CONSERVATION

David Weir
Second Committee Clerk
CLG Committee
7 Millbank
House of Commons
London SW1P 3JA.

Dear Sir

SELECT COMMITTEE INQUIRY: EXISTING HOUSING STOCK AND CLIMATE CHANGE

The Institute of Historic Building Conservation (IHBC) is the professional body of the United Kingdom representing conservation specialists and historic environment practitioners in the public and private sectors. The Institute exists to establish the highest standards of conservation practice, to support the effective protection and enhancement of the historic environment, and to promote heritage-led regeneration and access to the historic environment for all.

The Institute welcomes the opportunity to submit a memorandum to this Inquiry.

The Institute's interest in the Inquiry arises because an estimated 25% of the housing stock consists of historic buildings and those of similar traditional construction. Broadly speaking, this is constituted by nearly all pre-1919 stock and some post-1919 stock. The Institute is also interested because a substantial proportion of post-1919 housing stock is in conservation areas and other areas of visual quality which it is desirable to preserve and enhance.

The Institute welcomes the Government's drive to reduce greenhouse gas emissions and switch to alternative energy sources. We welcome the approach that pays close attention to improving the performance of existing buildings and recognize that historic buildings do have a part to play in achieving the overall aim.

However, the Institute is concerned that much of the drive for energy efficiency is based on new technologies and their use in the construction of new housing. This largely ignores traditional and vernacular approaches many of which have merit, particularly when the future of traditionally built stock is being considered. Examples of these approaches are set out in Appendix A to this memorandum.

The Institute has 4 broad areas of concern:

- The desirability of a whole life-cycle approach to energy use in existing buildings.
- The need for well-structured independent guidance on energy efficiency in the existing housing stock.
- The importance of improving the energy efficiency of historic property in ways that do not undermine its integrity.
- The importance of quality of place in improving and maintaining the value of existing housing.

Whole life-cycle approach to energy use

When dealing with existing buildings, the Institute believes it is important to consider the whole life-span of the building in energy terms and not just its energy performance in use as the Building Regulations do. With new construction the energy requirement in construction

may vary from project to project but there can be no offset for the embodied energy of existing fabric. With existing buildings account can, and should, be taken of this.

The construction and demolition industries account for about a quarter of all waste produced. The Housing Market Renewal Pathfinders have caused the demolition of large numbers of dwellings many of which, it has been shown by Urban Splash and others, could have been remodelled and re-used. Many building materials have high energy inputs in their manufacture including bricks and especially cement. Yet it is estimated that 70% of all brick manufacture is merely replacement of stock lost through demolition. It is important, therefore, to prolong the lifespan of buildings and thus avoid the manufacture of new materials with its energy implications wherever possible.

Where buildings do have to be demolished, re-use of materials should be promoted wherever possible. It is known that sometimes recycled materials are not used because there is no guarantee of their long-term performance. Government guidance on how to evaluate life-expectancy of recycled materials would be useful. There is a strong argument for demolition to be brought within full planning control. This would allow approval subject to conditions which might regulate the destiny of salvageable components and materials and thus reduce energy use overall.

The Institute would like to see a shift in the balance of the Government's approach to energy efficiency towards:

- The use of whole-life energy audit of houses as an assessment of their energy efficiency.
- Where houses are proposed to be demolished and replaced, full whole-life energy audits of both refurbishment and replacement informing the decision.
- Better recognition of traditional building techniques and materials that promote recycling and recyclability of materials.

Need for good independent guidance on energy efficiency improvement

Improving the energy performance of existing buildings needs to be done in ways that are complementary to the nature of the building and its original construction. Traditionally constructed buildings do not perform in the same way that modern buildings do. Modernisation techniques based on air-tightness and ill-considered positioning of vapour barriers are often incompatible with property built traditionally in which the ability of the fabric to move and breathe is vital for its long-term safety and future.

It is important, therefore, that in any campaign to improve the energy efficiency of existing dwellings, proper independent advice is available. This needs to ensure that property owners do not find that the promised long-term financial benefits of thermal improvements (there are rarely any short-term benefits) are not overshadowed by disbenefits caused by deterioration to the fabric of their home.

uPVC windows are an example of a building component frequently installed in the interests of energy efficiency without consideration to whole-life energy implications. The decision to install them is usually taken on the basis of estimates of heat loss reductions (the information supplied by the window's salesman). The following aspects are often ignored:

- The energy used in manufacture (from a fossil fuel source).
- The energy used in disposal (uPVC has a much shorter life-span than well-maintained, good quality timber).
- The polluting effects of disposal.
- If the house is of traditional (pre-1919) construction, the possible adverse effects on its fabric and the costs involved in remediating them or in a shorter lifespan for the house.
- The effect on the value of the house or its location by the alteration of its visual appearance.

The Institute believes there needs to be much better information on the costs and benefits of energy improvements for householders. The relationships between the costs and benefits, in both financial and energy terms are complex. These are well known in the case of some

simple techniques (draught proofing and loft insulation, for instance) but far less so in others, particularly those involving higher costs (double glazing, wall insulation, microgeneration).

It is to be hoped that the building industry might be engaged in the process of disseminating best practice. This should involve a more holistic approach that placed emphasis on the interests of the property rather than the supposed benefits of individual products according to their manufacturers and suppliers.

Maintaining the integrity of historic buildings

The listed building regime is shortly to be replaced with a unified register of historic assets. It is important that any changes to regulation or advice on the energy efficiency of housing take this into account. There is a strong argument for extending special consideration to all houses of traditional construction (say all pre-1919 houses) to ensure that new energy efficiency initiatives do not undermine their fabric and longevity.

Historic buildings are protected because of their historical and cultural value. While improving the energy efficiency of listed buildings is a laudable goal which the Institute supports, the techniques to be used must be compatible with the need to preserve the historic character and appearance of the building. Energy efficiencies can be incorporated into listed buildings without harm, but many modern techniques can cause serious harm to the fabric of the building or otherwise adversely affect its character or appearance.

So it is vitally important that listed buildings retain their exemption from the full rigours of Part L of the Building Regulations with possible extension of this to pre-1919 houses. In recent consultations about extensions to permitted development rights, we argued that the setting of listed buildings was an important aspect which had been missed when the proposals had been drafted. There is a danger that proposals for energy efficient improvements (that would clearly benefit the building for which they were proposed) might be seriously detrimental to the character and appearance of a nearby listed building. In this context wind turbines and external cladding spring immediately to mind.

Historic buildings were usually built in a manner we would call sustainable today: local materials, low energy inputs and reusable and recyclable components. In particular, lime was (and is) a particularly green material because it fixes CO_2 whereas cement production causes 3% of all greenhouse gas emissions. Returning to environmentally friendly methods of construction should be a complementary part of the process to the primary aim of reducing buildings' energy in use for existing buildings (including historic ones) and new construction alike.

BS 1793:1998 *Guide to the principles of the conservation of historic buildings* provides a good starting point for the development of best practice on energy efficiency for historic buildings, but will need further development and a significant price reduction to bring it into more widespread use.

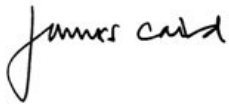
Maintaining the quality of places

Housing stock makes up a substantial percentage of the nation's wealth. It is important that this should continue to be valued and invested in. Some of the country's most treasured areas are designated as conservation areas. It is important that the visual quality of conservation areas is not impaired by insensitive proposals to alter existing dwellings. This is explicitly accepted in the Government's drive to improve the quality of places through improved design.

In recent years there have been many examples of ill-considered alterations to houses that have undermined the historic and visual qualities of conservation areas – loft conversions, external cladding, plastic windows etc. The Institute would wish to see Government policy and guidance on energy efficiency developed in such a way that does not contribute to degrading the visual appearance of historic places. Proposals for energy efficiency should not just take into account the benefits for the individual building but also the wider environmental impacts.

We would be grateful if these comments could be taken into account. The Institute would be happy to give more detailed evidence on any aspect raised in this memorandum.

Yours faithfully



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APPENDIX A

The IHBC and its members work towards the sustainable reuse of existing buildings by:

- Promoting the reuse of buildings rather than demolition and redevelopment – the manufacture of 30 bricks uses the equivalent of one gallon of petrol. 90,000 houses – the equivalent of a town the size of Derby - are demolished annually.
- Promoting the use of local craftspeople who contribute to the viability of their local community rather than supporting mass production and extensive carriage distances for products and materials.
- Supporting local business premises and community buildings through grant aid.
- Promoting the use of natural long lasting materials which are produced without generating noxious side effects.
- Promoting the use of sustainable timber and locally available materials.
- Keeping our activities to levels that do not permanently damage the environment by taking a long term view.
- Ensuring that decisions about the historic environment are made on the basis of the best possible information.
- Developing projects that incorporate these policies, including promoting best practice to developers, home owners and the wider public.
- Promoting designs for new buildings in historic areas which exploits the natural advantages of the site to maximise heat gain and minimise heat loss. This includes main windows on sunny aspects with cat slide roofs and few or small windows on cold sides, shelter from cold north easterlies provided by walls, hedges, trees along boundaries etc.