

AECB News

October 2011

AECB 2011 Annual Conference

Retrofit: Moving in and Moving on.

University of Nottingham, Jubilee Campus

Friday 16th & Saturday 17th September 2011

This year's AECB members' conference was held at the award winning University of Nottingham, Jubilee Campus and was, once again, a huge success. Presentations are being added to the AECB website.

Full details of the UK China Workshop on Smart and Sustainable Cities in the University of Nottingham, Ningbo Campus, China on 29th and 30th October 2011 (as mentioned by Professor Saffa Riffat during his welcome address) can also be found on the AECB website.

We would like to take this opportunity to thank all of those who worked on making the 2011 Conference such a success. We are especially grateful to those who gave presentations and ran workshops.

- Conference Feedback

While the informal feedback on the conference was on the whole very positive it is important that we get more detailed comments. If you were at the conference you should have received a link to the Survey Monkey for AECB Conference 2011. If you have please take a few minutes to fill it in, if not please contact Geoff at geoff.biy@homecall.co.uk.

We hope to do a full breakdown of the feedback in next month's Network.

AECB On Facebook

AECB Trustee, Neill Lewis, has uploaded 30 photographs of members from the 2011 Conference onto the AECB Facebook page. We would encourage you to become member of the AECB Group on Facebook to view the photographs.

Futurefit Report

There was much discussion at the 2011 Conference with regard to the Green Deal, what it would achieve and how easy it would be to get people on board. A report from Affinity Sutton (a large housing provider in the UK with 56,000 homes in total) is available to download on the AECB website alongside presentations from the Conference. Affinity Sutton retrofitted 102 homes as part of Futurefit and the report makes interesting reading. Not least that the low package (£6,500) would reduce the carbon emissions from their stock by just 18%.

Small Renewables Installers Warned They May Carry Can For 'Dodgy' Selling

Delegates at last month's AECB conference were urged to report companies using aggressive sales techniques and over-ambitious performance forecasts for renewables to the REAL Assurance Scheme, the body set up by the Renewable Energy Association to provide customer protection.

REAL Assurance Scheme certification assistant Ciaran Burns explained that REAL can act on tip offs, and also warned small local installers to take care when contracted by big suppliers looking to sub-contract installations. "REAL are hearing of sales firms selling systems and handing over the installation of those systems to smaller, MCS-registered firms," he said. "What the smaller firms often don't realise is that not only are these sales companies reliant on the MCS accreditation, technical expertise and hard work of the installers to complete a job they've only sold, they may try to transfer responsibility for those installations to those installers."

The REAL Assurance Scheme is an OFT-backed Consumer Code which is monitored by the OFT under the auspices of the Consumer Codes Approval Scheme.

Anyone installing renewable plant which is eligible for the FiT, RHPP or RHI has to be certified under the Microgeneration Certification Scheme (MCS), a requirement of which is to be a member of The REAL Assurance Scheme, and abide by the REAL Consumer Code. The Code covers activities with domestic consumers, and members of REAL must abide by its guidelines on selling, quotations, contracts and after-sales service and warranties.

Mis-selling was a major theme in Ciaran's session and among the delegates, fears were expressed that in the run up to next April's cut in the FiT, the rogue traders are likely to become much more active. This was borne out by members of the audience who had seen PV installations on north-facing roofs, or shaded by chimneys or trees. Stories were told, too, of people buying heat pumps only to be told they could not have a grid connection.

Ciaran described how companies with large sales teams often follow aggressive sales techniques. A significant proportion of the complaints about pressure selling to REAL are about these types of companies, he said.

“We take it very seriously. Of the firms that have been the subject of our disciplinary procedures this year, one has been suspended while another has been placed on probation.”

REAL can act on tip-offs and can act on reports of poor practice and Ciaran explained that the more evidence they can get on a company, the better.

For small contractors who are approached by sales companies to do third party installations, Ciaran made a stark warning. “Make sure you see the contract and you’re happy with the marketing and performance claims of the firm you’re working for. If anything goes wrong, it’s likely to be you that bears the responsibility, not the sales firm. If in doubt, contact REAL for advice.”

There are plans to issue further protection under a planned alteration to the MCS 001 which will require the MCS installer to sign the contract directly. Although no date has been scheduled, details of the new standard should be available through the MCS website shortly.

Current Tariff Levels

Ciaran Burns also felt that the FiT was higher than it needed to be at the moment and will be reduced considerably in April 2012. The tariff levels had originally been set in April 2010 on basis of 8% return on investment to customers, and he felt installation prices were not being forced downwards as the FiT is high enough to justify the installation costs. “Panels have come down in price about 30%, and when the tariff goes down, it would encourage installers to look for cheaper products.”

“When the market demands cheaper products, only suppliers who can deliver at lower prices will be able to survive and expensive or inefficient producers will be removed from the market,” he predicted. ‘This is what the FiTs were intended to deliver. With mass production of any product the costs decrease and Solar PV has been a major success. With continued long term support the industry will continue to deliver cheaper products until it no longer needs a subsidy’.

The REAL Assurance Code of Conduct can be viewed here <http://www.realassurance.org.uk/scheme/consumer-code#tag1>

REAL have put together a leaflet of top tips for consumers which can be accessed here at <http://www.realassurance.org.uk/pdf/top-tips-for-consumers.pdf>

What installers should offer customers (extract from REAL code)

It is very important that members do not 'oversell' energy generators to consumers. For this reason, it is essential that members give certain technical information, set out below, in writing to consumers before the contract is signed. These are set out below. This means that, in the case of a sales visit where a contract is signed in a consumer's home, the information must be provided in writing during the visit. Members must keep records of the information provided.

Before the contract is signed, members must:

- give consumers a written estimate of how the energy generator will perform in a format that is readily understandable by them, based on specific performance data for the technology in question;
- take care whether the estimate is specific to the property and, if it is, whether it follows a site survey;
- where the estimate is based on some standard or 'average' premises instead, give the full details and source of that standard.

Jonathan Porritt At The Town And Country Planning Association

Jonathan Porritt recently gave the Frederic J Osborn Memorial lecture 2011 for the Town and Country Planning Association. A witty and devastating appraisal of the Localism bill - where 'sustainable development' is mentioned an uncountable number of times, but is never defined and is therefore meaningless.

He identified a number of government papers which refer to environmental limits and ecosystem services, which are not picked up in this bill, and pointed out the lack of reference to 'place making, well-being of communities and health - all of which are not mentioned at all.

It was agreed that a definition is required. The Sustainable Development Commission had given five useful principles and these need to be embedded into the document. AECB Board member, Fran Bradshaw of Anne Thorne Architects attended this talk. During a conversation with one of the developers after the meeting he suggested that "meeting the needs of the present without comprising the ability of future generations to meet their own needs" was contained somewhere within the document, but you would need to look hard for it.

So it's over to us to take it up and write.

AECB Soapbox: “Sustainable Development In A Pickle”

In this month's very topical soapbox, Phil Newbold challenges the assumption that new development around villages cannot be 'green'. He argues that in fact true sustainability often requires more, not less development for rural communities. In a passionately argued piece he explains why in his view, the current system is worse than useless when

it comes to delivering sustainable development – and why the much disputed changes in the proposed new planning framework are unlikely to help.

'Sustainable Development in a Pickle' can be read on the AECB news pages. Remember you can add your views by posting on the AECB forum – see the link in the article.

If you want to comment on the National Planning Policy Framework the government consultation is open until the 17th October, see www.communities.gov.uk/planningandbuilding/planningsystem/planningpolicy/planningpolicyframework/

The Soapbox slot is open to any AECB member with a message they want to get across to fellow members and to the wider sustainable building world – the AECB website has at least 30,000 people viewing it every year.

If you've got an important point to make, email kate@aecb.net explaining what you want to say and why. Soapboxes are around 800 words long – all you will need to supply is the words, and your picture.

Herefordshire Council Is Supporting An Initiative To Help Businesses Benefit From The Drive To Make Homes More Energy Efficient.

Andrew Powell HCA officer from the council's private sector housing team will be speaking at an event at Holme Lacy Campus, Herefordshire College of Technology, on Friday, October 21 from 3pm to 5pm to talk about making the county's homes warm and energy efficient.

He will be joined at the event by Andy Simmonds, Hereford-based Partner of Simmonds.Mills Architects (and AECB CEO) who has just received the first Passivhaus 'EnerPHit' certification in the UK for refurbishment and extension works carried out on his home in Portfield Street, Hereford.

Simmonds.Mills carried out this ambitious scheme involving a wide range of energy efficiency measures such as extensive insulation and a 100 per cent draught free construction. These changes have reduced the house's measured gas consumption by a massive 80 per cent and 45 per cent less electricity use – whilst also providing increased comfort with room temperatures during the heating season able to be maintained at 21 degrees.

Attending the unveiling of the EnerPHit house plaque was MP Jesse Norman, Its Our County Councillors Marcelle Lloyd Hayes and Jim Kenyon along with Councillor Brian Wilcox, Herefordshire Council's cabinet member for environment, housing and planning, who said: "I was able to attend the unveiling of the EnerPHit plaque at Andy's home Grove Cottage and was also fascinated to learn more about the technologies he has used to achieve such a massive reduction in energy costs.

"These measures not only help households to reduce their bills but also offer a great opportunity for businesses in the county to develop skills to carry out similar schemes.

"The Government's Green Deal will establish a framework to enable private companies to offer consumers energy efficiency improvements to their homes, community spaces and businesses at no upfront cost, and recoup payments through a charge in instalments on the building's energy bill. It would be great if local contractors have the skills to carry out this this work.

"This event will offer a chance to find out more about improving energy efficiency in all building projects and I would urge anyone interested to make sure they book to attend," he added.

Also speaking may be AECB member, builder Mike Whitfield, who has recent hands on experience of low energy refurbishments.

Bookings can be made by calling 01497 831194 or sending an email to dave@herefordshirenewleaf.org.uk

h.Energy Week (October 15 to 23) is a week of free events and activities aimed at promoting more sustainable ways of living, reducing people's fuel bills, reducing people's reliance on fossil fuels and tackling climate change by cutting carbon emissions.

More information can be found by logging onto www.herefordshirenewleaf.org.uk

IHDC Conference 2011:

"Ecosystem Services Come to Town - Future Proofing our Environment for Climate Change": 18th October 2011, Museum of London

After 48 entries were received for this year's Integrated Habitats Design Competition, judges met at London's City Hall, hosted by the GLA, to debate and find the finalists and winning entries.

Whittled down to a final strong 11 contenders, the ensuing discussion was riveting - the apparent tension between ecology and the built environment ('nature is for the countryside') seemed to dissolve in designs which embraced the concept of working with the grain of nature, for a healthy and resilient neighbourhood.

The IHDC emphasises how, by integrating nature and biodiverse habitats into built environment designs, we can act restoratively to increase ecological value, and by so doing, also improve our own resilience and adaptation to climate impacts, by cooling overheated cities, filtering air and water, reducing energy use, and providing amenity and enjoyment, reconnecting people with nature in the place where most of us live.

The IHDC judging board is chaired by the independent ecologist and masterplanner Gary Grant, and includes Andy Simmonds of SimmondsMills and the AECB, Brian McDonald of Natural England, Justin Bere of bere:architects, Peter

Massini of the Greater London Authority, Martin Hunt of Forum for the Future, Jean Venables past president of the ICE, Phil Baarda of Scottish Natural Heritage, Alice Tree of SEPA, Lisa Hundt of the Bat Conservation Trust, Paul Collins from Nottingham Trent University, Paul Shaffer of CIRIA, and Dusty Gedge of livingroofs.org, co-instigator of the competition with Blanche Cameron of RESET Development and Gary Grant.

The IHDC 2011 Exhibition and Awards Ceremony will be held as part of an all-day event, Ecosystem Services Come to Town, organised by competition co-organisers RESET Development and livingroofs.org at the Museum of London on 18th October. This includes a City of London green roof tour, as well as a conference with high level speakers from ecology, property, investment, design, planning and policy, followed by the IHDC 2011 evening Awards Ceremony in the Sackler Hall.

For more information and booking: <http://reset-development.org/#/conference-2011/4554447767>

The IHDC 2011 is sponsored by the Victoria Business Improvement District and this year's IHDC conference is supported by the Museum of London, the Greater London Authority, British Land, Bauder and Russell Trew, and we are pleased to say our printers are the carbon neutral Print4London (www.print4London.com).

AECB CarbonLite Passivhaus Courses

2012 Course Dates:

- Introduction to Passivhaus

Birmingham: 27th February 2012

London: 16th April 2012

Plymouth: 21st May 2012

- Science of Passivhaus

Birmingham: 28th and 29th February 2012

London: 17th and 18th April 2012

Plymouth: 22nd and 23rd May 2012

- Construction of Passivhaus

Birmingham: 1st March 2012

London: 19th April 2012

Plymouth: 24th May 2012

- Thermal Bridging

Birmingham: 2nd March 2012

London: 20th April 2012

Plymouth: 25th May 2012

- Building Services for Passivhaus

Birmingham: 12th and 13th March 2012

London: 14th and 15th May 2012

Plymouth: 5th and 6th June 2012

Further information on CarbonLite courses and Certified Passivhaus Designer assessment is available at www.carbonlite.org.uk/carbonlite/courses.php or contact Dawn Padley at dawn@peterwarm.co.uk.

- Passivhaus Planning Package (PHPP)

The AECB is now an authorised reseller of the Passivhaus Planning Package (PHPP) (manual and software) so we can now offer this at £125 plus VAT. The latest edition can be ordered online at www.carbonlite.org.uk/carbonlite/software.php.

A clear understanding of the calculations and predictions involved in low-energy building relies upon the use of accurate modelling software. Based on dynamic thermal simulations validated by data gathered from hundreds of low-energy buildings, the German Passive House Planning Package (PHPP) is the software we use to calculate energy use and CO2 emissions. PHPP's level of sophistication enables it to take into account a wide range of variable characteristics which affect heat loss and subsequent energy use, allowing for a superior fit between predicted energy use and real-world performance.

The two day course 'Using PHPP to Design Low Energy Buildings' practical hands-on course will provide purchasers of PHPP with the skills necessary to design low energy and CO2 buildings to the AECB standards. The course is £499 plus VAT for AECB members and £599 plus VAT for non members.

- PHPP Courses dates for 2012:

Birmingham: 14th and 15th March 2012

London: 16th and 17th June 2012

Plymouth: 7th and 8th June 2012

Local Group News

Updated information on events can be found on the website Forum (follow the blue link to Local Groups), AECB News Platform or email debbie@aecb.net to be put on a Local Group mailing list.

- New Local Group for the North West (Cumbria) from October

The first meeting of the North West (Cumbria) Group is being organised by Christine Armstrong, a former Trustee of the AECB and founder of Second Nature, famous for its British wool insulation, Thermafleecce. The meeting will be held on 5th October 2011 at 6.30 pm at Second Nature, Soulunds Gate, Dacre, Penrith, Cumbria CA11 0JF.

This is a great opportunity to network with other AECB members with the AECB conference and Cumbria Green Build Festival being reviewed.

Ten years ago, Christine Armstrong (with help from Leeds University Non-Woven Textile department) launched her natural, 'British grown' insulation product – Thermafleecce. Famous for its wool insulation Second Nature now also supplies a hemp based insulation which is a blend of UK grown hemp and recycled polyester.

Christine, as well as starting up the new Local Group in the North West, has also served as a Trustee of the AECB. She believes that impartial independent advice and the encouragement of innovation within the green sector is fundamental to the AECB's ethos. Having now had Thermafleecce in the market for ten years, she has gained an in-depth knowledge and understanding of the complexities of researching, marketing and distributing sustainable building. It is this knowledge that she hopes to share to encourage and energise the Association.

If you would like to be kept in touch with regard to this Local Group please contact debbie@aecb.net.

- The Nottingham Local Group to visit an advanced "Whole-house Retrofit" - 2nd October 2011

Gil Schalom Group Leader of the Nottingham Local Group invites AECB members to join him on a visit to one of the UK's most advanced whole-house retrofits using the PassivHaus methodology.

This is a unique opportunity and it is right in the Nottingham Mapperley Park Conservation Area. Two guided tours will take place on Sunday 2nd October at 1.00pm and 3.00pm hosted by the clients and Gil Schalom of Gil Schalom Design and they very much hope you can join them. Booking essential.

- Cheshire/Shropshire/Staffordshire Group: "Going to the Dogs" - 8th October 2011

The next event near Shrewsbury is due to take place on Saturday 8th October 2011 at 10.30 am at The Roden Dogs Trust Rehoming Centre near Shrewsbury TF6 6BP. Limited places available - please RSVP to debbie@aecb.net.

Members will visit a sustainable refurbishment designed by an AECB member, Peter Napier of Peter Napier & Co Ltd, Chartered Building Surveyors. The whole development has been designed using Passivhaus principles although it isn't to be Passivhaus certified but we are only one of three to achieve BREEAM Outstanding. The project, for The Dogs Trust, includes a new reception area and rehoming kennels, a training hall, vets suite and an underground intake kennel building.

Building elements include timber framing filled with Warmcel insulation with glulam structural support, internal air tight barrier; service void filled with mineral wool insulation and, at the rear, steel framing with conventional brick and block cavity wall with 250mm cavity filled with mineral wool quilt. Recycled plastic bottle insulation batts were experimented with but proved difficult to work with.

The Intake building has reinforced concrete walls and roof with 300mm polystyrene insulation against outside face; earth and rubble arisings from the development were mounded over the structure and planted with ecologically rich species.

The whole approach has been to avoid the use of active technologies although PV panels will make the Centre zero carbon. Heating for the whole of the new development is by a district heating system with underground ducts and water heated by an Okofen wood pellet boiler within a pre packaged 'Energy Box' brought to site from Austria on a large lorry by DHL! Another AECB member, Eco Energi Ltd supplied and installed this system. Energy consumption will be a fraction of traditionally designed centres.

(see www.greenbuildingpress.co.uk/article.php?article_id=923 and www.wmccce.org/Dogs_rehoming)

- "The Challenges of High Performance Building" talk at South Yorkshire Energy Centre

"The Challenges of High Performance Building" presentation and CPD by Stephen Baker of Natural Building Technologies (NBT) a leading supplier of sustainable building envelope systems (www.natural-building.co.uk).

To be held on Thursday 13th October 2011 (6:30 for 7:00 pm start) at South Yorkshire Energy Centre, Sheffield S2 3DT.

The South Yorkshire Energy Centre's "Energy House" is described as an eco-refurbished visitor centre that demonstrates that even the worst north-facing, solid walled, end terrace in Sheffield can become a beacon of energy efficiency!

For directions visit <http://www.heeleyfarm.org.uk/index.php?id=south-yorkshire-energy-centre>.

- East Anglia Group Meeting on 26th October – 'Off-site' v 'On-site' Construction

David Frost, East Anglia Group Leader, invites you to a meeting on 26th October 2011 at 2.00pm at West Suffolk College, Bury St Edmonds IP33 3RL. The topic for this meeting is Off-Site –v- On-Site Construction (A look at modern methods of construction and how traditional build fits in with 'low energy building')

- Northern Scotland Group meeting 27th October 2011 with speaker Lucy Vaughan

Visit to Historic George Fort George Barracks, Ardersier, Inverness IV2 7TD on 27th October 2011 from 2.00pm to 4.00pm.

Topic: Historic Scotland Conservation Courses (in conjunction with Inverness College)

Guest Speaker: Lucy Vaughan, Head of Conservation North, Historic Scotland

For more info contact: lforbes@scribilib.info

- Local Groups of the South East:

Saturday 29th October 2011 - visit to Ecotecture's 'Curly House' and the Weald & Downland Museum 'Building Crafts Gallery'

A joint event with the Brighton (aka South East) Group and the Kent Group is being organised for Saturday 29th October 2011. Award winning architectural practice, Ecotecture, is arranging for us to visit their Curly House project. This will be a unique opportunity to visit this amazing building and hear how it came about from not only the architects but also the builder and engineer. More details on their website www.ecotecture.co.uk.

Following this will be a visit to the Building Crafts Gallery at the Weald and Downland Museum where AECB members, Greenman Carpentry, will be informing us on the sustainable building decisions they made on construction methods of the new Building Crafts Gallery as well as their other projects throughout the region. See their website for further information www.greenmancarpentry.co.uk or www.wealddown.co.uk

About The Curly House.

The Curly House in the Sussex Downs has made leaps and bounds since our last blog on the project. Kithurst builders have now installed the Op-Deck roofing system to the lower ground and ground floor. The product links seamlessly with the Nudura ICF product and produces U-values of 0.1w/m2k as standard. The contractor spent a lot of time ensuring that the services are in place prior to the pouring of the concrete core within the ICF and over the OP-Deck system. There are many advantages from using a poured system such as excellent inherent air-tightness, but these do need to be weighed up against the time spent preparing for the pour. Leaving any service item out of the equation prior to this point could well prove to be costly or even impractical to install after. With this in mind the cabling for the IT in the building has been specified to be as future proof as is possible.

The building is very strong in its form, particularly as the ICF system is a very bright blue colour. The building will be finished in a self coloured render which will work well with the curves to produce a soft finish, this in conjunction with the curved lines of the deck, the additional landscaping and the brise soleil will sit the building down into the landscape and produce a building of exceptional architectural merit.

The core idea behind the building design is the pushing the envelope whilst maintaining balance between energy efficiency and high design concept. The building has been thermally modelled within IES, and shows that the curved design does not compromise the performance, in-fact it this specific design it actually enhances it.

About the Building Crafts Gallery at the Weald & Downland Museum.

Designed by Richard Harris the then Museum director (retired 01/01/11) as a long awaited replacement for a temporary poly-tunnel type structure that had been in place for nearly 15 years. The 'white tent' as it was known, was originally intended as an onsite timber frame restoration facility, the idea being that the public could watch the process of restoration whilst on a visit to the museum. The success of this idea led to the building of the Downland Gridshell and the white tent went on to serve in many other roles but mainly by the education department who used it as a wet weather space for school groups.

With this in mind, plus the intended re-organisation of the introductory exhibition in Hambrook barn, a space was devised whereby the floor area would be unobstructed by posts and have no windows in the walls to maximise display space. The roof pitch had to fit in with the surrounding exhibit buildings and so 45 degrees was decided on. With a span of 8 metres an 45 degree pitch would make the roof excessively high and obscure the view of exhibit buildings. A roof system was devised whereby use of 6 metre king post trusses would be placed across the corners of the wall plates, the tie beams would take a cross beam and the cross beams would take two large LVL beams which would themselves form a box valley in the centre of the roof. The inside slope of the roof is covered in poly carbonate sheets and the exterior slope has a number of Velux conservation grade roof lights set into a traditionally tiled roof.

The insulation was from NBT and consisted of 200mm wood wool in the walls and 80mm rigid wood fibre sarking board across rafters with scope to infill between rafters with 100mm wood wool. Anti racking was achieved using OSB on the interior face of the studs, this was pre-painted and edges lined with comriband to stop any drafts. All electrics are surface mounted with extra sockets high up to provide power for future exhibitions whilst being out of reach of the children. Heating is underfloor and powered by an air source heat pump.

News

Panorama Programme: “Drinking Our Rivers Dry?”

Cath Hassell, Director of ech2o consultants, appeared in the Panorama programme “Drinking Our Rivers Dry?” on Monday 19th September 2011 on BBC 1. The Panorama programme investigated whether the water industry and its regulators are doing enough to protect the UK’s rivers. For more details go to www.ech2o.co.uk.

Government Is Taking The Wrong Approach To Decarbonising Homes, Says Think Tank

The UK Coalition Government should focus on making homes more energy efficient before subsidising renewable heat, the think tank IPPR has warned. In a report published on Friday, Warmth in a changing climate: How should the government encourage households to use renewable heat?, the IPPR criticises the Government’s current strategy of using public funds to support renewable heat, which it argues is “not going to help families” facing rising energy bills.

The think tank says the Government should be providing direct support to help householders make their homes more energy efficient rather than moving ahead with the renewable heat incentive (RHI), which the IPPR says is directly more at larger projects. The RHI, which is expected to cost up to £860 million, will provide a feed-in tariff to householders installing renewable heat technologies like ground or air source heat pumps and biomass boilers.

But the high upfront costs associated with these technologies rule out most household and small community projects, says the report. High upfront costs will mean low take up, warns the IPPR. Furthermore, research carried out by the think tank indicates that heat pumps do not work very well in poorly insulated homes, which makes them a poor choice for much of the UK’s relatively old housing stock.

The Government’s current approach will neither serve to help families deal with rising energy costs nor significantly cut the 23% of all UK carbon emissions that originate from homes. Instead, the report recommends restricting RHI incentives to households that already achieve a threshold level of thermal efficiency, integrating the incentives into the Green Deal to ensure a holistic approach and assisting householders with upfront costs.

Go to www.ippr.org/

UK Schools Sign Up To Cut Energy Costs And Carbon Emissions

Schools across the UK are signing up to a pilot scheme run by the Carbon Trust in partnership with local councils to cut energy costs and carbon emissions. One of the 43 local authorities taking part in the Collaborative Low Carbon Schools Service is Buckinghamshire County Council, which has signed up nine schools to the pilot.

Under the scheme, schools will work with their local authority and the Carbon Trust to become more energy efficient by planning their future energy strategy. Schools will be helped to train staff to monitor energy use, run ‘switch off’ campaigns and set up action teams in each school to raise awareness of energy efficiency.

Buckinghamshire County Council says the lessons learned from the pilot scheme will allow it to develop a package of support and knowledge for all its schools, which currently accord for 68% of the Council’s energy consumption and associated carbon emissions.

Go to www.buckscc.gov.uk/bcc and www.carbontrust.co.uk/

Government Earmarks £35 Million For Energy Efficiency Measures

Innovative measures that cut the costs of energy saving and reducing carbon emissions for homes and businesses are to get a £35 million boost, UK Energy Secretary Chris Huhne announced yesterday. In the Spending Review last year, the Government earmarked more than £200 million for low carbon technologies over the next four years. A £35 million share of that pot is now going to be devoted to reducing carbon emissions from buildings.

Details of where and how the funding will be allocated to reduce the costs of energy saving in domestic and non-domestic buildings will be announced later in the year. Meanwhile, a new Energy Efficiency Deployment Office will be established within the Department of Energy and Climate Change (DECC) to create an energy efficiency strategy and strong programme management. The Office will have its own chair and director, like similar Offices for renewable energy, carbon capture and storage and nuclear power.

Go to www.decc.gov.uk

Landlords Eying Up Government’s Green Deal

Two-thirds of the UK’s private landlords are eying up the opportunities presented by the Government’s forthcoming Green Deal, according to a survey. The Coalition Government’s Green Deal, which is in the report stage in Parliament

as part of the Energy Bill, will allow the costs of improving the energy efficiency of properties to be paid for out of savings to energy bills.

The National Landlords Association (NLA) reports that 24% of the landlords it surveyed are planning to take advantage of the Green Deal, with a further 38% saying they would consider taking advantage of loans to make energy efficiency improvements to their properties. Only 17% profess not to be interested at all. The Green Deal is likely to be open to property owners from October 2012 and will allow tenants to reduce energy consumption and bills, while adding value to properties by being more 'eco-friendly'.

Go to www.landlords.org.uk/

European Commission Sets Out Path To Sustainability

The European Commission today set out a 'roadmap' aimed at making the region's economy sustainable by 2050.

The 'roadmap to a resource-efficient Europe' identifies the sectors – particularly food, housing and transport – that consume most resources and outlines how the region can grow while using fewer resources. The report looks at key natural resources like raw materials, metals, energy, biodiversity and water, which have been used to fuel economic growth as if they were inexhaustible.

Instead, approaches like recycling, better product design, materials substitution and eco-engineering can mitigate the problem, as well as other measures that can transform production and consumption, like eco-labelling. Most controversially, the report suggests a move away from labour taxation to 'green' taxation targeting pollution and resource use. Pricing that reflects the real costs of resources – particularly on environment and health – could provide a fresh incentive to push consumers to resource-efficient products.

The report is only a first step, and the Commission will now look at appropriate policies and legislation to implement its main aims. But crucially it could pave the way for wider discussions at the Rio+20 Summit in June next year.

Go to http://ec.europa.eu/environment/resource_efficiency/index_en.htm

US EPA Delays Announcement Of Greenhouse Gas Standards

The US Environmental Protection Agency (EPA) is to delay the announcement of its plans to regulate greenhouse gas emissions from power plants. The agency had set a target of announcing its proposed new standards at the end of this month. But Administrator Lisa Jackson said last week that the EPA is still working on its plans and will announce a new schedule shortly, according to Reuters reports.

The environmental sector is concerned that the delay marks a climb down of the Obama administration in the face of Republican opposition, following a halt to a planned issue of new air standards for smog. The Republicans are seeking to limit the EPA's powers by reducing its funding and cutting planned environmental regulations.

Go to www.epa.gov/

Internet Giants Need To Take Action On Energy Management.

Internet and social networking giants like Amazon, eBay, Expedia, Facebook, Google and Yahoo! need to take action on their energy and carbon management, say independent analysts Verdantix. In a report out yesterday, Carbon Strategy Benchmark: Internet Sector, Verdantix assesses the energy and carbon strategies of the world's 14 largest firms in the sector, including major Chinese firms Alibaba, Baidu and Tencent.

The report highlights Akamai, Apple and eBay as leaders in the field in terms of their energy efficiency activities and the transparent disclosure of their carbon emissions. In fact, along with Google – which revealed its carbon footprint for the first time last week, they are the only four firms to disclose greenhouse gas emissions from their data centres on a global basis.

The report highlights a major lack of information in a sector that accounts, according to estimates by the Department of Energy, for as much as 3% of the total electricity use in the US. Amazon has rejected stakeholder requests for increased transparency on emissions and other companies like Expedia and Tencent are also lagging behind, says Verdantix.

Go to www.verdantix.com

Empire State Building "Green" Refurb.

New York City's iconic Empire State Building, which has been undergoing a \$550 million green refurbishment, has been awarded LEED Gold certification. The 2.85 million square foot building, which is celebrating its 80th anniversary, is one of very few 'national historic landmarks' to earn the certification from the US Green Building Council (USGBC).

The retrofit of the building by Johnson Controls and Jones Lang LaSalle promises to reduce its energy consumption by more than 38% and save \$4.4 million in energy costs a year. The retrofit will reduce the building's carbon emission by an estimated 105,000 metric tons over 15 years and the building's owner Malkin has pledged to buy carbon offsets totalling 55 million kWh per year of renewable energy to make the Empire State 'carbon neutral'.

The energy savings alone will payback the cost of the implementation of the energy efficiency measures in around three years. The refurbished Empire State Building has also been certified under the ENERGY STAR scheme over the last two years.

Go to www.usgbc.org

Majority Of Corporations Now Include Climate Change In Business Strategy

A majority of the world's largest corporations now include climate change actions in their business strategies, according to the latest Carbon Disclosure Project (CDP) annual report. The CDP Global 500 report, Accelerating low carbon growth, drawn up by consultants PwC, looked at 396 of the world's largest corporations.

For the first time in ten years, a majority – 68% – report putting climate change at the heart of business strategies, and 74% now have emissions reduction targets up from 65% last year. As a result, 45% of those corporations looked at by the CDP are now reporting lower greenhouse gas emissions as a result of their activities. This year also saw 14 new entrants to the Carbon Disclosure Leadership Index (CDLI), including Air Products & Chemicals, Lockheed Martin, Morgan Stanley, ENEL, FIAT, Novartis and Glaxo SmithKline.

New entrants Honda and Sony in Japan are also among the top performers, which also include Bank of America and Cisco Systems in the US; Bayer, BMW and SAP in Germany; Tesco in the UK; and Philips Electronics in the Netherlands.

The analysis also points to a correlation between higher stock market performance over time and inclusion in the CDP's Carbon Performance Leadership Index (CPLI) and the CDLI. Rising oil and energy prices, security of supply concerns and growing recognition of the potential returns of investments in emissions reduction have boosted the importance of these issues at boardroom-level, says the report.

Go to www.cdproject.net and www.pwc.co.uk/sustainability

Events

Site Visit: Code Level 6, Plot M, Peterborough, 6th October, 1.30 to 4.30pm

Plot M is a prototype dwelling built by Morris Homes to CSH Level 6. A further 295 dwellings will be built to this standard for HCA's Carbon Challenge.

They have incorporated various technologies to achieve this.

- Hot water through Solar Thermal & a Wood Pellet Boiler
- Photo Voltaic Panels (predicted output of 4.75kW)
- Whole House MVHR System
- Rainwater Harvesting

Construction details:

Foundation: Concrete Strip

Ground Floor: Precast beams & EPS insulation clock infill with reinforced screed topping

Walls: Sigma II close panel timber frame, fully insulated, with clear cavity and either brick, lightweight render, rendered blockwork or Western Red Cedar cladding.

Upper Floor: Engineered Open-Web metal joist system

Roof: Trussed roof with concrete tile finish and Ondutile low pitch underlay.

There is a predicted 148% reduction in carbon emissions with a Heat Loss Parameter of 0.77

The GHA is organising a visit to this house on the 6th October 2011. For full information, or to join the visit, please call Roger Southcott on 020 7704 3503 or email at roger@goodhomes.org.uk

Presentations from Morris Homes and Stroma.

£50 + VAT, discount of 20% to AECB attendees.

Publications

New From HIS BRE Press.

- LED lighting: A review of the current market and future developments (Ref FB 40)

ISBN978-1-84806-191-0

Lighting is one of the largest users of energy in buildings, being responsible for around 20% of electricity use. Good lighting is essential to health, well-being and productivity, but the efficiency of light sources varies widely. To reduce carbon emissions, designers, owners and occupiers are looking at the energy efficiency of lighting. Light-emitting diodes

(LEDs) are a proven technology that offers enormous possibilities for providing highly energy-efficient and good-quality lighting. This BRE Trust Report summarises the current LED market and various advantages of LEDs, and outlines the challenges and barriers to adoption of the technology.

www.brebookshop.com/details.jsp?id=326794

- Site Layout Planning For Daylight And Sunlight (Ref: BR 209)

ISBN: 978-1-84806-178-1

The new edition of this highly regarded BRE guide has been fully revised and updated. It gives advice on site layout planning to achieve good sunlighting and daylighting both within buildings and in the open spaces between them. This authoritative advisory document is widely used during the planning and design stages of building development in the UK and Ireland.

New material in this edition covers dense urban areas, trees and hedges. Intended for use in conjunction with the British Standard Code of Practice for daylighting, guidance is given on site layout for good sunlighting and daylighting; safeguarding of daylight and sunlight within existing buildings nearby; and the protection of daylighting of adjoining land for future development.

A special section deals with passive solar site layout. Guidance is given on the sunlighting of gardens and amenity areas. Issues like privacy, enclosure, microclimate, road layout and security are also reviewed. The appendices contain methods to quantify access to sunlight and daylight within a layout, and a transparent direction finder is included for use with the indicators.

Sun-on-ground indicators (AP288) is a set of 12 transparent indicators, which have been revised and updated, designed for use with BR209. They can be used to predict the availability of sunlight on the ground at the equinox at three different latitudes in the UK.

www.brebookshop.com/details.jsp?id=326792

- Environmental Impact Of Insulation (Ref: FB 37)

ISBN: 978-1-84806-196-5

This report reviews how insulation materials have been assessed within The Green Guide to Specification, including the application of the Environmental Profiles methodology which underlies The Green Guide data. The way in which insulation is addressed within building-level environmental assessment schemes such as BREEAM and the Code for Sustainable Homes is also explained.

The report will give manufacturers and specifiers a general understanding of the significant benefits and impacts of insulation products over their whole life cycle and help to identify opportunities for improvements to their environmental performance.

It is part of a series that provides comparable information on cladding, floor finishes, windows, metals, timber, masonry and concrete to assess the environmental impact of specific construction materials.

www.brebookshop.com/details.jsp?id=326787

- Environmental Impact Of Vertical Cladding (Ref: FB 38)

ISBN: 978-1-84806-194-1

This report reviews how external wall cladding materials have been assessed within The Green Guide to Specification, including the application of the Environmental Profiles methodology which underlies The Green Guide data. The way in which cladding is addressed within building-level environmental assessment schemes such as BREEAM and the Code for Sustainable Homes is also explained.

The report will give manufacturers and specifiers a general understanding of the significant benefits and impacts of external wall cladding products over their whole life cycle and help to identify opportunities for improvements to their environmental performance.

It is part of a series that provides comparable information on insulation, floor finishes, windows, metals, timber, masonry and concrete to assess the environmental impact of specific construction materials.

www.brebookshop.com/details.jsp?id=326788

If you have any news, events or courses you would like to publicise in Network then please email details to network@aecb.net