



# Network

**News**

**November 2009**

## **New Passivhaus Initiative From The AECB.**

Following the success of CarbonLite, AECB is establishing a new not-for-profit organisation to create a centre of excellence for low energy and low carbon buildings. This will take forward and develop the work already undertaken within Carbonlite.

The new organisation, the Passivhaus Buildings Trust is wholly owned by the AECB, but established as a separate company. It will have complete operational independence from the AECB, with its own staff and board of directors under Chairman John Walker.

Passivhaus Buildings will have a linked membership association. We are just inviting founder members to sign up.

The AECB board believes that this is an exciting development which will play a significant role in transforming the UK construction industry. It will build on the huge base of expertise and experience within the AECB, while allowing the AECB itself to continue to play to its own strengths as the premier sustainable construction networking organisation in the UK.

It will be some time before Passivhaus Buildings is officially launched, although its first event on Passivhaus schools is taking place in December.

Watch this space! Further details will be announced in the newsletter, or the AECB web site [www.aecb.net](http://www.aecb.net).

## **AECB Member's Project Wins Three Green Apple Awards**

A small environmental social enterprise in Lincolnshire, Hill Holt Wood, has won three Green Apple Awards in 2009: the prestigious Champion of Champions Green Apple, as well as a Green Champion award and the Housing Association for the Built Environment Green Apple.

The awards were in recognition of the very high calibre and deep green ethos behind the design of a new-build eco-village in ancient woodland and the construction of the first building, the Woodland Community Hall. The Woodland Community Hall was delivered in partnership with the University of Lincoln and Simons Construction Group.

AECB member, Bryce Gilroy-Scott, was the Project Manager from its inception in 2005 through to December 2009.

Further information about the project can be found on the Hill Holt Wood website: [www.hillholtwood.com](http://www.hillholtwood.com).

Bryce is now Lecturing and pursuing a PhD at the Graduate School of the Environment at the Centre for Alternative Technology.

## **AECB Members Named As "Welsh Green Heroes"**

52 sustainable development champions have been named in Wales' first annual Green List. The green heroes from across Wales have been recognised for taking action to create a brighter future for Wales.

The Wales Green List celebrates individuals making Wales a better and more sustainable place to live. It's the first list of its kind in Wales, bringing together the different elements of sustainable development – environmental, economic and social – in one award.

The list, which was compiled by Cynnal Cymru – Sustain Wales, shows that green heroes are no longer restricted to stereotypical environmentalists but can just as easily be ordinary people, from any background, making a difference in their own way.

Included on the Wales Green List 2009 are chief executives in private companies, SME managing directors, politicians, parents, campaigners, poets, musicians and many more. Well-known names on list include Jane Davidson, Minister for Environment, Sustainability and Housing and Gillian Clarke, National Poet of Wales.

Included on the list are AECB Members Nigel and Joyce Gervis of Ty Mawr Lime Ltd and Chris Lord-Smith of Llani Solar Ltd. Apologies to any other members on the list that have been omitted, if you have please let us know and you will be mentioned in the next newsletter.

For more information go to [www.sustainwales.com/home/en/campaigns\\_greenlist.aspx](http://www.sustainwales.com/home/en/campaigns_greenlist.aspx)

## **AECB Member Claims Water Saving Device Will Save More Carbon Than The Ban On Filament Bulbs.**

If people want to save £4 billion and half a million tonnes of carbon More than the ban on filament bulbs will achieve, then they should stop throwing their money and carbon, literally, down the pan. If water were to be delivered and taken away by ten tonne lorry, instead of invisibly through pipes, then for every HGV on the road today, we would need to add another FIVE. Yes the water companies are the largest single users of electricity in the UK. The carbon footprint of water is 0.969 KgCO<sub>2</sub>/m<sup>3</sup> (Water UK 2008).

60 of the 150 litres we each use a day go for WC flushing. For 150 years, for no other reason than 'we have always done it this way', we have 'Pressed and let go' flushing a full cistern every time, a complete waste of water. Fit the Interflush retrofit kit to the existing WC siphon, connect to the front handle and now you have control on the amount flushed. 'Press, hold down to flush, let go to stop', using only what is needed, wasting none at all, saving half the flushing water on average, 30 litres per person per day.

The Interflush only works on siphons, the only flushing device that never leaks. Push-button operated dual-flush WCs, promoted as water efficient are in fact the biggest Trojan Horse of water saving because they all have a drop valve in the cistern. These have been known to leak for 160 years. The latest figures from the Environmental Protection Agency in the U.S estimate WC valve leakage to be 40 litres per person per day.

Combined potential UK savings from using siphon flushing only, i.e. not using valve flushing and then fitting the Interflush are: 1.6 billion tonnes of water or 23% of UK water resources, £4.1 billion for consumers, 2.1 billion KWh of electricity and 1,6 million tonnes of carbon emissions. Cost £10-£15 per kit, see a payback of weeks not years, "a no-brainer" he claims.

Massive change will be needed to beat global warming, if we cannot make such a simple change as changing from 'press and let go' to 'press, hold down and then let go', what chance have we of beating global warming?

Shortlisted in the 'Sustainable Homes Awards'.

For more information go to [www.interflush.co.uk](http://www.interflush.co.uk).

## **Britons Urged To Stop Wasting Water And Save 20 Litres A Day**

The UK Government is launching a new campaign urging Britons to stop wasting water and save 20 litres a day. The average UK household uses over 100,000 litres of water a year, the equivalent of 150 litres per person per day – one of the highest usage figures in Europe.

Despite the UK's reputation for frequent rainfall and being surrounded by water, many parts of the country – particularly in the densely populated south east – actually have less water available per head than many European countries, including Italy, Greece and France. The water-saving campaign recommends turning off the tap while cleaning your teeth, reducing shower times by as little as a minute, using a bowl to wash up rather than a running tap and watering the garden with a watering can instead of a hosepipe.

Only around 13% of households have invested in simple measures like a water-saving bag in the toilet cistern to reduce the water used in each flush and even fewer – just 3% - use aerated water-efficient showerheads. The Defra initiative, which is part of the Government's Act on CO<sub>2</sub> campaign, will be fronted by TV presented Kate Humble.

For further information go to [www.defra.gov.uk/](http://www.defra.gov.uk/)

## **New Research From English Heritage Renews Calls For The Retention Of Original Sash Windows**

For the first time in England important scientific evidence is available to counteract some of the misconceptions about the energy efficiency of original timber sash windows, a unique feature of England's built heritage which is under threat and fast disappearing.

English Heritage has released the findings of a study into the thermal performance of traditional sash windows using a 2 x 2 timber sliding sash window dating from the 1880s which had been rescued from a skip. The results showed that even the simplest repair and basic improvements will bring significant reduction of draughts and heat loss, and that using a combination of these methods will upgrade a window to meet Building Regulations targets.

The key findings are:

- Simple repairs to mend cracks and eliminate gaps can significantly reduce the amount of air infiltration or draughts. On the window that was tested, air infiltration was reduced by one third.
- Air infiltration through a sash window in good condition can be reduced by as much as 86% by adding draught proofing.
- Heat loss through contact with the glass and frames can be significantly reduced by adopting simple measures like closing thick curtains and plain roller blinds. In the test, heat loss was reduced by 41% and 38% respectively.
- More elaborate measures reduce heat loss even more and can improve windows to meet modern Building Regulations, which target a U value for windows of 2 or below. In a test with good quality secondary

glazing, this value was 1.7. Well-fitted, closed shutters, also produce similarly good results. The best result is when the two methods are used together, resulting in a 62% reduction in heat loss and a U-value of 1.6.

The research comes at a time when large swathes of public and privately owned historic buildings will be subject to refurbishment and retro-fitting to improve their energy performance in order to meet the Government's ambitious climate change targets.

Full report at [www.climatechangeandyourhome.org.uk/live/content\\_pdfs/580.pdf](http://www.climatechangeandyourhome.org.uk/live/content_pdfs/580.pdf)

### **Buildability Equation Equals Less Than Zero**

Proposals for the minimum energy efficiency standard that will be enforced from 2016 when the 'zero carbon dwelling' regime arrives were presented last week at late-stage consultation events organised by the Zero Carbon Hub. After months of deliberating over what is deliverable, the industry task group charged with making recommendations to the government has opted for energy usage of more than double that already being achieved by the leading-edge PassivHaus standard.

The issue that looks set to drive a wedge between future UK requirements and Northern European best practice is the desirability, or otherwise, of mechanical ventilation with heat recovery. The taskforce clearly struggled with the question of whether MVHR should be a feature of the minimum efficiency standard and concluded that the UK market would not want it imposed.

With MVHR increasingly significant as air tightness of homes increases, its absence looks like putting UK 'zero carbon' homes in the shade compared to Passivhaus, which does take MVHR into consideration.

Last week was the first opportunity for the wider industry to consider the proposals, and the Hub's task group points out that it is still gathering feedback on the emerging recommendations. The government has said that it wants to announce a minimum energy efficiency standard by the end of the year after taking advice.

The emerging definition of the 'zero carbon home' was relaxed considerably in the summer, when the housing minister set the final 2016 target as a 70% reduction in CO2 emissions to be achieved through a combination of energy efficiency and low-carbon and renewable energy technologies, with the remaining 30% to be achieved by a variety of 'Allowable Solutions'.

The move was seen as reinforcing the need for a challenging energy efficiency requirement within the broader definition and led the CLG to commission the cross-industry Zero Carbon Hub to formulate an achievable standard for the building fabric.

Various energy efficiency metrics were considered by the task group, with a straightforward space heating and cooling energy demand as the favoured option, expressed as kWh/m<sup>2</sup>/yr. It has also proposed three separate levels of performance: one for blocks of flats and terraced housing, one for semi-detached homes and one for detached homes.

A range of specifications was considered against considerations of cost, buildability, deliverability on a mass scale and suitability for different dwelling types. The aim is to settle on a final figure for each housing category, with the recommended range in current proposals set at 30 to 35 kWh/m<sup>2</sup>/yr for blocks of flats and terraces of houses; 35 to 40 kWh/m<sup>2</sup>/yr for semi detached houses; 40 to 45 kWh/m<sup>2</sup>/yr for detached houses. Assessment would be based on the SAP2009 calculations.

For comparison, the PassivHaus standard already being achieved on the continent for a mid-terrace house is less than 10 kWh/m<sup>2</sup>/yr, which will prompt the industry's zero energy champions to dismiss these proposals as not ambitious enough and a major retreat from the original zero carbon ambition.

Download the Zero Carbon Hub's six-page briefing on its current thinking, decision criteria and the recommended energy efficiency specification at <http://riba.msgfocus.com/c/1BaIVmGB1vP8OyP>

Source: RIBA Practice Bulletin No 518, 29<sup>th</sup> October 2009

### **UK Government Unveils Final Details Of CRC Scheme**

The UK Government has unveiled the final details of its Carbon Reduction Commitment (CRC), which as of April 1, 2010 will require large public and private sector organisations report and reduce their carbon emissions. Under the scheme, organisations that consume at least 6000 MWh a year – equivalent to spending £500,000 on electricity – will be required to purchase allowances to cover their annual energy usage.

At the end of the monitoring and reporting period, participants will have to surrender their allowances or buy extra ones to cover their consumption. The revenue-neutral scheme repays participants their original investment back plus a 10% bonus or penalty, depending on how they rank on their energy efficiency improvement. Significantly, the Department of Energy and Climate Change has rebranded the scheme the CRC Energy Efficiency Scheme in a move to appease critics of the scheme who maintain that it does not sufficiently reward organisations' investment in renewables.

The revised scheme will also now recognise those organisations that have invested in onsite renewable energy with a separate listing detailing the carbon saving realised through such measures. The other major change to the Government's plans is that participants in the scheme will only be required to report their emissions in the first year

(2010/2011) and will not be required to purchase carbon allowances. The move comes in response to complaints that the initial stages of the scheme could cause a cashflow crisis for participants.

After the initial stage, the scheme will revert to the original plan in which organisations purchase allowances in advance. The revisions to the scheme should also make participation for large organisations easier. Under the new plans, subsidiaries of a company that are large enough to qualify in their own right may now opt to do so. The change was prompted by large organisations complaining that the scheme would put an undue reporting burden on them.

According to the Government, the scheme will drive large organisations to invest in energy efficiency measures that they might not otherwise. By 2020, Government figures put the potential savings at £1 billion a year.

The final qualification and registration information will be published by the Environment Agency in the next month.

For further information go to [www.decc.gov.uk/](http://www.decc.gov.uk/)

### **Cambridge Plans For 3000 Level 5 Homes**

Cambridge City Council and South Cambridgeshire District Council adopted an Area Action Plan on 22nd October that will see almost 3,000 homes built to level 5 of the Code for Sustainable Homes, the highest level believed to have been required by a formal planning policy so far for a single development. In August Inspectors endorsed the North West Cambridge Area Action Plan, a Cambridge University site allocated for substantial mixed-use development, subject to a number of changes.

Inspectors approved wholeheartedly the evidence presented by the councils as to why this particular development should be setting leading edge standards ahead of the national Building Regulations timetable for zero carbon in 2016.

The plan also requires a site wide decentralised energy system which, if renewably fuelled, could save over 60% of carbon emissions compared to current requirements for the homes, student accommodation and 100,000m<sup>2</sup> of research and academic space. The University is currently investigating whether a neighbouring site under its ownership could be cost effectively connected to the North West's decentralised system, to help with viability in the early phases of the development, whilst reducing the University's carbon footprint.

The plan also requires all non-residential buildings to achieve an 'excellent' rating, under the BREEAM scheme and a minimum of 20% onsite renewables. All buildings will need to be 'climate proofed' and the development as a whole designed to reduce the impacts of predicted climate change. Inspectors emphasised that the site had ideal credentials to deliver high levels of sustainability and that the University must strive for maximum carbon savings. To this end the University has established an advisory panel from leading sustainability academics who will create the vision and provide expert critique of proposals that come forward for this exemplar development.

The University will be undertaking stakeholder and public consultation in November on its emerging master plan for the site.

Source: [www.greenbuildingpress.co.uk/](http://www.greenbuildingpress.co.uk/)

### **UK Feed-In-Tariff Rates Not High Enough, Says Renewables Group**

The UK Government's Clean Energy Cash Back scheme – which will operate like a feed-in tariff – is proposing rates that are not high enough, says the Renewable Energy Association (REA). The consultation on the scheme closed yesterday with concerns mounting that the tariff rates are insufficient to attract investment in small-scale renewables, particularly from the commercial sector.

The potential for sub-5 MW renewables installations is significant in the UK – and could provide up to a third of the country's electricity demand, according to estimates. The Government, however, has only set a target of 2% of the UK's electricity supply for small-scale renewables by 2020. The Clean Energy Cash Back scheme could deliver 5% of the country's electricity by 2020, according to proponents of the scheme, but tariff rates need to be higher.

For further information go to [www.r-e-a.net/](http://www.r-e-a.net/)

### **MESSIB, Multi Source Energy Storage System Integrated in Buildings**

MESSIB is an EU funded project based on a new type of energy efficient buildings with thermal and electrical energy storage capacity. The overall objective of MESSIB project is the development, evaluation and demonstration of an affordable multi-source energy storage system (MESS) integrated in building, based on new materials, technologies and control systems, for significant reduction of its energy consumption and active management of the building energy demand. MESS is composed by two thermal and two electrical storage systems, integrated with the building installations and a control system to manage the building energy demand.

This new concept will reduce and manage smartly the electrical energy required from the grid favouring the wider use of renewable energy sources (RES) in any type of building and district level. It will reduce raw material use for thermal performance and improve the indoor environment, the quality and security of energy supply at building, including Cultural Heritage (CH), and district level. Furthermore, a significant reduction of the energy unit cost for end-users will be achieved.

To install additional conventional energy generation and distribution network assets with the capacity to accommodate to the maximum (short-term) demand is economically inefficient. Furthermore, productivity decreases when power plants cannot operate at full capacity in periods of reduced demand. The basic idea behind energy storage in buildings is to provide a buffer to balance fluctuations in supply and demand.

Source: [www.messib.eu](http://www.messib.eu)

### **UK Government Issues Low-Carbon Challenge To Local Communities**

The UK Government yesterday issued a challenge to local communities to be at the forefront of the low-carbon economy. Twenty local communities will share £10 million to support low-carbon schemes such as retrofitting homes with energy efficiency measures, constructing a local biomass plant or installing electric car charging points.

In return, residents will help government agencies determine which low-carbon measure could most benefit the whole country. Measures that prove successful in the Low Carbon Communities Challenge could be rolled out nationally. Currently, around a quarter of the country's greenhouse gas emissions come from lighting, heating and powering our households. The Government's pledge to cut emissions by 80% by 2050 will require major improvements in the energy efficiency of the country's housing stock.

The winning communities will be assisted by the Government, as well as the Energy Saving Trust, Carbon Trust and WRAP to come up with low-carbon action plans. To be eligible, communities will have to demonstrate that they are already committed to carbon reduction through renewables, energy efficiency refurbishments or green transport plans.

Go to [www.decc.gov.uk/en/content/cms/what\\_we\\_do/consumers/lc\\_communities/lc\\_communities.aspx](http://www.decc.gov.uk/en/content/cms/what_we_do/consumers/lc_communities/lc_communities.aspx)

### **Social Housing Retrofit Programme Gets Underway In UK**

The UK Government-backed Technology Strategy Board has awarded contracts worth £3.5 million to over 180 housing associations, construction companies and local councils to draw up low-carbon refit plans for social housing. The funding of the feasibility studies is the first phase of the Technology Strategy Board's £16 million Retrofit for the Future competition, which aims to reduce energy use and greenhouse gas emissions from the country's social housing stock.

Housing in the UK currently accounts for around a third of the country's carbon emissions and the Government has pledged an overall reduction of 80% by 2050. The energy efficiency of existing housing, including the country's 4.5 million social housing dwellings, will need to increase dramatically over the coming decades if the UK is to meet its reductions targets.

The initial phase of the retrofit programme will see the development of plans for refitting homes with energy efficient and low carbon technologies like insulation, external wall cladding, heat recovery, on- and off-site renewable energy generation and solar water heating. The initial feasibility studies will be whittled down to around 100 of the most promising designs, which will be invited to a second construction phase. Building contracts of up to £150,000 will be available to retrofit and monitor the 100 'demonstrator' homes in early 2010.

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

### **Professions Adopt Common Stance On Urban Flood Risk**

Professional institutes, including planners, came together after the floods of 2007 and the subsequent review of flood risk by Sir Michael Pitt and agreed to produce a common, joined up policy on the management of flood risk in urban areas. The policy statement has now been published with the support of the RIBA, RTPI, ICE, CIWEM, RICS, RUSI and the Landscape Institute.

Produced as guidance for respective members and the industry as a whole, the statement sets out a set of principles. From a design perspective, the stated aim is to move from flood defences to a holistic management of risk, embracing physical defences, passive measures from storage to planting and reinstating the flood plain, and emergency management measures. From the planning perspective, the risk of flooding is to be recognised as a key constraint on development. Download the Joint policy statement on managing urban flood risk ([www.ice.org.uk/downloads/mufr\\_2009.pdf](http://www.ice.org.uk/downloads/mufr_2009.pdf)).

Source: RIBA Practice Bulletin No 517 22 October 2009

### **Green Roofs Sequester CO2 As Well As Reducing Energy Costs**

Green roofs can not only reduce heating costs and improve the energy efficiency of building but can also sequester CO<sub>2</sub>, according to a report from US scientists. The study by Kristin Getter and colleagues at the Michigan State University finds that replacing traditional roofing materials with green roofs in an urban area the size of Detroit could capture over 55,000 tons of carbon.

The carbon reduction provided by installing green roofs is equivalent to taking 10,000 mid-sized SUVs and trucks off the road for a year. Green roofs are already gaining popularity because they reduce heating and air conditioning costs and retain storm water. In the last couple of years, green roofs have grown by 30% in the US.

Full report at <http://pubs.acs.org/stoken/presspac/presspac/full/10.1021/es901539x?cookieSet=1>

### **Welsh Businesses Get £5 Million Boost To Become More Energy Efficient**

Small businesses and the public sector in Wales are to get a £5 million from the Welsh Assembly Government boost to become more energy efficient. The funds will go to the Carbon Trust Wales' 'invest-to-save' programme that provides interest-free loans for installing energy efficiency measures such as insulation, new boilers and lighting, as well as IT upgrades.

Public sector organisations like hospitals, schools and local government will get an extra £4 million, while £1 million will be earmarked for small businesses.

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

### **London To Get £100 Million Boost For Decentralised Energy**

London is to benefit from a £100 million joint funding programme supporting decentralised energy, recycling and waste energy projects. The Joint European Support for Sustainable Investment in City Areas fund (JESSICA) is made up of £50 million from the European Regional Development Fund, £32 million from the London Development Agency and £18 million from the London Waste and Recycling Board.

The fund will be managed by the European Investment Bank and will focus on sustainable energy projects in the poorest areas of the capital. One of the first projects that looks set to receive support under the scheme is a decentralised energy network in Barking.

For further information go to [www.london.gov.uk/](http://www.london.gov.uk/)

## **Events**

### **How To Meet The Code For Sustainable Homes 04/11/09**

This half-day seminar will provide practical and timely information on how to meet the Code which you can take away and apply to your own projects.

All new homes will have to meet the CO2 reduction target of Level 3 of the Code for Sustainable Homes (25% lower than current Building Regulations) from next year onwards with a timetable of tougher targets over the coming years. An increasing number of local planning authorities require new homes to achieve certain Code levels. Government funded housing already has to meet at least Code Level 3 in full and this is likely to increase in the near future.

Wednesday 4th November, Bristol 1.30pm to 4.30pm (registration from 1.00pm). Fees: £75 plus VAT (£86.25 in total)

For further information and to book visit our website [www.ecostrust.org.uk](http://www.ecostrust.org.uk), email [alison@ecostrust.org.uk](mailto:alison@ecostrust.org.uk) or call us on 01458 259400

### **Modern Timber Framing Smarter, Leaner, Greener 17/11/09**

This seminar is for architects, designers, contractors, development managers for RSL (Registered Social Landlords), contractors for the public and private sector and others involved with or interested in timber frame construction.

This event will bring together some of the leading practitioners in the south west region to share experience and show how the industry can face the challenges of increasing standards, reducing costs and reduced construction times. When the market returns there will be demand for more houses and public buildings to be completed quickly at reduced cost and to a higher standard. How can Timber frame construction address this challenge and how can it help you meet the Code for Sustainable Homes? What have been the experiences of construction professionals that have moved away from traditional brick and block construction and how can timber frame reduce cost and risks?

Tuesday 17th November 2009, 10am - 4pm, Langport, Somerset. Fees: £120 plus VAT (£138 in total) including lunch and refreshments

For further information and to book visit our website [www.ecostrust.org.uk](http://www.ecostrust.org.uk), email [alison@ecostrust.org.uk](mailto:alison@ecostrust.org.uk) or call us on 01458 259400.

### **Passivhaus Schools - The Route to Low Energy Schools in the UK? Friday 11 December 2009 - RIBA, London**

This one day conference organised by AECB/Passivhaus Buildings will explore how the German low energy Passivhaus standard could provide a solution to achieving low energy buildings and improved air quality in UK schools.

During the conference, speakers from some European case study projects will outline the approaches undertaken, highlight the similarities with the UK and provide feedback on the resulting energy usage calculations, including some new results from recently completed schools.

Reduced delegate rates apply until 13 November 2009.

For full programme information and to book please go to [www.carbonlite.org.uk/carbonlite/passivhausschools.php](http://www.carbonlite.org.uk/carbonlite/passivhausschools.php)

## **Courses**

### **Emergency Planet Earth! Environmental Crises, Definitions And Responses, Tues 10 - Sun 15 Nov 2009**

NEW SHORT COURSE in November 2009 led by the University of Leeds at the Centre for Alternative Technology, Wales - the UK's leading ecocentre

Teaching staff from the MA in 'Activism and Social Change' ([www.activismsocialchange.org.uk](http://www.activismsocialchange.org.uk)) based in Geography at the University of Leeds are beginning an exciting new partnership with CAT to deliver this short course. CAT is one of Europe's leading ecocentres, undertaking practical research and teaching into ecological issues. It is based in the town of Machynlleth on the edge of Snowdonia National Park. This collaboration is particularly timely as CAT is launching a major new educational initiative and resource this summer called WISE (the Wales Institute for Sustainable Education). WISE will provide a state-of-the-art environmental education centre, featuring 24 en suite study bedrooms, 200 seat rammed earth lecture theatre workshops, seminar rooms, laboratory, restaurant and bar.

This course will take place in mid November 2009 and will be taught over one week, from Tuesday evening to Sunday afternoon. Registration for this course costs £300 unwaged, £475 waged and £650 company rate and includes full board accommodation, tuition and materials.

Accommodation will be on our main site, in small simply furnished rooms, which contain 2-5 bunk beds. We have a few single rooms available for an extra £10 per night. There are common rooms available for relaxation, with facilities for making drinks. Meals are served in our wholefood vegetarian restaurant. The module will be delivered by staff from the University of Leeds and CAT and will involve a mix of lectures, seminars, evening reading groups, debates and films, student led presentations, guest speakers and site tours and a social on Saturday evening.

To register, tel: 01654 705981 email: [course@cat.org.uk](mailto:course@cat.org.uk) or [www.cat.org.uk/courses](http://www.cat.org.uk/courses) for online booking.

For more information on the MA in Activism and Social Change see: [www.activismsocialchange.org.uk](http://www.activismsocialchange.org.uk) or email the Programme Director: Dr Paul Chatterton [p.chatterton@leeds.ac.uk](mailto:p.chatterton@leeds.ac.uk)

### **Master Classes From Hockerton Housing Project.**

Thursday 12th November: A practical case study of sustainability.

This event will be of particular interest to developers, self-builders, landowners, planners, architects, buildings services engineers, other building professionals, and postgraduate students.

Delegates will gain:

- An appreciation of the practicalities of building sustainably
- An understanding of strategies and technologies for ultra low energy building and 'zero heating' design
- A comprehension of the differences between high thermal mass and lightweight timber frame construction
- Knowledge of the potential solutions and strategies for delivering a zero carbon and autonomous development through renewable energy technologies, and water systems (collection and waste), and how they can be incorporated into buildings
- An insight into what it is really like to live in eco homes and to live sustainably.

Thursday 3rd December: The practicalities of delivering zero carbon homes

This event will be of particular interest to developers, self-builders, landowners, planners, architects, buildings services engineers, and other building professionals.

Delegates will gain:

- An overview of government targets for zero carbon homes based on the recent launch of the Code for Sustainable Homes.
- An understanding of the impact of these targets for future development and what are the key principals for delivery of zero carbon homes.
- An appreciation of the realistic practicalities of achieving zero carbon housing.

- An understanding of strategies and technologies for ultra low energy use in buildings.
- Knowledge of the potential solutions and strategies for delivering a zero carbon and autonomous development through renewable energy technologies, and water systems (collection and waste), and how they can be incorporated into buildings.
- An insight into what it is really like to live in zero carbon homes and to live sustainably

For more details of both events go to [www.hockertonhousingproject.org.uk/ViewItem.asp?ID=1007](http://www.hockertonhousingproject.org.uk/ViewItem.asp?ID=1007), email [hhp@hockerton.demon.co.uk](mailto:hhp@hockerton.demon.co.uk) or phone: 01636 816902.

### **Renewable Energy Essentials - Course programme 2009/10. Centre for Sustainable Energy**

A new programme of Renewable Energy Essentials courses has been announced starting in Autumn 2009. The courses, which will run from November 2009 through until November 2010, cover a range of renewable energy technologies.

The provisional dates and locations are:

- Thursday 5 November 2009: Bristol
- Wednesday 9 December 2009: London
- Tuesday 26 January 2010: Birmingham
- Tuesday 9 March 2010: Bristol
- Thursday 20 May 2010: London
- Wednesday 16 June 2010: Taunton
- Thursday 23 September 2010: Birmingham
- Wednesday 17 November 2010: Bristol

Venues and times have yet to be confirmed.

There is a maximum of 20 places on each course, giving plenty of time for discussion and sharing of experiences and views. This course gives participants a 'window' into small-scale renewable energy installations. The course is aimed at people working in the energy field or interested in learning more about renewable energy. It is especially suitable for: local authority staff (e.g. planning officers or those with an interest in energy issues); architects and building services engineers; energy management professionals; community representatives and individuals interested in developing renewable energy systems.

The cost of this course is £199.00. This includes a delegate information pack, copies of the presentations, lunch and refreshments, and a certificate of attendance.

For more information go to [www.cse.org.uk/pages/skills/training/cse-training-courses/renewable-energy-essentials](http://www.cse.org.uk/pages/skills/training/cse-training-courses/renewable-energy-essentials)

### **Using PHPP In A Building Certification Process**

Birmingham: 30 November - 1 December 2009

London: 15-16 December 2009

Part of the CarbonLite Training Programme, this practical hands-on course will provide energy consultants, technical building designers and architects with the skills necessary to design low energy and CO2 buildings to AECB standards using the PassivHaus Planning Package (PHPP).

There is limited availability on the Birmingham course and delegates are advised to book early for this venue.

Book online at: [www.carbonlite.org.uk/carbonlite/training.php](http://www.carbonlite.org.uk/carbonlite/training.php)

New course dates for your diary

Introduction to Passivhaus - London: 14 December 2009

Calculating psi Values for Thermal Bridging - London: 17 December 2009

Online booking for these two courses will be available shortly. Please contact [sally@aecb.net](mailto:sally@aecb.net) to be added to the list for further information about these courses.

*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.*