

# Annual Conference 2007

## **Venue** **The Rivergreen Centre**

This may well be the first time that the AECB has visited a private development. Built by someone committed to minimising the environmental impact of the building whilst at the same time making financial sense. This we feel is important as this must be the way forward. Because this is such an interesting project we want to look at it in some depth and see what can be learnt. To this end we have arranged for the developer, Peter Candler, to talk about the building and his companies philosophy. He will also be doing one tour of the centre. We will also have presentation / tours by the architects Jane Darbyshire & David Kendall Ltd. who will look at the building design in detail, landscaping, and importantly the services (solar panels, water recycling, wood chip boilers etc.)

## **PAUL KING** **Chief Executive, UK Green Building Council**

### **About the UKGBC**

The mission of the UK Green Building Council is:

*'To dramatically improve the sustainability of the built environment by radically transforming the way it is planned, designed, constructed, maintained and operated.'*

We are concerned with the sustainability – environmental, social and economic – of the whole UK built environment, new and existing, domestic and non-domestic. We are drawing members from across the built environment industry, including companies, not-for-profit organisations, NGOs and government agencies. Since our launch in February 2007 the UK GBC has recruited over 100 members, including 40 Founding Members who have made a significant commitment of resources – both human and financial - to the UK GBC over a 2 year period.

The UK GBC will, over time, determine a number of priorities and targets. These will be largely driven by the external environment, for example the emerging scientific evidence surrounding climate change. Because the majority of the UK GBC's members will have a significant influence over the impacts of the built environment, the focus will be on *real and meaningful action* to reduce negative impacts, while increasing benefits for society and the environment.

The UK GBC is committed to developing 'road maps to sustainability' for the UK's built environment. Different road maps will be required for different

sectors, facing different obstacles and opportunities. We will work with a wide range of stakeholders to develop these road maps, and we are committed to building on existing knowledge and best practice, and avoiding 'reinvention of the wheel' or duplication of the contributions and efforts of other organisations.

### **Personal Profile:**

Paul became the first Chief Executive of the UK Green Building Council (UK GBC) in May 2007. The mission of the UK GBC is *'to dramatically improve the sustainability of the built environment by radically transforming the way it is planned, designed, constructed, maintained and operated'*, and it is affiliated to the World Green Building Council, established in 1998.

Prior to joining the UK GBC Paul worked for environmental NGO WWF-UK for over 12 years. Over the course of his career with WWF he headed the Corporate Sponsorship team, worked in the Directorate on strategic planning and governance, spent 2 years on secondment to WWF Bhutan, and led the Business & Consumption Policy team working on a range of issues including climate change, toxic chemicals, timber trade, tourism, and socially responsible investment.

In January 2003 Paul became Campaign Director for WWF's One Million Sustainable Homes campaign, with the aim of moving sustainability from the fringes to the mainstream of the UK housing sector. In this capacity Paul was a member of the Egan Review of Skills for Sustainable Communities taskforce and the Sustainable Buildings Task Group, both commissioned by the Deputy Prime Minister, and the ACCPE Homes and Environment Group, an advisory group to DEFRA focusing on consumer products and their environmental impact. He was actively involved in the Code for Sustainable Homes Steering Group, and hosted the launch of the Code at a WWF event in December 2006. Paul became Director of Campaigns for WWF-UK in May 2006.

Paul is a member of the Igloo Regeneration Scrutiny Committee, serves on the Sustainability Board of BRE, Advisory Board of Genesis and the UK Centre for Excellence in Housing. He is a member of the Zero Carbon Homes 2016 Task Force and the Sustainability of New Non-Domestic Buildings Steering Group convened by the Department for Communities & Local Government in 2007.

Paul was a co-founder of One Planet Living®, a joint WWF/BioRegional initiative that is facilitating the development of sustainable communities in a range of countries and promoting the imperative for One Planet Living to governments, businesses and individuals around the world. He co-authored the book *'One Planet Living – a guide to enjoying life on our one planet'*. He lives with his partner and 2 young sons in a green home in Shropshire.

## **Workshops**

**Friday 3.45 – 5.00**

## **The AECB Gold and Silver Standards**

### **DAVID OLIVIER & ANDY SIMMONDS**

A chance for delegates to look in some detail at the standards and the thinking behind them.

### **Recent innovations in low carbon building materials**

#### **PETE WALKER**

'The presentation will summarise research and development work in the field of low carbon building materials currently on-going in the BRE Centre in Innovative Construction Materials at the University of Bath. Projects include the development of: unfired clay masonry walling systems; ModCell - prefabricated straw bale panels; hemp-lime construction materials; lime mortared brickwork; and, durability testing of rammed earth. The presentation will include a discussion of barriers and opportunities for wider uptake of these materials in the UK.'

#### **Personal Profile:**

Pete Walker is a chartered civil engineer and Director of the BRE Centre in Innovative Construction Materials (BRE CICM) based at the University of Bath. BRE CICM is a joint venture between University of Bath and the Building Research Establishment Ltd, with the aim of undertaking research and development in a wide range of innovative and sustainable construction materials. Initial focus areas include advanced composites in construction, timber engineering, low carbon and traditional materials, and recycled building materials. Pete is currently leading research on lime mortared masonry construction, dry-stone retaining walls, hemp-lime masonry blocks development, unfired clay masonry, rammed earth, and prefabricated straw bale panel construction.

### **Carbon Reduction from Existing Housing -- a Lost Cause?**

#### **ROGER KELLY**

This workshop will look at a project which worked intensively with over 500 households to help reduce their carbon emissions during a 12-month period. The conclusion was that there is no hope of meeting carbon reduction targets for the existing housing stock unless some really dramatic steps are taken in terms of legislation and financial sticks or carrots. There is also a need for some far more innovative thinking about the fabric of older housing, particularly the high proportion with solid brick walls.

#### **Personal Profile:**

Roger Kelly trained as an architect and spent his early professional years co-founding a Housing Association in Bristol, teaching environmental /social responsibility in architecture and researching rural sustainability. After 5 years living in a remote village in the far west of Cyprus while running annual environmental summer schools, he returned to take on the task of 'directing' the Centre for Alternative Technology in Wales for 10 more years, interspersed with feasibility studies for ecovillages and sustainable rural communities. Another 2-year stint in Cyprus involved locating and designing an 'eco-peace village' for young people in the eastern Mediterranean, since when he has been Director of Energy Solutions (North West London), a not-for-profit Energy Agency based in Wembley.

## **Workshops**

**Saturday 9.15 – 10.45**

### **Making buildings that work**

#### **MIKE WHITFIELD**

Looking at how one committed builder has approached detailing to make buildings perform and the problems faced  
Construction details for airtightness and insulation. The evolution of our detailing over the last few years. A practical approach to actually getting a good result on site. How to maintain the feel of an older building and achieve the performance of a modern energy efficient building.

#### **Personal Profile:**

Mike Whitfield Construction Ltd is a small business in South Herefordshire specialising in Energy Efficient and Ecologically Sound construction, Traditional and Modern Timber Framing, and Conservation Building. We do extensions, barn conversions and new-builds, paying special attention to airtightness, insulation, and use of appropriate materials. Our ideal job would allow us to combine the soul quality that comes with natural materials and traditional craftsmanship, with a carefully detailed high performance modern building.

### **Sustainable refurbishment – missing opportunities?**

#### **FRANCES BRADSHAW**

The government Decent Homes programme has initiated the largest programme of council housing refurbishment ever. But expectations of what can be achieved in terms of improving sustainability and reducing carbon emissions have been much too low. Angell Town gave us a great opportunity to see what can be achieved with 70's low rise construction, and working with MSC student from UCL to compare what was achieved by refurbishment and newbuild.

### **Personal Profile:**

My work over the last 20 years has focussed on three key issues;

- Green building; how can we transform our most unsustainable industry
- women and the urban environment; how women's lives shape and are shaped by buildings and the city
- the process of designing and producing buildings: how people can have a creative input into the design of the buildings they live and work in, and the roles of the construction industry participants

Partner since 1996 at Anne Thorne Architects Partnership. 1985-1995 at Collective Building and Design. 1981 a founder member of Matrix Women's Design Co-operative.

Recent projects at ATAP include new sustainable construction showcase Sure Start and refurbished Community Centre at Granville Pus for South Kilburn Sure Start and New Deal for Communities, Sustainable new build housing and sustainable refurbishment at Angell Town Estate in Lambeth.

### **Material and Design Considerations for Rammed Earth Construction** **PETE WALKER**

'The presentation will consider material and design requirements for rammed earth construction in the UK. The process of material testing and selection, together with the construction process, will be outlined. The Aykley Heads Rivergreen Building, and other recent projects, will be used as case studies. Design considerations for rammed earth include wall geometry, protection, durability, structural resistance, shrinkage, fire resistance, acoustic performance and finish quality. These aspects of rammed earth will also be discussed.'

**See Peter's personal profile from Fiday**

### **Workshops** **Saturday 11.15 – 12.45**

**Sustainability and Conservation - Finding the balance**

## **NIGEL GRIFFITHS**

Part L1B - Conservation of fuel and power in existing dwellings. The seminar presentation material will have three sections: (1) an overview of the new Approved Document (2006) of the Building Regulations; (2) Analysis of the potential effects of the legislation and identifying problem areas, especially in relation to solid walled housing stock; (3) Case study - The Otterhead Coach House". The second half of the seminar will aim, with the contributions of all the participants, to arrive at a consistent and sustainable alternative approach which takes into account any issues raised.

### **Personal Profile:**

Nigel was the project manager of the highly successful Great Bow Yard development in Somerset. His forthcoming book on eco-renovation ("The Eco-House Manual") is due to be published this summer. He advises a number of corporate and private clients who wish to build or to renovate sustainably and specialises in old buildings.

### **Designing Solar Thermal for maximum effectiveness.**

## **CHRIS LORD-SMITH**

The solar thermal industry in the UK is in its infancy, compared to countries like Germany and Austria. There is set to be a rapid expansion of the industry in the UK, but there is widespread ignorance on the part of installers and designers of the potential that solar thermal has to help deliver low carbon buildings, and how to design efficient systems. The aim of this workshop is to try and help designers to understand different ways solar thermal systems can be integrated into heating systems in the UK using knowledge gained from the continent.

### **Personal Profile:**

Chris Lord-Smith is director of a company that designs, supplies and installs solar thermal systems in Wales and the Marches. He has 15 years experience of solar systems and is a long standing member of the AECB having served on the board for 7 years. He has designed and installed systems from small scale domestic installations, through to larger systems combined with various back up heating systems.

He has 35 years experience of the building trade, a time served tradesman, with extensive practical knowledge of the industry.

### **The Zero Carbon Brief, A site specific assessment**

## **NICK GRANT**

Faced with a competition brief for a zero carbon development Peter Warm and Nick Grant of NBT Consult dared to go against the flow by making a

strong argument against on site renewables for this project in Cornwall. In this workshop Nick will show their working as an opening for discussion about what zero carbon might mean and whether it is the right target.

### **Personal Profile:**

Nick Grant runs the water and wastewater consultancy Elemental Solutions <<http://www.elementalsolutions.co.uk/>> ) and is a director of Solution Elements Ltd and NatSol Ltd. Nick is committed to an 'Eco-minimalist' approach to construction rather than bolt on solutions and green icons. Whilst a keen theorist, Nick is extremely practical having designed and developed commercial products, built sewage treatment systems and, with his partner Sheila, designed and built his own water and energy efficient home and office.

As a breather from sewage, he has recently teamed up with Neil May, Peter Warm and Phil Allen to work on all aspects of sustainable building design and construction as NBT Consult.

### **BRIAN MURPHY**

The Green Building Specification has teamed up with the CarbonLite Programme to offer a dissemination route from AECB expertise towards the vast number of designers who need to know and who could adopt this route to Zero Carbon.

### **Personal Profile:**

Brian is an architect by training and a specification writer by choice; he set out to create a web based resource for design professionals in the Violet world to introduce them to Green Building Methods and materials..

### **ANDY SIMMONDS**

#### **We are all green builders now?**

Andy Simmonds, AECB Executive Officer, will look at the recent focus of the AECB work including the energy standards as well as core activities and look at the challenges as green building issues become more mainstream. This will be a chance for the membership to raise questions about the emphasis of the AECB's work and influence future developments in light of a raft of government initiatives.

### **LOCAL NETWORKS**

There will be a chance for anyone interested in setting up a local AECB network to discuss it with 2 groups who have already set one up. This session will be between 5 –6 on Friday.

**AECB Web Site**

**TOM ANDERSON (AECB webmaster)**

Tom will be available to explain about setting up your profile on the web site. This facility has taken a lot of work to set up and offers members a unique opportunity to promote their services.