



# Network

Happy New Year To Our Members From All At The AECB.

## News

January 2010

### **Passivhaus Buildings Are Not A Rocket To The Moon But A Building That Looks After Itself.**

This was just one of the striking and possibly reassuring messages to delegates to emerge from AECB/Passivhaus Buildings' recent one day conference held on Friday 11 December. It came from Axel Bretzke, former Deputy Chief of City of Frankfurt's Energy Department who together with German and Belgian colleagues spoke persuasively about the merits of Passivhaus, ably supported on the day by British colleagues with expertise in sustainability and school design, maintenance and energy performance.

My children's school is currently being refurbished and it is a sobering thought, for example, that UK Schools account for 25% of public sector energy costs and are under increasing pressure to reduce energy consumption and their associated carbon footprint. UK Schools spend about £450m on energy each year, three times as much as they do books. (source: [www.ecoschools.com](http://www.ecoschools.com)).

The conference theme was to explore what lies behind this stark statistic and how the German low energy Passivhaus standard can provide a solution to achieving low energy buildings and improved air quality in UK Schools. Yes, there is a correlation between hot, stuffy, noisy classrooms and pupil performance and those, like me, with an oxygen habit were no doubt pleased to see it made.

The conference held at RIBA's London Headquarters was sold out and provided a fantastic opportunity to network with acknowledged experts and a range of stakeholders. Those attending included government representatives, energy saving lobbyists, professionals involved in the procurement design and operation of new schools, architects, contractors, engineers, consultants and researchers. Robin Nicholson, Chair of the Department of Children, Schools and Families Zero Carbon Task Force chaired the conference and presentations included:

'Sustainability and Building Schools for the future' – Mairi Johnson Director of Design, Partnership for Schools

'Defining the issues – results of recent evaluation of schools' performance' – Rod Bunn, BSRIA

'What is the Passivhaus standard and how it is applied to schools' – Sally Johns, Warm Low Energy Building Practice

'Frankfurt: the results from Passivhaus Schools' – Axel Bretzke, former Deputy Chief of City of Frankfurt's Energy Department

'24 new schools in Belgium to the Passivhaus standard – why and how' – Peter Dellaert, passifhuisplatform (PHP)

'The DCSF Zero Carbon Road Map' – Simon Burton, Regional Director, Sustainability Building Engineering, AECOM

'Different solutions for ventilation in different types of schools' – Jeroen Poppe, passifhuisplatform (PHP)

'The Passivhaus approach to services: avoiding unnecessary energy demand and use through careful design and operation' – Bill Bordass, Usable Buildings Trust

So, there was much to absorb in an information-packed day. The presentations were enthusiastically received with a high level of input from delegates during the question and answer sessions. Liz Reason for Passivhaus Buildings brought the conference to a close with an outline of proposed work streams and action research. If you would like to find out more about Passivhaus Buildings and the next steps, please contact Liz who will be delighted to hear from you. Email [liz.reason@r2bc.co.uk](mailto:liz.reason@r2bc.co.uk).

Some of the presentations from this event are available to view at <http://www.aecb.net/phschools2009.php>

Report by Adam Smith, Business Development Manager, AECB – the sustainable building association, email [adamsmith@aecb.net](mailto:adamsmith@aecb.net)

### **It's Your Call ...**

AECB have formed a partnership with The Phone Co-op to offer members and supporters a great deal on phone calls, line rental, broadband and now line rental.

Like all good relationships, it's a two-way thing. Our members and supporters benefit from The Phone Co-op's low cost services and good levels of service, while we will receive a small regular monthly income from The Phone Co-op which will help us grow and develop.

We chose The Phone Co-op as a partner on the strength of our shared values. The Phone Co-op is the only real option for anyone seeking a more ethical and environmentally responsible supplier of telephone calls, broadband and line rental. Owned and democratically controlled by its customers, the co-operative is primarily concerned with giving customers what they want, namely good value, excellent service and a socially responsible, environmentally sustainable approach to business.

Their line rental and mobile services are both rated a 'Best Buy' by Ethical Consumer magazine and their broadband service is also recommended. What's more, the co-operative was winner of the Green England Best for Customer Service Award, so you can be confident that you'll receive high standards of service as well as getting an excellent deal on price.

To find out more, visit [www.thephone.coop/aecb](http://www.thephone.coop/aecb) or call them on 0845 458 9040.

Quote 'AECB' and our Code 'AF0130' to receive a £10 credit on your first bill.

### **New Resource For Place-Making Workshops**

People responsible for organising place-making training workshops have access to a free flexible electronic toolkit – Train&Sustain. Developed by the HCA Academy, the skills arm of the Homes & Communities Agency, Train&Sustain provides all the materials needed to give audiences a good understanding of place-making and examples of how to make communities more sustainable. The toolkit includes: Bite-sized information that describes different aspects of place-making, a workshop presentation (in Microsoft PowerPoint) and supporting information including learning activities, case studies, audio and video. To access Train&Sustain visit <http://trainandsustain.hcaacademy.co.uk>

### **Code Falls Into Line With Zero Carbon Homes Trajectory**

Housing minister John Healey has published proposals for a revised Code for Sustainable Homes, billing it as a streamlined and more consumer-friendly version.

The most significant changes lie within the energy section; however, as the replacement code has to align itself with next year's revisions to Part L of the Building Regulations and the recently-published energy efficiency definition that will be the core of the zero carbon homes standard from 2016.

The code has been voluntary for the private sector, but its Level 3 is well established as the minimum performance standard for publicly-funded new homes. Its positive role in helping to prepare designers and the construction industry for the tougher sustainability standards that lie ahead is widely recognised.

But with its third birthday arriving in April, the code was being overtaken by events. Healey's intention is to introduce the revised code in October 2010, at the same time that changes to Part L come into force. And in the spirit of using the code as a signpost towards the zero carbon objective, it is proposed that the zero carbon energy efficiency standard (consultation launched in November, Practice Bulletin 518) will be incorporated in next year's revision.

Though the final form of Part L revisions will not appear until next spring, the proposal is to align the code's lower levels (1, 2 and 3) with the 25% reduction in carbon emissions due to be delivered by Part L from October next year. The higher levels of the code are redefined to require at least 70% carbon compliance, in line with the minimum requirement that will be required in the final 'zero carbon' standard.

Apart from the energy aspects, the code covers the minimising and recycling of waste, reducing water demand, reducing the risk and impact of flooding, reducing travel by providing facilities for cycle storage and working from home, and encourages reductions in the embodied energy of materials used in construction.

One of the more significant 'streamlining' proposals for housing designers, put forward as a way of reducing the compliance burden on recession-hit house builders, is the scrapping of plans to make the Lifetime Homes Standard mandatory for Level 4 of the code from next year. The new proposal is that Lifetime Homes will be mandatory only at Level 6, remaining voluntary at all other levels.

Download the 'Sustainable New Homes – The Road to Zero Carbon: Consultation on the Code for Sustainable Homes and the Energy Efficiency standard for Zero Carbon Homes' consultation from <http://riba.msgfocus.com/c/1RSUxOSoghzXo7D>

Source RIBA Practice Bulletin, No. 525 - 17 December 2009

### **UK Launches Trial Of Home Energy Makeover 'Pay As You Save' Scheme**

As the UK Government's Energy Bill has its second reading in the House of Commons, Energy and Climate Change Secretary Ed Miliband announced a trial of the new 'Pay As You Save' home energy makeover scheme. Pilot schemes will run in Birmingham, Sunderland, Stroud and the London Borough of Sutton to test ways of financing whole house makeovers.

In conjunction with local councils, Gentoo Sunderland, British Gas and B&Q, around 500 households will get the opportunity to invest in energy efficiency and microgeneration technologies at no upfront costs. Instead, the costs will spread over a long period to ensure that repayments are less than the predicted savings on energy bills.

The trial will pave the way for the Government's Great British Refurb plan to improve the energy efficiency of the UK's existing 22 million homes. Meanwhile, the Energy Bill will mandate support for the poorest households to help with fuel costs if it succeeds. The Bill will also give new powers to energy regulator Ofgem to protect customers and tackle carbon emissions, as well as establishing the CCS Incentive to support the development of carbon capture and storage technology.

For more information go to [www.decc.gov.uk](http://www.decc.gov.uk) and [www.greatbritishrefurb.co.uk/](http://www.greatbritishrefurb.co.uk/)

### **UK Government Unveils Second Wave Of Eco-Towns**

The UK Government is moving ahead with its controversial plans to build eco-towns across the country with the unveiling of a second wave of nine new proposals. Earlier this year, Housing Minister John Healey announced the first four locations to meet the Government's requirements for eco-towns in Hampshire, Norfolk, Cornwall and Oxfordshire.

The potential new developments, which include schemes in Shoreham Harbour in West Sussex, Northstowe in Cambridgeshire, Taunton and Yeovil in the South West, Leeds, Lincoln, Coventry, Sheffield and Cornwall, will receive £10 million to develop the plans further. The proposals include plans for at least 5000 smart, efficient homes in each case, as well as innovative ideas for providing low-carbon jobs, schools and services such as zero-carbon shops, restaurants and buildings.

The Government want to see ten eco-towns by 2020 and Healey says they will now be working closely with the councils and communities to take the new plans forward.

For further information go to [www.communities.gov.uk/news/corporate/1399284](http://www.communities.gov.uk/news/corporate/1399284)

### **UK Government Should Improve Feed-In Tariff Scheme, Say Green Groups**

Environmental group Friends of the Earth says that small-scale renewables could meet 6% of the UK's electricity needs if the Government ups the ambition of its feed-in scheme. The Government's feed-in tariff scheme, called the Clean Energy Cash-back, is due to be launched next April but is predicted to deliver only around 2% of the country's electricity requirements.

But according to Friends of the Earth, raising the proposed tariffs to deliver a 10% annual return on investment instead of the current level of 5-8% would triple the amount of energy produced to around 25 TWh by 2020 – equivalent to over two Sizewell B nuclear power stations.

The costs would only be slightly higher, says Friends of the Earth. On the basis of the Government's own figures, the current scheme will cost the average household an extra £2.37 per year, while upping the ambition of the scheme will only add £1.20 a year over the next four years.

Friends of the Earth and 30 other organisations and businesses including the Renewable Energy Association, British Retail Consortium, the Co-operative Group and Federation of Small Businesses have written to the Government calling for a much greater level of ambition for the scheme.

For further information go to [www.foe.co.uk](http://www.foe.co.uk)

### **Efficient Buildings Key To Meeting UK Emission Reduction Targets, Says Report**

Non-domestic buildings must improve their energy efficiency if the UK is to meet its carbon emission reduction targets, according to a report out today from the Carbon Trust. Currently, the UK's 1.8 million non-domestic buildings account for 18% of the country's total emissions – a figure that has not changed in the last 20 years.

The Carbon Trust report, Building the future, today, estimates that the right strategy could reduce the carbon footprint of non-domestic buildings by 35% by 2020 and deliver a net benefit of £4 billion. The

government-backed organisation is calling for the country's commercial, industrial and public buildings to improve their energy efficiency rating from an average energy rating of E to C by 2020 and A by 2050.

The first stage is the roll out of Display Energy Certificates (DECs) and Energy Performance Certificates (EPCs) to all non-domestic buildings by 2015. Next, says the Carbon Trust, building regulations need to be tightened up to ensure that all cost-effective efficiency measures for lighting and heating be implemented on all non-domestic buildings over the next decade.

A national programme led by energy suppliers could be set up to help businesses install low-cost measures, it suggests. Beyond that, the Carbon Trust says that more costly measures like triple glazing and ground source heat pumps will have to become standard in new and existing buildings.

Realising the potential of making cuts in the non-domestic sector will require clear direction from the Government, as well as means to overcome obstacles such as covering upfront costs, general ignorance of energy efficiency, non-compliance with building regulations and the landlord-tenant divide.

The Carbon Trust recommends that large public sector buildings should lead the way by implementing cost-effective energy efficiency measures over the next seven years. The Government should also tighten up the Carbon Reduction Commitment (CRC) to encourage businesses to implement energy efficiency measures, while providing advice to owners and tenants of the worst-performing F- and G-rated buildings.

For further information go to [www.carbontrust.co.uk/Publications/pages/publicationdetail.aspx?id=CTC766](http://www.carbontrust.co.uk/Publications/pages/publicationdetail.aspx?id=CTC766)

### **Nine European Countries Sign Up To North Sea Supergrid**

Nine European countries have signed up to a plan to develop an offshore grid in the North and Irish Seas to transmit energy generated by offshore wind farms to land. Ministers from the UK, Germany, France, Belgium, the Netherlands, Luxembourg, Denmark, Sweden and Ireland agreed at a meeting in Brussels yesterday to start by developing a strategic work plan for the 'The North Seas Countries' Offshore Grid Initiative' early next year. The plan will be ratified by members in a formal Memorandum of Understanding later in the year.

UK Energy and Climate Change Minister Lord Hunt announced £5 million in funding for wind power research and development at Vestas, Clipper and Mitsubishi. Vestas will receive £1.75 million from the Government and a further £1.75 Million from the South East England Development Agency to support its Isle of Wight R & D facility. Clipper will receive £2.5 million and Mitsubishi £0.81 million.

### **ETI To Study Impact Of Renewables On The UK Grid**

The UK Government-backed Energy Technologies Institute (ETI) is launching two projects to analyse the impact of renewable energy sources on the country's electricity grid. The two seven-month projects will look at the challenges presented by connecting up offshore renewable energy and at ways of enhancing transmission and distribution capacity in the UK grid.

The Offshore Connection project, which will be carried out by consultants Sinclair Knight Merz, will consider how electrical energy can be collected from individual and multiple sites and transported back to shore using novel electrical system designs and control strategies. Meanwhile, consultants Mott MacDonald will assess the feasibility and benefits of using new approaches and technologies to accommodate new renewable power on the grid in the Network Capacity project.

For further information go to [www.energytechnologies.co.uk](http://www.energytechnologies.co.uk)

### **South Africa Receives Major Boost To Renewables And Efficiency Efforts**

South Africa is set to benefit from a major investment of \$500 million from the Clean Technology Fund (CTF) and €40 million from the European Investment Bank (EIB) to promote renewables and energy efficiency. The CTF, which is a trust fund supported by Australia, France, Germany, Japan, Spain, Sweden, the UK and US and administered by the World Bank, provides financing for the demonstration, deployment and transfer of low-carbon technologies.

The \$500 million will be focused on efforts to convert half a million households to solar water heating over the next five year and increasing the finance available for energy efficiency projects. Eskom, the South African public electric utility, will also be supported in its plans to build the region's first concentrated solar power (CSP) plant and the 100 MW Western Cape Province wind farm.

Meanwhile, the EIB is providing FirstRand Bank with a €40 million loan to support energy efficiency and renewables projects, particularly those in industrial cogeneration, using waste or landfill gas for heat and power generation and improving the energy efficiency of residential, public or commercial buildings. Other projects that could receive support include plans for two 3 MW mini-hydropower facilities at existing dams in rural areas of South Africa.

For further information go to [www.worldbank.org/](http://www.worldbank.org/)

## **Events**

### **Now Or Never – A Low Carbon Built Environment For The 21st Century: 19 January 2010**

Organised by OISD: School of the Built Environment, Oxford Brookes University, this work-session-based conference and exhibition will bring together leading experts from industry, the public sector and academia to help plan and develop a low-carbon roadmap for the future.

The conference is based around keynote presentations from leading experts including Professor Michael Kelly, David Kennedy, Paul King and Dr Peter Headicar, and three work-sessions on the residential and commercial property sectors and the transport sector chaired by experts in their field (including Dr Paul McNamara, Professor David Banister and Professor Mark Swenarton).

The work-sessions include presentations from leading researchers based in the Oxford Institute for Sustainable Development (OISD), Oxford Brookes University and the Environmental Change Institute (ECI), Oxford University and from industry.

The conference will include invited guests from government, academia, and the research councils. There are also places for fee-paying delegates and the following groups are likely to find the conference of particular value: property developers, investors, real estate managers, local authorities, architects, transport planners and urban designers.

Full details are at [www.brookes.ac.uk/schools/be/development/courses/lcbe.html](http://www.brookes.ac.uk/schools/be/development/courses/lcbe.html)

### **The Road To Zero Carbon – Tuesday 9<sup>th</sup> February 2010 – The Watershed, Bristol**

The Government has set targets to significantly reduce CO<sub>2</sub> emissions from all buildings, whether residential, commercial or public and new or existing. All new buildings will need to be zero carbon within a decade, starting with a 25% reduction in CO<sub>2</sub> emissions next October, while CO<sub>2</sub> emissions from existing buildings need to be approaching zero by 2050. We are now seeing a move from demonstration projects to an increasing number of real world low and zero carbon buildings being built, demonstrating that it is already possible to achieve significant reductions in carbon emissions.

This conference will showcase some of the best of these low and zero carbon projects, with a strong focus on the steps and measures taken and the impact it had on the construction process, providing delegates with a unique opportunity to learn from those at the leading edge of compliance with this fast approaching standard.

The conference is supported by the UKGBC, the SW Regional Development Agency (SWRDA) and SW Councils (formerly the SW Regional Assembly). It is organised by the Devon Sustainable Building Initiative (DSBI) and Ecos Trust.

For more details go to [www.sustainablebuild.org/TheRoadToZeroCarbon.html](http://www.sustainablebuild.org/TheRoadToZeroCarbon.html)

To book contact Corina Reay on [corina@ecostrust.org.uk](mailto:corina@ecostrust.org.uk) or on 01458 254349 – £180 plus VAT (£211.50 incl VAT)

### **Yorkshire And Humber Microgeneration Conference And Awards – Thursday 11th February 2010**

April 2010 will be a new dawn for Microgeneration with the introduction of the Clean Energy Cashback scheme. This will reward householders, businesses, communities and public bodies with a special tariff for electricity generated from renewable sources.

The Yorkshire and Humber Microgeneration Partnership will be holding its conference on the 11<sup>th</sup> February at the Royal York Hotel in York. The focus this year will look at how prepared is our region to take advantage of the Clean Energy Cashback opportunity and reap the rewards of increased investment, new income streams, new jobs and skills, cleaner energy and lower carbon emissions?

The Conference, organised by the Yorkshire and Humber Microgeneration Partnership and supported by the Energy Saving Trust will be addressing this question, seeking the views from all those involved in this fast growing industry and also hearing first hand experiences of those customers who are already pioneers of Microgeneration technologies in the region.

The Conference is a must for commercial enterprises, local authorities, government bodies, charitable organisations, and anyone with an interest in carbon reduction and climate control. Our first confirmed keynote speaker is the Rt. Hon. Rosie Winterton MP, Minister for Yorkshire and the Humber.

Delegates to the conference also have the opportunity to attend the 2010 Microgeneration Awards Dinner, hosted by BBC weatherman, Paul Hudson.

This major conference will be the first to explore the potential of the Clean Energy Cash Back/Feed in Tariff. For more information or to register for the event, please email [info@yhmicrogeneration.org](mailto:info@yhmicrogeneration.org) or paper copies are available from Adam Gillespie on 01484 351 778

### **EKOWORLD2010 – Istanbul – 27-30 May 2010**

Held in the Istanbul Expo Centre, EKOWORLD2010 aims to increase awareness and demand for environmentally friendly products and services. EKOWORLD2010 will bring together people looking for and those who provide ecological solutions for a sustainable future, and will be the first and only umbrella event in Turkey.

EKOWORLD2010, will be the umbrella event of the alternative energy sources, recycling technologies, waste management and ecological building materials sectors. EKOWORLD2010 will be meeting point, where private sector, government, local governments, national and international non-governmental organization, associations and unions share recent developments and innovations.

Go to [www.ekoworldfair.com](http://www.ekoworldfair.com) for more information.

### **Sustainable Innovation 2010 – Creating Breakthroughs: Green growth, Eco-innovation, Entrepreneurship and Jobs.**

8th- 9th November 2010 Rotterdam, The Netherlands

Conference Announcement And Call For Papers

15th International conference in the 'Towards Sustainable Product Design' series, organised by: The Centre for Sustainable Design, University for the Creative Arts

Sustainable Innovation 2010 will provide a platform to discuss the future opportunities and challenges related to the design, development and commercialisation of sustainable products, services, technologies and new business models. Sustainable Innovation 2010 will include invited and refereed papers from academics, consultants, entrepreneurs, investors, technology providers, designers, sustainability, environment and Corporate Social Responsibility (CSR) managers as well as other business functions. The event will be a unique learning experience, networking space and an opportunity to think! Delegates will come globally from large companies, entrepreneurs, as well as academia, government and non-governmental organisations (NGOs). The conference is supported by an international Advisory Board.

Sustainable Innovation 2010 welcomes conceptual and research-based papers covering sustainable innovation, technology, product and service design and development. Papers particularly focused on the relationship between sustainable innovation, entrepreneurship and job creation.

Conference papers: please email [SI10@ucreative.ac.uk](mailto:SI10@ucreative.ac.uk), fax or post up to 500 words describing your proposed paper by 26th April 2010. The paper will then be sent to the Advisory Board for evaluation and authors will be given feedback by June 2010. The highest rated papers will be invited to present at the conference. Please only submit abstracts if you have a budget to attend the conference which includes travel, accommodation and registration fees.

For more information on Sustainable Innovation 2010 please contact: Martin Charter on 01252 89277 or fax 01252 892747m email: [mcharter@ucreative.ac.uk](mailto:mcharter@ucreative.ac.uk) or visit [www.cfsd.org.uk](http://www.cfsd.org.uk)

## **Publications**

### **The Good Shopping Guide Edition 8**

The Good Shopping Guide is the world's leading ethical shopping reference book - providing clear & extensive ethical rankings across 60 product sectors. Now on its 8th annual edition, this is the essential reference work for the ethical shopping sector - and includes detailed ethical comparison tables on the leading companies in consumer sector from ethical banking to ethical investment and ethical fashion.

The Good Shopping Guide is used by ethical consumers, NGOs, CSR professionals, every ethical business, and government procurers who want to choose the most ethical products.

Go to [www.ethical-company-organisation.org/the-good-shopping-guide.htm](http://www.ethical-company-organisation.org/the-good-shopping-guide.htm) for more information.

*If you have any news, events or courses you would like to publicise in Network then please email details to [network@aecb.net](mailto:network@aecb.net), or post to Chris Lord-Smith, y Graig, Llidiart-y-Waen, Llanidloes, SY18 6JT.*