

**Exploring The Green Deal – Read Our New Feature On AECB.Net**

The Green Deal is an ambitious government programme, long sought by many in the sustainable building world, which is intended to allow people to finance energy-saving improvements to their properties, out of the future savings in energy bills – in effect, it's a finance instrument.

Government introduced the first stages of the legislation needed to create the Green Deal in last month's Energy Bill. This will create the framework, but much devil remains to be thrashed out in the detail. Who will design the work? Who will calculate the savings – on what basis? What if the work costs more than the likely savings – can anything fill the gap, or will the whole idea fall flat on its face? What if the calculations prove to be wrong? How will the practical constraints applying to individual buildings and households be accommodated in a nationally-regulated scheme? Who will be allowed carry out the improvements – will local building firms get a look-in?

Refurbishment pioneer and AECB member Russell Smith of Parity Projects has been involved in the "Pay as you Save" pilot in Sutton, representing the householders, and Parity Projects are now consulting on various elements of the Green Deal, directly and indirectly with DECC. AECB therefore asked Russell to share his very practical perspective on the Green Deal, and set out what he feels are crucial elements required for the deal to succeed, socially, financially and environmentally.

His answers to our questions are published as a new Network feature article, which can be read at, or downloaded as a pdf from, the New Releases page of the AECB website. You can view links to other background information about the Green Deal, and AECB members can post comments and questions of their own, on the AECB forum.

**AECB Local Groups – Old Friends, And New Groups!**

Although the bad weather put paid to some of the AECB meetings recently, groups are already organising events for 2011. If you are interested in getting together with other AECB members in your area go to the AECB forum to see details or post questions about groups in your area (or contact Debbie Mauger direct on [anadapta@teh2ozone.co.uk](mailto:anadapta@teh2ozone.co.uk)). We can put you in touch with groups in your region, or help you organise a get together with other AECB members in your area.

Two new Local Groups will be having their first meetings within the next few weeks. Nidhi Shah of the Birmingham area is aiming to arrange the first get-together on 28th January and this promises to be an exciting event. Nidhi has had a passion for low carbon and sustainable design both in India (where she studied architecture) and also as part of a project with Birmingham City University and Ashram Housing Association.

The second new group, the Lancashire Group, plans its first meeting on 7th February 2011. Peter Stott is the leader in this area and is part of the architectural practice EcoDesign. His partner in EcoDesign, Peter Wilkinson will give a presentation on Passivhaus construction and standard, and as a member of the AECB Board he will also give an update on current AECB news. Lancashire has a full programme planned for 2011, so look out for posts on the forum or details sent to your email address if you are in that area.

The existing Cheshire Group also has a meeting planned – on 18th January – and so those of you in the middle of the UK are spoilt for choice!

Other meetings coming up include Brighton (venue yet to be announced) on 15th February – with Neil May (Passivhaus Trust Trustee) giving his presentation on Natural Building Technologies' products and building methods. If you can't make this he is also headlining at an AECB Better Building breakfast the next day 16th Feb in Haywards Heath from 8am to 9:30. A London meeting is planned for late Feb, organised as usual, by Carine. Keep an eye on the forum for details of all of these.

Those of you in Scotland will have noticed that two groups are now up and running and Linda Forbes will be posting details of future meetings on the AECB forum, so make sure you watch out for these informative networking opportunities.

**Carbonlite New Year Dates**

Raise your game in 2011 with a CarbonLite course: February courses now booking, in London and Bristol:

- Understanding the Passivhaus Standard, Principles and Methodologies

7th February 2011 | Westbourne Grove, London

14th February 2011 | City Point, Bristol

- Using PHPP to Design Low Energy Buildings

8th February 2011 - 9th February 2011 | Westbourne Grove, London

15th February 2011 - 16th February 2011 | City Point, Bristol

- Thermal Bridging

10th February 2011 | Westbourne Grove, London

17th February 2011 | City Point, Bristol

Full course information, prices and booking at <http://www.carbonlite.org.uk/carbonlite/events.php>. Remember, if you join AECB first, you save £50 per course per day.

### **Put Your Keen Mind To Use, And Help AECB To Share Cutting-Edge Information**

The Low Energy Buildings Database ([www.retrofitforthefuture.org/](http://www.retrofitforthefuture.org/)) is a remarkable resource, offering unprecedented insight into the design and performance of over 100 buildings, both new build and retrofit.

The database shows the performance of each building in both figures and graphs, so design intention can be compared with built reality, and projects can be compared with each other.

Would you be interested in getting involved, and making this database even better?

AECB is looking for a member who could volunteer a few hours to develop the search functions of the database, by helping us think about what users are most likely to be looking for. If you are interested please contact Sally Hall ([sally@aecb.net](mailto:sally@aecb.net)) and if relevant, tell her about any previous experience of working with databases.

## **News**

### **Housing Minister Relaxes New Home Building Regulations**

Housing Minister Grant Shapps has announced that he is scrapping proposals for tighter building regulations for new homes and will end red tape. Having pledged to support zero-homes after his appointment in the summer, Shapps now says that by not introducing new building standards for homes built with Government funding or on public land, developers will save £8000 per home.

Existing building standards are sufficient to deliver high quality homes and introducing additional standards is unnecessary and would put off new developments, he said. He also pledged to “call time” on the “cocktail” of local building standards that developers have to meet. Instead, Shapps is asking developers and the building industry to work with local councils on a new ‘menu’ of costed standards.

The new framework will be introduced through the National Planning Policy Framework, which is scheduled for April 2012. Meanwhile, the Zero Carbon Hub (ZCH)’s consultation document on 2016 standards for ‘zero-carbon’ homes has recommended setting levels only slightly higher than the 44% (Level 4 of the Code for Sustainable Homes) set for 2013.

Stating that the Government “has recognised” that the previously proposed target of a 70% improvement in carbon compliance by 2016 is “particularly challenging and may not be achievable in all cases”, the document instead recommends new targets based on predicted emissions of CO<sub>2</sub> per square metre per year. The suggested levels are 8-12 kg CO<sub>2</sub>/m<sup>2</sup>/year for houses and 10-14 CO<sub>2</sub>/kg/m<sup>2</sup>/year for low-rise apartments, which work out far less than the 70% target (more in the region of around 57%) and representing a very modest improvement on 2013 levels.

For further information go to: [www.communities.gov.uk/](http://www.communities.gov.uk/) , [www.ukgbc.org/site/home](http://www.ukgbc.org/site/home)

### **Construction Industry Must Transform, Says Report**

The UK construction industry faces the biggest transformation since the Victorian era to respond to the low-carbon challenge, according to a new report. The industry-backed Innovation and Growth Team (IGT) was asked by the previous administration to look at how the construction industry could help meet the country’s low-carbon objectives, which include an 80% reduction in carbon emissions by 2050.

The report says that meeting the UK’s carbon reduction commitment will affect every aspect of the built environment and represents a “considerable” change. But a good deal of action can be taken now, says the report, particularly to improve the energy efficiency of existing building stock. The report calls for fiscal support measures in addition to the ‘Green Deal’ to help fund low-carbon refurbishment, the introduction of minimum standards for existing non-domestic buildings by 2020 and a bringing forward of the mandatory display of Energy Certificates in non-domestic buildings.

In the longer term, transforming to a low-carbon built environment could provide the industry with a 40-year programme of work and stimulate the growth of over 200,000 small businesses. That transformation will have to be driven by demand, warns the report, and the Government and industry will need to work together to stimulate the market for low-carbon and energy efficiency technologies.

Construction Minister Mark Prisk said the Government would now consider the report and respond in the New Year. However, yesterday the Government announced the scrapping of a number of regulations and a relaxing of the small print of the 2016 'zero-carbon' target for new homes.

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

### **Aldersgate Group Calls For Mandatory Carbon Reporting**

As the Coalition Government continues to distance itself from the Carbon Reduction Commitment (CRC) efficiency scheme, the Aldersgate Group of businesses and green NGOs is calling for mandatory carbon reporting. In an open letter to Caroline Spelman, the Secretary of State for the Environment, published in the Financial Times, the Aldersgate Group says requiring companies to report carbon emissions under the Climate Change Act would be a "useful tool" in the decarbonisation of the economy.

The move would "reward those companies taking a lead in the green economy and help businesses manage and reduce their emissions", says the statement. In addition, says the Group, having comprehensive and reliable information would allow investors to compare companies and make informed long-term sustainable decisions. Signatories to the letter, which include Co-op, Aviva, National Grid, Biffa, Johnson Matthey, are urging the introduction of mandatory carbon reporting for large companies by 2012.

For further information go to [www.aldersgategroup.org.uk/home](http://www.aldersgategroup.org.uk/home)

### **Energy Efficiency Could Save Public Sector £1 Billion, Says Carbon Trust**

With public sector budgets feeling the pinch across the board, energy efficiency measures could provide immediate savings of up to £1 billion, according to the Carbon Trust. Speaking to a meeting of public sector organisations in London, representatives from the Carbon Trust added that energy efficiency could reduce public sector emissions by 46 million tonnes over the lifetime of the projects – equivalent to the annual emission of London.

Existing projects are on track to save over £400 million and reduce CO2 emissions by 10 million tonnes over the lifetime of the projects, but more could be done says Richard Rugg of the Carbon Trust. Over 2500 such organisations have worked with the Carbon Trust over the last eight years to reduce energy costs and carbon emissions, with several hundred participating in carbon management programmes. One of those is Oxford City Council, which set a target of cutting carbon by 25%.

Local authorities participating in the carbon management programme are set to see net cost savings of £367 million – which could be essential in the current climate. But Rugg is calling on more hospitals, universities, local authorities and central government organisations to let the Trust help them cut costs by implementing energy efficiency measures.

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

### **Poor Energy Efficiency Costing UK Businesses £6 Billion A Year**

Poor energy efficiency is costing UK businesses over £6 billion a year, according to the Environment Agency's annual Greener Business Report. The report adds that failure to implement water efficiency measures is costing businesses a further £3.5 billion annually. Despite this, the Environment Agency says that overall the country's industrial sector is improving its environmental performance.

Over half of industrial sites covered by the Agency achieve its highest 'A' rating for environmental performance and management and nearly nine out of ten are in the top two bands. The energy sector remains the largest single source of emissions, totalling 75% of greenhouse gases, 82% of nitrogen oxides and 75% of sulphur oxides, but each has been substantially reduced over the last decade. Some sectors need to do better, says the Agency, particularly the waste sector, which saw the most serious pollution incidents, and is prone to illegal dumping activities.

The Agency, which uses the report to guide its activities over the next five years, says it will be working with the worst performing sectors to provide advice and guidance, as well as more regular inspections.

For further information go to <http://publications.environment-agency.gov.uk/pdf/GEHO1110BTGE-e-e.pdf>

### **UK Progress In Renewables "Unacceptably Slow", Warns Committee**

The UK's progress towards meeting its renewable energy targets has been "unacceptably slow" over the last decade, warns the chair of the Committee of Public Accounts, Margaret Hodge MP. The Committee's damning report published today says that, on the basis of evidence from the Department of Energy and Climate Change (DECC), the UK will miss the target of generating 10% of electricity from renewable sources by 2010. Slow progress on increasing the supply of renewable energy will mean that 10% of supply is not reached until 2012. In 2009, the proportion stood at 6.7%, up from 2.7% ten years ago.

Longer-term 2050 targets of reducing emission by 80% are even more doubtful, says the report, given that DECC has yet to set out a timescale for the necessary innovations in renewable technology. DECC will have to have a "greater sense of urgency and purpose" says Hodge, if the UK is to meet its renewable energy targets. Hodge particularly criticises the arrangements meaning that while DECC is responsible for ensuring that targets are met over the next 40 years, government funding to support renewable energy is split between different departments and organisations over which DECC has no control.

In consequence, DECC does not know how much has been spent on renewables or what has been achieved. Between 2000 and 2009, some £180 million in funding allocated to support renewables has gone unspent, according to Hodge. The Committee's report also warns that DECC could be overly reliant on wind power to meet the UK's 2020 target and has underestimated financial constraints and planning approvals, which typically lead to around 40% of proposals being abandoned.

For further information go to [www.parliament.uk/business/committees/committees-archive/committee-of-public-accounts/](http://www.parliament.uk/business/committees/committees-archive/committee-of-public-accounts/)

### **Government Should Introduce Emissions Performance Standard, Says Committee**

The Coalition Government should move ahead with its pre-election commitment to introduce an emissions performance standard (EPS), according to the Energy and Climate Change Committee. An EPS would effectively prevent new coal-fired power stations being built without adequate carbon capture and storage (CCS) technology. However, the Parliamentary Committee cautions that plans for an EPS should be carefully considered in light of existing policies, including the EU Emissions Trading System (ETS), the Renewables Obligation and the CCS demonstration programme.

An EPS could be beneficial though, argues the Committee, which launched a report today, as these existing measures appear insufficient to drive a significant decarbonisation of the UK's power sector by 2030. The Committee welcomes the Government's plans for an independent review of the electricity market, potential reforms and how this would work with an EPS. But the report urges the Government to consider what a UK EPS should be intended to achieve – faster emissions reductions from the power sector? Stopping the building of new high-carbon infrastructure – as EPS has been used in California and other US states? Or stimulating the development and deployment of CCS?

Overall, however, the introduction of an EPS would demonstrate leadership and commitment to climate change, says the Committee, and could allow the UK to negotiate international agreements. Energy Minister Charles Hendry, commenting on the report, promised that the Government will publish its proposals for an EPS shortly as part of its wider electricity market reform.

For further information go to [www.publications.parliament.uk/pa/cm201011/cmselect/cmenergy/523/52302.htm](http://www.publications.parliament.uk/pa/cm201011/cmselect/cmenergy/523/52302.htm)

## **Events**

### **Earthscan Earthcast - Sustainable Refurbishment And Solar Heating For The Home**

Wednesday 12th January 2011 17:00 (UK time – GMT)

Join the authors of Sustainable Home Refurbishment and Solar Domestic Water Heating for an event that offers guidance to anyone wanting to improve the energy efficiency of their home and to professionals looking for guidance on the best techniques and materials.

David Thorpe and Chris Laughton will examine the benefits of engaging in this burgeoning industry and the technologies that can help people save money and reduce CO2 emissions.

David Thorpe has been the News Editor of Energy and Environmental Management magazine for ten years and writes a popular blog - The Low Carbon Kid. His new book, Solar Technology, is due out from Earthscan in May. Chris Laughton is Managing Director of The Solar Design Company. He is an experienced heating engineer, author and lecturer, and a regular columnist in magazines, journals and on-line media.

Go to <http://www.earthscan.co.uk/tabid/101760/Default.aspx>

### **Passivhaus: Principles and Examples - Half-day Seminar - 18 January 2011**

Bath Royal Literary and Scientific Institute, Queen Square, Bath

1pm registration, 1.30 - 4.30pm Light refreshments provided, cost £50

What is the Passivhaus standard and how can it be achieved? This half day seminar will look at the principles and performance standards of Passivhaus and give practical guidance on the requirements for certification.

Confirmed speakers

- Craig White, Director, White Design and ModCell
- Justin Bere Principal, Bere Architects
- Adam Graveley, Senior Consultant, BRE
- Paul Jennings Air Leakage Detailing & Awareness Services (ALDAS)
- Rod Pope, Freelance Protect Manager/Cost Consultant
- Peter Warm, Passivhaus Building Certifier

- Sofie Pelsmaker, Programme Leader MA Architecture, University of East London

Software is the required package for designing a Passivhaus project, but on first sight can be intimidating. There will be an additional PHPP training session at the end of the event from approximately 4.30pm. Please contact Building Centre Events to register for this additional session

Full details and booking are at [www.buildingcentre.co.uk/events/event\\_diary\\_details.asp?id=636](http://www.buildingcentre.co.uk/events/event_diary_details.asp?id=636)

CPD Certificates provided on request

### **Events At Ty Mawr Lime – Brecon, 21<sup>st</sup> January**

To be held at the Training Centre, Ty Mawr Lime Ltd, Llangasty.

- Energy Efficiency in Solid-walled Buildings

Friday 21st January 2011. 9 am to 1 pm, lunch included in course fee.

A half day information seminar that will look at the principles behind improving the energy efficiency of traditional, solid wall buildings without compromising their appearance or vapour permeable structure using natural/ecological building materials.

Many of the products and systems discussed during the day will be illustrated by real examples carried out in the on-going renovation of the buildings at Ty Mawr which continue to serve as the main inspiration for product and systems innovation.

In the afternoon there is a free open event on Heat Recovery Systems aimed at Small and Medium-sized Enterprises (SME's) but all participants are welcome to stay.

- Heat Recovery Open Day

Could you use waste heat from your business? Find out about the new heat recovery system at Ty Mawr Lime Ltd.

Open Afternoon, Friday 21st January 2011, 2 pm – 4.30pm

Demonstrations and presentations on Ty Mawr's innovative combined heat-power system: a biofuel boiler plus heat recovery from a diesel generator and the exothermic lime slaking process.

Presentations on installation and monitoring by Dulas Ltd and Greener Earth Energy Tour of the buildings looking at the system in place. Tea and cake!

For more information contact: Mike Scruby 01874 658005 or email [mike.scruby@lime.org.uk](mailto:mike.scruby@lime.org.uk)

### **Sustainable Development 2011 – Harnessing The Energy Of Communities – 23rd February**

The Barbican, London - This Event Is CPD Certified.

The carbon emissions targets of 2020 are fast approaching; it is vital that growth continues to be sustainable, communities are engaged and waste is reduced. Public services can take a bold and creative approach to meeting environmental challenges. At our sixth annual Sustainable Development conference, we will aim to promote the efficient use of resources and explore how sustainable initiatives can not only improve our quality of life but also deliver cost savings.

With the Coalition Government's promise to be the 'greenest government ever', and the introduction of many initiatives to support this promise, the questions remain: how can these new policies be implemented? And, how will they affect you?

Full details are at <http://www.publicserviceevents.co.uk/event/overview.asp?ID=169>

## **Courses**

### **Courses From The Ecos Trust**

- Greening your home - helping to make your home better for you, your pocket and the environment.

Friday 28th January. 9.15am - 4.30pm

This course is for homeowners, self-builders, landlords and anyone else who would like to know more about how to build or refurbish in a sustainable way. If you want to know how to make your home perform better, save money and have less impact on the environment, this is the course of you.

The course will be delivered by Charles Couzens, Executive Director of Ecos Trust. Charles has a lengthy background in training in the environmental sector and, as well as having undertaken his own sustainable self-build project in Somerset in the late 1990s, has been closely involved in Ecos Homes' new-build projects and the refurbishment of the listed warehouse at Great Bow Wharf in Somerset. He is also on the board of Regen SW – the sustainable energy agency for the south-west.

- Achieving Low Carbon Housing - Learning from Elm Tree Mews

Wednesday, 16th February. 1.30pm - 5.15pm. Watershed, 1 Canon's Road, Bristol. BS1 5TX

A seminar exposing the performance of real-life sustainable buildings in partnership with Joseph Rowntree Housing Trust, the Good Homes Alliance and Ecos Trust. This seminar will examine the results of performance measurement at Joseph Rowntree's Elm Tree Mews development, as well as other monitoring by the Good Homes Alliance, Ecos and others. It will then explore the implications of these results for developers, RSLs, policy-makers, contractors and supply-chain representatives.

To book email [info@goodhomes.org.uk](mailto:info@goodhomes.org.uk).

For full details go to [www.ecostrust.org.uk/jcms/index.php?option=com\\_content&view=article&id=92&Itemid=79](http://www.ecostrust.org.uk/jcms/index.php?option=com_content&view=article&id=92&Itemid=79)

## **Publications**

### **New Books From Earthscan**

- Integrated Sustainable Design of Buildings

By Paul Appleby

This book aims to provide a guide to members of design and masterplanning teams on how to deliver sustainable development and buildings cost effectively, meeting current and emerging UK and international statutory and planning requirements. Using a series of case histories and examples from the author's 10 years of providing sustainability advisory services the book sets out a clear and understandable strategy that deals with all aspects of sustainable design and construction and the implications for delivery, costs, saleability and long term operation. The extensive scope includes all aspects of environmental, social and economic sustainability, including strategies to reduce carbon emissions and the impact of climate change.

ISBN 9781849711173

- Shaping Urban Infrastructures: Intermediaries and the Governance of Socio-Technical Networks

Edited by Simon Guy, Simon Marvin, Will Medd and Timothy Moss

This book presents the first authoritative collection of research and analysis of the intermediaries that underpin the transitions that are taking place within urban infrastructures, showing how intermediaries emerge, the role that they play in key sectors - including energy, water, waste and building - and what impact they have on the governance of urban socio-technical networks.

ISBN 9781849710688

- Heat Islands: Understanding and Mitigating Heat in Urban Areas (New in Paperback)

By Lisa Gartland

Heat islands are urban and suburban areas that are significantly warmer than their surroundings. Traditional, highly absorptive construction materials and a lack of effective landscaping are their main causes. Heat island problems, in terms of increased energy consumption, reduced air quality and effects on human health and mortality, are becoming more pressing as cities continue to grow and sprawl.

Internationally renowned expert Lisa Gartland offers a comprehensive source of information for turning heat islands into cool communities. The author includes sections on cool roofing and cool paving, explains their benefits in detail and provides practical guidelines for their selection and installation. The book also reviews how and why to incorporate trees and vegetation around buildings, in parking lots and on green roofs.

ISBN 9781849712989

*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)*