

News Bulletin

September 2008

Janet Alty from Leamington Spa has been given permission to install photovoltaic (PV) panels on the gable wall of her Victorian home on Campion Road. The decision is significant as the panels will be highly visible in a Conservation Area; this is likely to be a first, certainly in Warwickshire, and possibly nationally. The decision received cross-party support from Conservative, Labour and Liberal Democrat councillors on the planning committee, who over-turned the recommendation of planning officers working to national planning guidelines. The PVs will be Sunpower 205 solar panels, with 14 modules providing a total of 2870 KWp (205 watts each). These will be mounted on a frame angled at 10 degrees to the vertical and the array will measure 5.7 metres wide and 3.12 metres high.



Warwickshire County Council has a new fleet of five mobile libraries that have been selected to reduce the environmental impact of the service. The vehicles, although having a standard box cab, are smaller and lighter than the previous fleet. Weighing in at just 7.5 tonnes (as opposed to 14 tonnes) they are also easier to navigate through narrow country lanes. The vehicles are providing 16-18 miles per gallon, whereas the older fleet achieved around only 9-10 miles per gallon. In addition, the new vehicles support on-board generators to provide lighting, heating and computers, the latter being a new feature for the library vans. Being smaller, the vehicles carry fewer books, but the library service now simply restocks the vans every three weeks.

Action 21, based in Warwick and Leamington, is inviting applications for the post of General Manager, to: lead, manage and develop Action 21 as an organisation which acts as a positive force for promoting environmentally sustainable living in Warwickshire and Coventry; doing this in ways which improve quality of life for local people; involving local people in the planning and delivery of activities as much as possible. For further information and an application form please log on to the Action 21 website at www.action21.co.uk or telephone: 01926 456067/01926 456067

The Partnership webpages received 9592 hits during June and 9041 hits during July and, at time of writing, are currently ninth on a Google ranking for 'climate change partnership'. We are keen to increase this ranking and would like to ask all our partners to add a link to the Partnership home page. If you would like us to add reciprocal links, please get in touch.



The installation of a high-power wind turbine, produced by the Stratford upon Avon based FuturEnergy, has helped a unique two-storey straw house in Wales gain the title of Britain's Best Eco-Home. The accolade was presented during Channel Four television's annual Grand Design Awards. A total



commitment to non-impact self-sustainable living is reflected throughout the design of the building, with all electrical power generated cleanly on-site by the one-kilowatt FuturEnergy wind turbine supplemented by five 125-watt Kyocera solar PV (photovoltaic) panels. The hybrid mix of wind and solar power provides sufficient all-year round electricity to cover all the building's needs including the running of low-energy lights, laptop computers, sound system, pumps for the solar thermal system and underfloor heating and appliances including washing machine.

Influential designer Wayne Hemingway recently visited Wolseley's Sustainable Building Center at Leamington Spa and has stressed the importance of good design in 'selling' sustainable products. Hemingway, famous for setting up award-winning fashion company Red or Dead back in the 1980s, is now concentrating on housing and landscape design and is current chair of Building for Life. Hemingway said: "I've come to the new Wolseley Sustainable Business Center in Leamington Spa, and I don't think you can fail to be impressed by it. It shows you how to do things in the modern way, and a sustainable way." Wolseley has so far taken 148 bookings for visits to its Sustainable Building Centre, which is open to architects, suppliers and contractors. For a virtual tour, log on to: <http://www.wolseleysbc.co.uk/>

Warwickshire County Council (WCC) is currently working in partnership with ARUP Consulting to develop a bid for central Government assistance to trial a fleet of pool cars through the Electric / Zero Carbon Emissions Vehicle programme. If the bid is successful, a fleet of 6 (estimated) electric cars will be used intensively to evaluate all aspects of zero carbon vehicles (including performance, duty cycles, reliability, value for money etc) with a view to a permanent scheme being adopted if the trial proves successful.

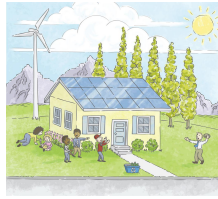
WCC has also just submitted a bid to be involved in the Low Carbon Vehicle Procurement Programme (LCVPP). If successful this will involve the trial of hybrid and / or all-electric vans within the WCC fleet. It is proposed that 3 low-carbon 'van-based' vehicles (primarily within the CFM fleet) will be trialled in the first year of the scheme and if successful, the scheme will be rolled out across a wider area of the County Council's operations in the second and third years. The vans will be used intensively and their performance closely monitored to determine the feasibility of permanent scheme adoption. It is envisaged that, if both schemes prove successful, significant carbon emission savings can be made, particularly if the schemes are rolled out across a much wider range of the 500 or so fleet vehicles that WCC currently operates.



A team, led by Warwickshire Climate Change Partner Prof Tony Marmont of Beacon Energy Ltd in Loughborough, has been exploring the concept of manufacturing synthetic liquid fuels from carbon dioxide and hydrogen via a Fischer-Tropsch (FT) reaction route. The key step is an idea being developed by Dr David Benton to extract carbon dioxide from the air to produce a feedgas for the FT process. If carbon dioxide extraction from the air can be developed economically, then combined with unlimited amounts of hydrogen from water electrolysis and with the two processes driven by renewable electricity, the result would be carbon neutral fuels available in unlimited amounts. This would give every nation the opportunity to manufacture its own fuel, thereby removing the geo-political problems of oil supply. The production scale of a manufacturing plant could be large or small to suit any country's needs.

Similar research already being carried out at Los Alamos National Laboratory, New Mexico, has recently been published. Researchers claim to have developed a low-risk, transformational concept called Green Freedom, which uses air and water to produce carbon-neutral, sulphur-free fuels and organic chemicals. The research cites that it uses carbon-neutral power to capture and recover carbon dioxide from the atmosphere; split water into hydrogen and oxygen; and convert hydrogen and carbon dioxide into synthetic fuels and organic chemicals.





English Heritage has launched a new website, called 'Climate Change and Your Home', to help owners of traditionally constructed houses understand the potential impacts of climate change on their properties and how simple building maintenance can help to lessen the effects of increasingly extreme weather. The site also provides detailed advice on how to improve the energy efficiency of traditionally constructed houses whilst preserving their special character. A section is included on micro-generation, which details how technologies such as micro-wind generation and solar thermal energy can successfully be incorporated into older buildings. Log on to the website at: <http://www.climatechangeandyourhome.org.uk/live/>

A fully-fledged quality mark scheme has been established to give consumers confidence in the standards they can expect from green energy products and installers. Building on a two year development phase, Energy Minister Malcolm Wicks has approved plans to open up the Microgeneration Certification Scheme (MCS) to a number of certification providers to give the industry more options when seeking approval for products and services. Nearly 450 installer companies and over 30 product manufacturers have already registered under the development phase of the scheme. Certification gives companies permission to display the MCS logo to promote services or on their microgeneration products. For further information log on to: <http://www.ukmicrogeneration.org>

The Digest of United Kingdom Energy Statistics 2008 has been produced by BERR (Department for Business, Enterprise & Regulatory Reform). The Digest provides essential information for everyone, from economists to environmentalists and from energy suppliers to energy users. The Digest contains extensive tables, charts and commentary covering all the major aspects of energy, including separate sections on petroleum, gas, coal and electricity. It provides a detailed and comprehensive picture of energy production and use over the last five years, with key series taken back to 1970. To download the publication, log on to: <http://stats.berr.gov.uk/energystats/dukes08.pdf>



Pöry Energy Consulting has just completed a report for WWF-UK and Greenpeace-UK investigating the implications of the UK meeting its 2020 Renewable Energy Target. The report finds that, if the UK Government is able to achieve its commitments to meet EU renewable energy targets and its own ambitious action plan to reduce demand through energy efficiency, then major new power stations would not be needed to ensure that Britain can meet its electricity requirements up to at least 2020. The report also concludes that a strong drive for energy efficiency and renewable energy can reduce emissions and assist energy security. To view the full report log on to: http://www.ilenergy.com/pages/230_-%20Implications%20of%20the%20UK%20meeting%20its%2020%20Renewable%20Energy%20target%20v1.0.pdf

The Open University's online website, Open2.net, has a dedicated section on climate change, with an obvious academic focus. Current topics include climate change predictions, rising temperatures, economic impacts and effects of extreme weather. Check it out on <http://www.open2.net/climatechange/index.html>

There has been an increase in demand for alternative fuels in the UK, according to a new report by British Car Auctions (BCA). When analysing the price performance of petrol, diesel and alternative-powered cars, BCA has found that more and more people are looking to the latter. Rising sales of hybrid vehicles as well as use of fuels apart from petrol and diesel illustrate a growing trend, with



LPG/hybrid cars outperforming guide prices. The rise in interest has been accredited to the credit crunch and rise in fuel prices. For further information log on to: <http://www.british-car-auctions.co.uk/default.aspx?page=10084>



More than three-quarters of day-to-day waste produced by schools could be easily recycled or composted, saving local authorities more than £6m in landfill tax, according to new research published by WRAP. Waste produced during the school day by England's 20,871 primary and secondary schools is estimated at more than 250,000 tonnes each year - enough to fill Wembley Stadium. Of this waste, mostly discarded food, paper and card, an estimated 78% or 200,000 tonnes could be readily recycled or composted. This could potentially save an estimated 176,000 tonnes of CO2 equivalent emissions. Recycling or composting this waste would give local authorities an environmentally-friendly alternative to landfill and could save them around £6.4 million in Landfill Tax (at £32 per tonne). The study - which analysed a week's-worth of waste from 24 schools in four different local authorities - found that, on average, primary schools generated 45kg of waste per pupil and secondary schools 22 kg per pupil over the 40 week academic year. More than 70% of waste from schools comes from just two categories – food waste, and paper and card. To download the report, log on to: www.wrap.org.uk/schoolwaste

The US Environmental Protection Agency has released a report that discusses the potential impacts of climate change on human health, human welfare, and communities in the U.S. The report also identifies adaptation strategies to help respond to the challenges of a changing climate and identifies near- and long-term research goals for addressing data and knowledge gaps. The report discusses the challenges and potential effects of climate change, including unusual or unexpected weather, and how some individuals and communities may be disproportionately affected by climate change, including the elderly, the poor, children, and people with chronic medical conditions. Copies of the report are available to download from: <http://downloads.climate-science.gov/sap/sap4-6/sap4-6-final-all.pdf>

In a revolutionary leap that could transform solar power from into a mainstream energy source, researchers from Massachusetts Institute of Technology (MIT) have overcome a major barrier to large-scale solar power: storing energy for use when the sun doesn't shine. Until now, solar power has been a daytime-only energy source, because storing extra solar energy for later use is prohibitively expensive and grossly inefficient. MIT researchers have just announced that they have hit upon a simple, inexpensive, highly efficient process for storing solar energy. Inspired by the photosynthesis performed by plants, researchers have developed an unprecedented process that will allow the sun's energy to be used to split water into hydrogen and oxygen gases. Later, the oxygen and hydrogen may be recombined inside a fuel cell, creating carbon-free electricity to power your house or your electric car, day or night. To read the full press story log on to: <C:\Documents and Settings\GSqu\Local Settings\Temp\notesC12791\photosynthesis, H2 - MIT News Office.mht>

For any climate sceptics out there, 'How it all ends' is a simple but effective You Tube post from an American teacher that details how we can choose what to do about global climate change without having to believe what either side in the debate is shouting about. Check it out on: <http://www.youtube.com/watch?v=2oCYW4ScUnw>

