

## **Draft Strategy for Sustainable Construction. Response by the Royal Institute of British Architects**

### **Introduction**

The Royal Institute of British Architects is one of the most influential institutions in the world, and has been promoting architecture and architects since being awarded its Royal Charter in 1837. The 35,000-strong professional institute is committed to serving the public interest through good design. It also represents 85% of registered architects in the UK through its regional structure as well as a significant number of international members. Our mission statement is simple – to advance architecture by demonstrating benefit to society and promoting excellence in the profession.

### **Summary**

- A greater level of simplicity is needed in the final Sustainable Construction Strategy.
- The role of the architect within the construction industry is more important than ever. Sustainable construction requires good design skills. Architects can deliver more on this.
- DBERR's Strategy should contain more ambitious design targets. The public sector should continue to spearhead the full adoption of good sustainable design practice. However, developers must be encouraged to follow suit in the delivery of private sector projects.
- The proposed increase in the use of Design Quality Indicators is welcomed. However, this will only be effective if DQI recommendations are taken into account and used to improve project outcomes.
- The RIBA can offer great expertise in terms of procurement with its Client Design Advisor programme. Greater and more intelligent interaction between the client and the construction industry will help create a more sustainable built environment.
- Targets that address the environmental sustainability of existing accommodation are very welcome. More needs to be done to tackle the existing housing stock and climate change.

### **General Points**

The RIBA welcomes the DBERR's strategy consultation for its evident commitment to creating a more environmentally sustainable construction industry. There is, however, a need for greater simplicity. We feel that many of the targets and milestones are hard to decipher and would be hard to apply. After consultation with industry professionals, we would also add that the draft strategy includes references to obscure initiatives and schemes. Anecdotally, we have evidence that benchmarks and targets with regard to innovation in particular (Section 3) were not recognised by experts in the field. We hope that the finalised Sustainable Construction Strategy will provide a clear and concise tool for the

construction industry. The RIBA also considers that the consultation appears to express little in terms of commitment towards monitoring targets, making it very difficult to see how the proposals will have the desired effect.

The RIBA is focusing its response on issues of design, procurement and climate change; areas in which the Institute has great expertise in terms of the built environment. Various points from the consultation have been highlighted for ease of reading.

## **The role of the architect**

The role of the architect in the construction and final delivery of buildings has altered radically over the last two decades. The 1980s and 90s were seen by many in the profession as decades where the role of the architect in this field was largely marginalised. The construction industry was increasingly able to deliver the practical needs of the market with little or no design focus.

Conversely the architectural profession was increasingly perceived as having failed to capitalise on its core capability by not creating the range of skills needed to meet the demands of the modern construction industry.

The RIBA feels that this situation is gradually shifting and we are beginning to see how the importance of good design principles are being upheld in a range of Government policy and guidance on housing, planning and infrastructure. Very much tied to this has been the need to factor in sustainability into how we construct and change our built environment. As the DBERR's consultation points out, good design and sustainability are inextricably linked and should go hand in hand in delivering better buildings and places that foster successful communities.

Within the context of this new direction, the architectural profession's competency for creativity and problem solving, as embodied in the design process, should increasingly reinvigorate the architect's role within construction industry.

Architects occupy a vital position as they are very often the only part of the supply chain able to see the whole picture: from identification of client need to the lifecycle of the finished building. In reality, however, these valuable capabilities often form a minimal part of the architect's role in the project team, as management and regulatory issues become increasingly significant in the building process. The RIBA strongly believes that if the construction industry is really to meet the challenges that climate change brings, tough, meaningful design principles must be incorporated into the construction process, from inception to the occupancy of a project. Architects are central to bringing this about. Sustainable development, which is becoming increasingly performance based, dependent on the social, economic and environmental value, needs architects' involvement. Architects – particularly those undertaking masterplanning activities – could potentially play a key future role and become instrumental in setting performance objectives for developments.

## Skills

The development of skills is essential if we are to see a dynamic and beneficial relationship between architects and the construction industry. With this in mind the RIBA has recently published a series of guidance documents, known collectively as the RIBA Climate Change Toolkit. The guidance covers latest energy and environmental standards for the main building types (residential, commercial and public) as well as performance simulation software for buildings of different types. It also includes is post-construction performance testing, performance monitoring and evaluation methods and references and links more detailed information. The dissemination of this kind of practical and industry focused information is helping to bridge the gap between the architecture profession and the needs of modern sustainable construction.

*Please find the first three parts of the six-part RIBA climate change toolkit enclosed. The same information is also available on our website: [www.architecture.com/climatechange](http://www.architecture.com/climatechange)*

## Design (Section 5)

**5.1 60% of all publicly funded or Public Finance Initiative (PFI) projects, with a value in excess of £1 million, to have used the Design Quality Indicators (DQIs) or equivalents by the end of 2008.**

The RIBA believes that the marker could be raised from 60% to 100% of all public and PFI projects over the value of one million pounds to have used the Design Quality Indicators. This should be implemented as soon as possible, ideally with the release of the finalised DBERR sustainable construction strategy. The RIBA continues to believe that the public sector should lead the way in terms of sustainability and the environment.

**5.2 20% of all projects, with a value in excess of £1million to have used the Design Quality Indicators and Building Research Establishment Environmental Assessment Method (BREEAM) or equivalents, and achieve an excellent rating, by the end of 2008, (proposed new target for industry).**

See answer to Q.13 below.

**5.4 Good design is integral to all aspects of sustainable construction and underpins all the sections within this Strategy. It is not an optional extra. Good design is synonymous with sustainable design. No building, public space, infrastructure or place can be considered genuinely well designed if it does not contribute to environmental, social and economic sustainability.**

The RIBA is very glad to see the Government taking design so seriously in this consultation. The RIBA has always campaigned for good design principles to be integrated within the planning and construction of projects both large and small. With this in mind, RIBA is concerned that targets that attempt to make construction more sustainable will not be achieved unless important aspects of social sustainability are considered within DBERR's strategy. The social and

environmental value of masterplanning must be taken into account. We believe that the performance and quality of single buildings or projects cannot be deemed successful within a vacuum. Infrastructure and social integration are inextricably linked to construction that is truly sustainable.

**5.6 Delivering design quality requires strong leadership. Recognizing this, the Government has called for all public bodies with a responsibility for delivering and managing the built environment to appoint a ‘design champion’. The Government wants to encourage the appointment of effective design champions throughout industry and Government. The role of a design champion will vary from organisation to organisation, but the purpose remains clear: to provide leadership and motivation, ensuring that every relevant organisation or project has a clear vision and strategy for delivering good design.**

In 2005 the RIBA’s *A Manifesto for Architecture* recommended that design champions should be appointed in Regional Development Agencies and local authority cabinets. We stressed that they should be duly empowered to give a clear lead and insist on the importance of good design. We were glad to see our recommendations picked up in the Barker Review of Land Use Planning earlier this year. The report endorsed the appointment of design champions at all levels and recognized the importance of ensuring that they have the necessary skills and experience to benefit the projects they become involved in.

For the RIBA, the key point remains that design champions should have sufficient authority within their organisations to make a difference. Tokenistic labeling is not good enough, and design champions cannot be expected to operate in a vacuum of good design principles in a given organisation or business.

**5.8 Post-Construction Evaluation (PCE) and Post-Occupancy Evaluation (POE) are tools which can also be used as indicators of design quality and sustainability.**

The RIBA agrees that Post-Construction Evaluation (PCE) and Post-Occupancy Evaluation (POE) are useful and indicative evaluation tools. We feel that the increased promotion of POEs, in particular, would be an effective way to check the social, environmental credentials of a given project. The RIBA also backed Community and Local Government’s proposal to implement longer time limits for local authorities to bring prosecutions for breaches of Building Regulations. We strongly believe that a longer time limit would ensure a fairer system for the occupant.

**5.11 It is clear that no single sector can address design quality alone. Concerted action is required from the following groups: Government, clients and client advisers, developers, project teams – architects, engineers, planners, procurers, contractors, sub-contractors, materials suppliers, finance managers and professional institutions.**

The RIBA has always campaigned for the best design standards in architecture. More than serving the interests of our members, we have long felt that improving the places in which we live and work falls very much within our important public remit. The RIBA has worked hard to involve a wide cross-section of built-environments professionals in improving design quality across the board. We see procurement as playing a vital part in delivering raised design standards in the public sector and have increased the use of client design advisors, and called for the development of more design focused briefs and proper options appraisals.

However, given the particularly fragmented nature of the construction industry, the RIBA feels that much more is needed than a call for concerted action. The Government must take the lead on design issues and take forward much of the more ambitious recommendations that it has commissioned. The Barker and Callcutt reviews propose strong commitments towards better design in the construction of new houses. The Government must deliver on this. The construction industry alone cannot be expected to take a lead on design issues on its own.

## **Procurement (Section 4)**

In 2006 the RIBA set out its policy with regard to the PFI procurement process (*Smart PFI: Position Paper*). Our concerns lay not only in the issue of design quality but also wasted money, time and effort. The DBERR's consultation highlights how the theme of client leadership is a key one; and indeed the RIBA is actively working to engage clients. The RIBA Client Design Advisor programme already provides valuable support to clients, advisors often acting as the only interface between the client's design agenda and the rest of the project team.

Sustainable construction requires good design and the RIBA believes that the Government needs to invest further in the funding of the public client after the initial, preparatory stages of procurement. Funding needs to be sufficient to enable proper options appraisals, the preparation of a well developed brief, a client concept design and a robust budget. The RIBA also calls on central and local government to increase the availability and capacity of design and other professional skills for the public sector, and to seek more affective ways of applying the skills and expertise, such as client design advisors, that already exist. The RIBA believes that professional bodies should also encourage the acquisition of cross-professional skills that reflect the changing reality of PFI design, procurement and construction.

*Please find enclosed a copy of the RIBA's guide to its Client Design Advisor service.*

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**4.3 From 1 April 2009 only timber and timber products originating either from independently verified legal and sustainable sources or from a licensed Forest Law, Enforcement, Governance and Trade (FLEGT) partner will be demanded for use on the Government estate – appropriate documentation will be required to prove it. From 1 April 2009, only legal and sustainable timber would be demanded.**

Along with several other members of the United Kingdom Green Building Council, the RIBA feels that the target should be applied forthwith, when the DBERR publishes its final strategy rather than delaying implementation until 2009. As with all aspects of construction, and planning in general, the RIBA feels that the Government should be spearheading progressive policies and accreditation schemes.

We also feel that the Government should be more ambitious in trying to eliminate unsustainable timber from the market rather than focusing solely on a (gradual) phasing out of use on the Government estate alone. There is currently very little incentive for the construction industry to procure sustainable timber for private projects. We feel that here is a chance for the government to take the lead and more actively curb the demand for unsustainable timber, working towards the control of domestic and international suppliers rather than depending on the construction industry to source and regulate such materials.

## **Climate Change (Section 9)**

**9.2 By 2010 the general level of energy efficiency of residential accommodation in England to be increased by at least 20 percent compared with the general level of such energy efficiency in 2000.**

The RIBA is pleased to see the DBERR attempting to tackle the fundamental issue of our existing housing stock within this target of the consultation. There are approximately 25 million domestic buildings in the UK. At current rates of replacement (roughly 1% per year) we will be living in much of the existing housing stock for several generations to come. If we are to make any sizable impact on domestic carbon emissions, it is vital that focus is not only placed on the relatively minimal amount of new housing built, but rather on housing as a whole.

The RIBA would like to see the development of a *Code for Sustainable Existing Homes* that could work along side the existing Code for Sustainable Homes. How and at what stage such a code could effectively be applied remain the greatest challenges. However, the RIBA is keen to work with all relevant Government departments and other organisations such as the Energy Saving Trust and the Sustainable Development Commission to find a solution that best suits an immensely varied and complicated existing housing stock.

In recent evidence submitted to the CLG Parliamentary Select Committee inquiry on the subject, the RIBA identified a need for a systematic approach, involving a broad range of facilitating measures. First, a mass market needs to be created for the construction methods and technologies needed to retro-fit our housing. In turn, this will need enormous investment in construction skills if the industry is to

deliver in terms of helping carbon reduction. We also feel that clear and demonstrative information needs to be disseminated; information highlighting different refurbishments techniques for the various types of houses is greatly needed (the RIBA looks forward to seeing the BRE's forthcoming work in this field). International best practice must also be studied; Germany for instance, has long led in the field of large-scale retro-fitting of existing housing. Other, fiscal incentives must also be considered. An equalisation of what is fundamentally a new-build-biased VAT system along with favourable council tax credits might make it possible to contemplate the target featured in this consultation.

*Please find enclosed a copy of the RIBA's written evidence submitted to the Communities and Local Government Parliamentary Select Committee inquiry on Existing Housing and Climate Change held on the 12<sup>th</sup> November 2007. An uncorrected transcript of the oral evidence the RIBA gave is available on the House of Commons Website:*

<http://www.publications.parliament.uk/pa/cm200708/cmselect/cmcomloc/uc70-i/uc7002.htm>

## **DBERR Consultation Questions**

**Q13. Is target 5.2 stretching, achievable and realistic? If not then please propose an alternative. Which organisation or organisations should be responsible for this target.**

The RIBA believes that rather than focus solely on the implementation of best construction practice on the public sector, more needs to be done to actively bring the private sector into the fold. The public sector should indeed spearhead the advancement of sustainable construction. The RIBA believes that English Partnerships and the Housing Corporation have led the way in implementing sound frameworks for delivering well-designed, sustainable public projects. The Housing Corporation's *Design and Quality Standards*, published in April 2007 set out the core design standards for the provision of social housing. The RIBA has also welcomed English Partnership's recent decision to reintroduce minimum space standards for developments on its land, thereby demonstrating a genuine commitment to higher quality new homes.

However the RIBA feels that institutional disparity should be avoided, i.e.: where the industry does not feel obliged to follow important design quality benchmarks in private sector projects. The RIBA believes therefore, that this strategy's targets should be more ambitious. DBERR's 20% target figure should represent only a starting point, with 40% of all projects to use BREEAM and DQI by 2010 leading to 100% as soon as possible thereafter.

The RIBA sees the Design Quality Indicator process as a good way to assess and influence the design implications of a given project. Care must be taken, however, in using the DQIs as simplistic, binary assessment methods. The notion that the 'DQI box' can simply be ticked is not helpful and should be avoided. The considered recommendations that are offered by DQIs need to be absorbed into the project, after the official assessment. Failure to do this renders the whole process futile. The added value of architect involvement should be taken into account rather than treating the DQI as objective benchmarks.

The RIBA currently runs the Client Design Advisor (CDA) programme, which offers a valuable design support from the earliest stages of the inception of a project by a client. The RIBA CDA identifies an agreed set of project outcomes and ensures that the project is compliant with the original design brief. Key design issues are taken into account as well factoring in strategic risk assessments together with proposed funding strategies and whole project-life costs. The RIBA believes that there is scope to integrate some of the valuable functions that the CDAs perform into the DQI process.

**Q14. Which of the proposed actions for business do you consider to be a priority? Why? What are the barriers to implementing this action and how might they be overcome? Who should take the lead implementing this action?**

The RIBA believes that businesses need leadership in terms of delivering sustainable construction. We find it hard to see how the DBERR's assertion that businesses should 'insist' or 'demand' various measures to insure well-designed projects would be sufficient in itself. We believe that built environmental professionals can work best under clear design guidance which applies across the board. The Government's Code for Sustainable Homes which is to be made mandatory to level 3 in 2010 has been largely welcomed as a positive step. This kind of straightforward approach to issues of sustainability could act as a model for further incorporating issues of design into the construction industry.