**Evidence given by:**

* [Local Authorities Building Control](http://www.cic.org.uk/admin/resources/labc.pdf)– Paul Everall CBE
* [The Building and Engineering Services Association](http://www.cic.org.uk/admin/resources/besa.pdf)– David Frise
* [Atkins](http://www.cic.org.uk/admin/resources/1370614819-atkins-.pdf)– Dr Dorte-Rich Jorgensen
* [The Institution of Structural Engineers](http://www.cic.org.uk/admin/resources/istructe.pdf)– Sarah Kaethner

**Local Authority Building Control**

Paul Everall

“We’re supposed to be enroute to zero carbon in 2106, but 16 months after the consultation, we still don’t know what’s going on. We need to remove uncertainty so the industry knows how to move forward,” said Everall.

He added: “Local Authorities do take Part L seriously and enforce energy efficiency measures, but there is a performance gap. The buildings that are being built are not achieving the standards which the designers and architects have set for them. We are working with the Zero Carbon Hub and others to try and find the reasons for this, and what solutions can be adopted.

In terms of the Green Deal, there was an opportunity for consequential improvements. We supported it for extensions and conversions.

Work carried out under the Green Deal has far wider protection than other work on buildings.”

Another barrier is finance. “Many people are concerned about what putting a charge on the property will do when it comes to selling it.

We have concerns on the technical side. Solid wall insulation is difficult and if that’s not done properly, there’s damage to the wall and structure.

We’re particularly concerned as government is making solid wall insulation a priority.”

Everall explained that all types of Green Deal work is covered by a competent persons scheme rather than Building Control. “We’re not against this, but we are worried when it comes to solid wall work. LABC is also concerned about the way competent person scheme members are monitored. We accept that building control bodies might have been overwhelmed by building notices, when replacement glazing was brought into the building regulations. A competent persons scheme had not been introduced. The rapid expansion of schemes since then concerns us. Installers operating under the scheme have their work inspected only a couple of times each year, whereas if the work goes through building control, every job is inspected. Although competent person schemes are monitored now by UKAS, there is still a significantly greater risk of poor work going unnoticed under these schemes.

We believe that it would be better if major installations such as external wall insulation were also subject to building control – and hence potentially damaging works inspected by professionals. It will be disastrous to the success of the scheme if there are early examples hitting the headlines of seriously defective workmanship.”

Everall also said he was concerned about the progress being made by the Green Construction Board. “It has now been in operation for a year, and there is little as yet to show for its efforts – but hopefully that will change.”

**The Building and Engineering Services Association (BE&S)**

David Frise

BE&S represents 1400 M&E contractors. David Frise presented a case study of his flat, which had been built to achieve 25% better energy use than the Building regulations required.

He presented a catalogue of issues, explaining how the block had been designed and operated, which made it virtually impossible for him to measure how much energy was being used, as he wasn’t able to access any meters for electricity, gas and water. He concluded that developers, supposedly building to higher levels of energy efficiency, were paying lip service.

In terms of the submission, B&ES, says that the recession is undoubtedly affecting sustainability in construction, with clients and contractors cutting back where they can to get away with it. The simple answer then is to put in place stricter regulations that raise the standards for across-the-board sustainability measures.

**Atkins**Dr Dorte Rich Jorgensen

Atkins recognises the level of ambition of the Green Deal and Atkins remains cautiously optimistic that it can provide significant impetus to the UK's pioneering drive to become a low carbon economy, said Dr Jorgensen. “We firmly believe that the success of the Green Deal is dependent upon a number of key factors namely, how well the initiative is promoted, the demonstration of strong leadership by local authorities and the level of interest rates set for the loans, as a financial incentive to householders to encourage them to take part.”

Her talk was about demonstrating how some of the techniques, management ethos and vision from projects like Olympics were needed, to get more sustainable construction across the built environment and for the Green Deal. She said: “Visionary clients were critical to the success of promoting sustainable construction in the built environment” and cited the example of the Olympic Park.

Another visionary client she cited was Marks & Spencer. Faithful Gould had been commissioned to assist in identifying and closing the performance gap that often exists between design ambition and actual operation. This work includes a recent 12 month in-depth Post Occupancy Evaluation study of a large Marks & Spencer’s store.

According to Dr Jorgensen, barriers to sustainable construction are as follow:

* Innovation and sustainability gets cut out of budgets
* Lack of visionary clients
* British Society set up in relation to property ownership and operation a more complex situation to influence than say Germany.

Dr Jorgensen said that £3m was not enough topromote the Green Deal scheme and compared it with the budget to promote the switchover to digital TV, which was around £150m.

Strong leadership is required by local authorities also if the Green Deal is to be taken up and as in the example of ten authorities in Greater Manchester, the first in the country to develop a statutory Combined Authority (AGMA), to co-ordinate key economic development, regeneration and transport functions. The region became a “UK Low Carbon Hub” in October 2012 after a deal was struck between AGMA and the Department for Energy and Climate Change (DECC).

Finally, she said that Green Deal interest rates of 7.5% were worrying.

In her view, the following needed to be done to promote take up of the Green Deal:

Need stronger policy drivers and assurance mechanism to achieve uptake, namely:

* Minimum energy performance standards in place by 2018
* Large corporate or other business to donate a minimum of their profit margins to Green Deal funds.

For delivery (learn lessons from the success of the Olympics):

* Identify how to build the ‘ Green Deal Dream Team’ ethos
* Engage 2012 Athletes as Ambassadors
* Engage Sebastian Coe on visionary collective leadership and to win the support of the British public
* Identify sectors of society which are the ‘easy adopters’ of the scheme and target them for roll out, eg families with children

From local authorities:

* Learn from early schemes, like Birmingham and Greater Manchester
* Trial retro filling schemes art, smaller scale first to provide information and best practice
* Smart meters used as motivational means.

Creating financial incentives

* Lower interest rates
* Lower stamp duty for more energy efficient homes
* How could obtaining a mortgage be lined with a more energy efficiency homes?
* Reform the landlord industry
* Lower council tax for homes that have Green Deal measures
* Believe in it

**Institution of Structural Engineers**

Sarah Kaethner

Sarah Kaethner said the approach of the Inquiry places the emphasis on the operational impacts of buildings. This all but ignores the contribution of industry (including construction) which represents around 35% to global CO2 emissions of which 25% are from steel production and 19% are from cement production. The construction industry consumes all the cement and nearly half the steel.

It is estimated that cement/clinker production alone accounts for around 5% of manmade global greenhouse gas emissions.

The reductions (50% reduction needed in the next 40 years) will only be met by reducing the impacts of materials in construction significantly, said Kaethner.

“Our position is that the focus attention needs to encompass both retrofit of both existing buildings and reduction of carbon dioxide emissions from use of construction materials. But this will be challenging. There is a lack of financial incentives and complexity of the supply chain.

We would like to see the targets develop beyond avoiding landfill and achieving high recycled content. Strengthened initiatives are needed for consideration of end-of-life during initial design and procurement. That may mean dismantling and reuse for schools and hospitals.”

One barrier which is often quoted is the difficulty in assessing the CO2 footprint of materials. This is being overcome by standardisation and the Institution strongly recommends that Government is at the forefront of providing incentives for these standards to be adopted and developed in practice. Example references are:

* BS EN 15804:2012 Sustainability of construction works. Environmental product declarations. Core rules for the product category of construction products
* BS EN 15978:2011 Sustainability of construction works. Assessment of environmental performance of buildings. Calculation method.

The Government should publish a transitional plan and timescale for the inclusion of consideration of material impacts into Building Regulations. This is necessary in order for the material supply industry and construction industry to develop an appropriate response, she said.

Kaethner also rounded on the Code for Sustainable Homes which, she said, owed much of its basis to BREEAM. “Institution members have long been concerned that these schemes do not adequately address building structure. This is the main use of steel and cement, and typically represents 40-50% of the initial CO2 footprint of a building. The Institution commissioned research, which recommends how this issue can be better addressed.”

Kaethner also added that the reduction in carbon dioxide emissions from construction materials is important, more incentives to reduce impacts from materials are needed and the Code for sustainable homes and BREEAM need modification.

**Q&A**

***Q.Nick Raynsford MP***

*You can have all the clever systems in the world for monitoring energy, water use, but if no one reads them, it’s a complete waste of time. How do we ensure the systems produce outcomes and they’re used?*

*We heard about the importance of leadership, yet we have the extraordinary situation where no one seems to know what will happen with Part L or indeed the building standards: is there not a bit of a challenge there? How do we expect things to develop, if there’s not clear leadership telling us where we’re going and what the direction is?*

**A. Paul Everall CBE:**

Clear leadership is absolutely essential, and it is disappointing that five months after I submitted written evidence, very little has changed. Some of the leadership has to come from government and parliament; some can come from colleagues in the industry. The Olympics Delivery Authority provided a very good structure for this, but it was down to the drive and foresight of the people working on it that it went so well.

***Q. Peter Bonfield OBE***

*How do we enthuse the public and users of buildings?*

***Q. Oliver Colvile MP***

*And also, can we change the culture, so that when people are buying property, they need to be told the running costs as well?*

**A. Sarah Kaethner**

We don’t need money just to invest in technical services, we need money for research into how we reach the general public, because then we can create stories, so they get it. So we can talk about smart meters, and translate it into something meaningful for them. How do we understand how to get the public to buy into it?

**A. David Frise**

People would rather invest their money in Sky HD rather than new heating control, or a new kitchen or bathroom, rather than a smart meter. Focus on delivery, not on that tick box.

**A. Paul Everall CBE**

We stand or fail by whether there are good news stories or bad news stories. What we really need are journalists out there with real case studies of how peoples’ homes are. What we don’t want is what happened with cost improvements/a Conservatory tax. If the Daily Mail runs stories about disasters with GD, we can all pack it in.

***Q. Lord Whitty:***

*On the whole, the question is whether buildings perform to the way they’re designed, should we build in a system of post-occupancy inspection – for refurbishment as well as new build - that is mandatory, and mandatory on whom? Because generally a year after occupancy, it’s no longer the original owner or contractor.*

**A. Paul Everall CBE**

Talking about how well a building is performing. You do need a period of occupation to actually measure it. But are people willing to have scientists and engineers back 6-12 months after they’ve occupied the house to see how well it’s working?

**David Frise**

Why are there secrets? (Referring back to his flat experience)

**Oliver Colvile** **MP**

I agree, there should be greater transparency, and you should be able to take control of your own utilities.

**David Frise**

How do you get the energy data, in a simple-to-use form, that’s as easy to use as a Tesco supermarket bill?

The key to me is to get consumers – ultimately the long-term monitor of what goes on – to have the right skillset and demand the information

**Sarah Kaethner**:

We have to make people think the building schemes work.

***Q. Nick Raynsford MP***

*We looked at Olympics as an example of best practice – what about the not-so-good practice?*

*Some of the projects we’ve heard about, no real commitment by the developer – they just went through the motions and did what was imposed on them by government regulations.*

***Q. Jack Pringle***

*Where should the mechanisms lie that give you control you should have had? (To Fris, regarding his flat).*

Oliver Colvile says building control needs to get more involved and take more responsibility.

**John Alker**: I wonder if we need a building MoT? Build on some of the stuff we’ve got so far, like minimum performance standards regulations, and take it much further, not without its challenges, obviously.

**David Frise:**

We could get to the stage where no one is allowed to sell their home unless it meets a certain standard. It is incredibly difficult politically but, I understand, this has actually been discussed in Scotland at the moment.

***Q. Peter Bonfield OBE***

*Performance gap keeps coming up: what do we do to address the performance gap? (To Paul Everall)*

**A. Paul Everall** **CBE**

Zero carbon hub has a major piece of work going on to try and establish this.

**ENDS**