

# DARE

Devon Association for Renewable Energy



## **Renewable Energy In Devon (REID) DARE Newsletter – Issue 22 – December 2009**

**Seasons Greetings** to all “Renewable Energy In Devon” DARE Newsletter readers. As always DARE is very busy and looking forward to a prosperous New Year in 2010. Shura has now left the office for her maternity leave and is due any day now. We have a new member of the DARE team covering for Shura’s absence and we would like to take this opportunity to welcome Sue to the office.

### **COP15 among the largest summits ever**

The 119 heads of state and government will be participating in the climate summit in Copenhagen.

This will rank the summit among the world's largest ever and the largest outside of New York, and obviously the largest ever in Denmark.

As the Copenhagen conference formally entered its high-level stage on Tuesday, COP15 President Connie Hedegaard defined their responsibility in her opening address:

“We can’t do anything without you, the parties. YOU must compromise, YOU must commit. YOU must deliver – NOW. Not only because of the climate. There is even more at stake. This is also about the world’s confidence in their global leaders’ will and ability to cope with the challenges of our time.”

The 119 heads of state and government represent countries that account for 89 percent of the world's GDP, 82 percent of the world's population and 86 percent of global greenhouse gas emissions.

Included in the 119 countries are the 20 largest economies and the top 15 greenhouse gas emitters in the world.

*Rie Jerichow 16/12/2009 11:30 <http://en.cop15.dk/>*

### **Devon is to get another nine wind turbines after plans were given the go-ahead.**

Renewable Energy Systems (RES), which will build the 120m (393ft) high turbines at Den Brook near Cridton, said it was "delighted".

A planning inspector overturned objections about landscape impact by West Devon Borough Council.

Objectors questioned the turbines' output and said they would "devastate a beautiful valley".

The inspector felt that although there will be an impact on the rural environment, the harm caused could be outweighed by the renewable energy benefits of the development.

Devon has only one commercial wind turbine, but 22 are being built at Fullabrook Down near Barnstaple.

The Den Brook turbines will be able to produce enough power for 16,000 homes on an average output of eight to 10 megawatts, claims RES.

Rachel Ruffle, development director of RES, said: "We are delighted. It's been in planning for nearly five years.

"It's a particularly good time with concerns about climate change top of the agenda that well-designed projects are allowed to go ahead."

A spokesman for objectors Den Brook Valley Action Group said: "It's a complete waste of time and a total devastation of this beautiful valley."

"This is a low wind area. It won't produce the power they are offering."

Local people will be given priority to buy shares in the Den Brook development at £1 a share. Ms Ruffle said: "We are very keen to explore how residents local to Den Brook could be offered a stake in the wind farm as a way to reap some direct benefit from the project once it is up and running."

Devon has about 32 megawatts of renewable energy from all sources and now has about 95 megawatts approved, which will bring it close to the renewable energy output in neighbouring Cornwall.

Cheryl Hiles, director of sustainable energy delivery at renewable energy quango Regen SW, said: "This is a positive decision, not only for North Tawton, but also for Devon and the South West. This is also a significant milestone for Devon, which has significant wind resources but currently has only one built turbine."

*BBC News 11<sup>th</sup> December 09*

### **Devon County Council kickstart innovative rural development**

A community led development in High Bickington has been kickstarted today (Tuesday 15 December) with a major £850k funding boost from Devon County Council.

The first phase of this innovative scheme, at Little Bickington Farm in High Bickington, will provide 18 new homes, two workshops for local businesses, a plant room for a woodchip heating plant and other community facilities. Planning consent has also been secured for a new community building and sports facilities, a new primary school, a Multi Use Games Area, a Health Centre and allotments.

Devon County Council invited the local community to consider the surplus land available in High Bickington and how it could support the long term sustainability of the village. The High Bickington Community Property Trust (HBCPT) was established by the community and planning consent was secured for their plans.

Councillor William Mumford, Cabinet Member for the economy and regeneration said: "This is an innovative and rare example of community led development that will provide a sustainable future for the rural community and stimulate the local economy. "The money we have agreed today will go a long way to help the community secure further funding towards the project and kick start the infrastructure work. The community has worked extremely hard for a long time to get the scheme this far and the national recognition it has received is wholly deserved."

The scheme will cost £12.144million in total, with phase one costing £3.567million. This will include 18 homes, two of which will be outright sale, nine shared ownership and seven homes for rent. There will be two workshops for rent or sale and a woodchip heating plant. Serviced land for two further workshops and five further homes will be included.

David Brown, Chairman of High Bickington Community Property Trust, added "This is a great step forward that will be warmly welcomed by all those members of our community who have recognised and supported the need both for affordable housing for local people and also the other essential community services that will be delivered by the project.

"The participation and support of both members and officers of the County Council has been tremendous throughout and this latest demonstration of support will be a critical factor in achieving long term success in moving forward our vision of creating a truly 'sustainable community' in High Bickington. We now look forward to being able to make a successful start on site in the New Year."

The design of the development will be sustainable and will include a renewable energy heating plant to serve the development and provide income to the trust.  
*Joint Press Release from Devon County Council and High Bickington Community Property Trust 15/12/2009*

### **The new Energy Bill**

New powers and clearer legislation will provide support for energy consumers, giving a greater amount of help to the poorest and most vulnerable, as well as introducing a new financial incentive for carbon capture and storage.

The new Energy Bill, introduced into Parliament today, follows on from the Low Carbon Transition Plan which set out an ambitious route-map for a move to a low carbon economy, outlining the actions which will cut emissions and maintain secure energy supplies while protecting the most vulnerable.

Energy and Climate Change Secretary Ed Miliband said:

“The new Energy Bill is an example of the Government taking direct action to ensure the markets work fairly and to help more of the most vulnerable with their fuel bills. It will ensure that consumers can be confident that British energy is sustainable and secure. Making the transition to a low carbon economy will be a challenge but this Bill will allow us to put in place key powers which will help us make the shift fairer for all.

“Carbon capture and storage is a key technology to tackle climate change, and 17 days ahead of the crucial talks in Copenhagen, this Bill sets up a new CCS Incentive to support the development of up to four commercial-scale CCS projects in the UK.”

The Energy Bill will:

Protect vulnerable households

By providing mandatory social price support, such as in the form of an electricity bill rebate. This builds on the success of the voluntary agreement with energy companies which ends in 2011 and has helped reduce the fuel bills of more than one million vulnerable customer accounts. The level of support to be provided through the new mandated scheme will be greater than the £150m committed by suppliers in the final year of the agreement.

Making absolutely clear that Ofgem, the energy market regulator, must:

- include the reduction of carbon emissions and the delivery of secure energy supplies in their assessment of the interests of consumers
- step in proactively to protect consumers as well as considering longer term actions to promote competition.

Giving Ofgem additional powers to tackle market exploitation where companies might take advantage of constraints in the electricity transmission grid.

Strengthening the deterrent nature of Ofgem’s powers by extending the time limit from 12 months to 5 years within which Ofgem can impose financial penalties for breaches of licence conditions.

Put UK at the forefront of developing CCS technology

The new CCS Incentive will support the construction of up to four commercial-scale CCS demonstration projects in the UK.

The CCS Incentive could also provide funding for the retrofit of demonstration projects to their full capacity, should it be required in future.

This Bill will strengthen the UK’s leadership position in the development of clean coal technologies that could bring between £2-4 billion a year into the UK economy by 2030, and support between 30,000-60,000 in jobs such as engineering, manufacturing and procurement.

<http://www.decc.gov.uk/en/content/cms/news/pn134/pn134.aspx>

## **Battle against climate change begins at home**

The Conservatives' Green Deal would help to greatly reduce the 27% of UK carbon emissions that comes from households, writes shadow housing minister, Grant Schapps

This month world leaders are gathering in Copenhagen to thrash out a deal to tackle [climate change](#). Reaching agreement at this UN summit will be the key to addressing one of the defining challenges of our century. But the hard work isn't just setting those targets, it's reaching them. Each country will have to set their own priorities to reduce emissions and here in the UK, we'll need to look close to home.

Twenty-seven per cent of all the carbon emissions in this country actually come from the homes we all live in. So it's clear that improving the carbon footprint of our housing stock is crucial if we are to meet our legally binding carbon reduction targets. Part of the solution lies in making the new homes we build as [energy](#) efficient as possible and I enthusiastically endorse the concept of building all new homes at zero carbon. However, the fact remains that 85% of the housing stock that we'll be living in by 2050 already exists.

So, there is a simple and, once again, inconvenient truth – greening-up the 25m existing homes is essential. The efficiency of these properties has been largely ignored thus far.

Under a Conservative government however they will introduce the [Green Deal](#). Every household in this country will be entitled to an allowance of up to £6,500 for energy improvements. Utilities companies, charities, social landlords will improve homes with no cost to the homeowner.

Healthy competition in retro-fits will create 70,000 new jobs and a £2.5bn marketplace, while consumers save money and most importantly 9.4m tonnes of carbon emissions are avoided. It's a great scheme, but that doesn't necessarily lead to great take-up. The key is to create a trigger for people to easily and quickly sign up for retro-fitting.

Imagine if you could walk into your favourite store, buy some clothes or do your weekly shop and then at the checkout, as you hand over your clubcard, the cashier offers you the prospect of permanently lower utility bills. There's nothing to pay, now or later. Your home will be retro-fitted and all you'll notice is that it costs less to heat and power it. Unless you enjoy burning money, you're going to love the Green Deal. Behind the scenes this retailer is working with the banking sector to fund the £6,500 spent on retro-fitting your home, resulting in home improvements like energy-efficient lighting, modern boilers, cavity and loft insulation.

Under a Conservative government you won't have to imagine this scheme, because the likes of Marks & Spencer and Tesco are already interested and more providers of all types will want to get in on the act. In future you'll be able to pick-up your groceries and green-up your home at the same time.

But living a greener life isn't just about the physical changes you can make to your home; it's about how you live in it too.

Even without retro-fitting our properties, there are plenty of things we can do to influence our energy consumption behaviour. Last year I installed a small device which sits on the window sill in our kitchen and constantly reports how much electricity we're using as a household.

This particular [energy monitor](#) is called a Wattson and it expresses itself in £s sterling. Worryingly it let us know when we switched everything off, we were still spending about £700 per annum on powering our home.

That's the fridge, the freezer and those TVs and chargers which all prefer to go on standby, rather than off.

With the kettle and toaster on for a cuppa and sandwich the clever little monitor told us that our electricity bill could hit £7,000 per annum.

Now rather than filling the kettle to the top, we put just enough water in for cups we're making. Meanwhile, the kids spend their time hunting round the house searching out

left on lights and Nintendo DSs which are charged but still plugged into the mains. Devices like this can really alter habits.

For the first time we also became aware that a TV or computer monitor left on standby costs around 15p per day.

With two, three or maybe four screens in the house that's a couple of hundred pounds per year.

Slashing the 27% of carbon currently emitted from our homes is a big ask. The Green Deal enables a combination of the physical and the behavioural changes needed to make a big difference straight away. It removes barriers currently preventing a domestic green revolution. It gives us a significantly better chance of meeting our Kyoto obligations.

As we head towards the Copenhagen summit the Conservative party understands that the solution to the global challenge of climate change truly begins at home.

*The Guardian 26<sup>th</sup> November*

### **DARE Environmental Question Time**

November saw DARE host it's Devon Environmental Question Time in Exeter, the event was a great success and we were lucky enough to have representatives from all the major political parties. We would like to thank Mark Cann – Labour, Merlin Hyman – Regen SW, Paula Black – Green, Matthew Groves – Conservative, Stephen Crowther – UKIP & Nick Harvey – Liberal Democrat for volunteering their time and answering the environmental questions posed to them. The triumph of this occasion lead to it being rather over-subscribed and in the end being standing room only. There were calls for this event to be repeated with a larger auditorium venue in the new year, if you would be interested in this being done please contact DARE to let us know. We did take notes on the questions and responses, unfortunately the audio recording had some technical problems and will not be able to be used. We are endeavouring to have the minutes available on the DARE website in the New Year.

### **Transformation Trails**

DARE has received funding to carry out a series of tours of renewable energy demonstration sites across the Greater Dartmoor area. The first tour covered the technology of hydropower and was a massive success with there not being enough places to meet demand. Delegates visited four sites all using water power at a variety of scales and applications and we have received excellent feedback from those who attended.

The next tours will be held on the 14<sup>th</sup> January for Wood fuel and 28<sup>th</sup> January for Wind power, for more information please see our events diary. These tours will be lead by a DARE technical officer and each delegate will receive an information pack brimming with case studies, factsheets and data. The delegates will be transported by minibus to each site and will be able to ask the site owners questions about their technologies discovering the process from inspiration through to installation.

Are you a member of a community group who want to secure a local electricity or heat supply? Are you a householder who wants to generate your own energy? Are you a farmer with land that could be developed for wind power or biomass production? Or are you a local business who is concerned about fossil fuel supply and security? We welcome all kinds of delegates to see these wood fuel and wind power installations in operation; the sites themselves include business, tourist, agricultural and domestic examples.

The delegate fee is based on a sliding scale dependant upon the type of delegate: community representative (£5 pp), individual (£10pp) & business representative (£20pp). The cost includes transport and lunch.

Please contact DARE by telephone 01837 89200 or email [mail@devondare.org](mailto:mail@devondare.org) if you are interested in attending. You can also visit our website for more information [www.devondare.org](http://www.devondare.org)

The Transformation Trails are part of a series of tours; there will be a specialist day for each technology including solar thermal, photovoltaics and heatpumps. This tour is funded by Greater Dartmoor LEAF, incorporating funding from the EU, Defra, SWRDA and LEADER and The Dartmoor Sustainable Development Fund, West Devon Borough Council's Community Project Grant and Renewable Energy 4 Devon project.

### **Ecotricity to provide "real British gas"**

Green gas is to be made available for the first time to UK homes, supplied from renewable sources by sustainable energy pioneers Ecotricity, the world's first green electricity company.

Green gas - or biogas – can be made during a composting-like process that breaks down food waste and other material that normally gets dumped straight into landfill or burnt in incinerators. Britain currently wastes around 18m tonnes of food alone a year, which could produce enough biogas to supply over 700,000 homes.

Green gas made this way has the potential to generate as much as half of the UK's domestic gas with the right government backing. Ultimately, Ecotricity plans to create bio-gas from emerging next-generation technologies such as special strains of algae, a naturally occurring, fast reproducing and potentially endless source of energy.

Ecotricity will supply gas from a mix of green and conventional 'brown' sources, with the green fuel mix increasing as more customers sign up and it builds new renewable supplies, the same model it has used with electricity since it started in 1996. Since then Ecotricity's green electricity mix has grown rapidly to 45.6%, entirely from its own sources (compared with a UK average of just 5%) with a continuing long-term mission to reach 100% and beyond.

Dale Vince, Ecotricity founder, said: "We're the real British Gas now. We're kickstarting the market to move Britain from brown to green gas, turning people's gas bills into green gas mills, just as we've been doing with windmills for over a decade.

"People can now have complete control of where the money they spend on their energy bills goes, and ultimately where their energy will come from. Nobody has to carry on giving their money to the big multinational energy companies, who seem determined to keep burning whatever in the world they can get their hands on like there's no tomorrow.

"By choosing green gas, customers can help unhook Britain from its addiction to foreign gas supplies, make a positive long-term change to the world we live in, and could also keep thousands of tonnes of waste out of landfill which could even help keep council tax bills down".

Ecotricity even pledges it will deliver its green gas at no extra cost, matching British Gas on both its standard gas and dual-fuel price in each region.

On the eve of the Copenhagen climate change conference, Ecotricity is the first company to offer British households gas from new green sources, just as 13 years ago at Kyoto it was the first company in the world to offer users electricity from new green sources: windmills.

Half of Britain's winter gas supplies already come from foreign sources such as Russia, and Britain will be almost entirely dependent in the coming decades as North Sea supplies run out.

As Ecotricity is a privately owned, not-for-profit company with no share price and no shareholders or investors to keep happy, it is unhindered to devote itself to its mission of growing Britain's new sources of green electricity. In the last five years to 2008, Ecotricity has invested an average of £450 per customer per year in new sources of green electricity, more than ten times that of its closest rival – or put another way, more than all of its competitors put together, and then some. It now intends to apply its unique business model in the gas market, to change where Britain's energy comes from forever.

Some green gas facts

Press Release 22 November 2009

### **Devon business shortlisted for Green Web Awards**

15 December 2009

Sidbury-based company, YouGen, has been shortlisted for the Green Web Awards in the Green Living Awards category. The winner will be decided by public vote.

YouGen aims to make it simple for people to find out which (if any) renewable energy is suitable for their home, and then to find a local supplier they can trust to install it.

"It's very exciting to be shortlisted," said Cathy Debenham, founder of YouGen. "Our site has only been going a year, and here we are competing alongside The Guardian. I'm delighted that all our hard work has been recognised."

The inspiration for the site came when Cathy and her husband renovated their house a few years ago. "I did a lot of research into biomass boilers," said Cathy. "But when it came to deciding whether or not to go ahead I was faced with quotes that differed by £5,000, and no way of telling how the products or installers compared. We played safe and stuck with a condensing gas boiler, but the idea for YouGen was sparked. While there is now more help available, it is still very difficult for homeowners to know whether they are getting a good deal. Recently published research from Oxford University found that prices for wood-fuelled boilers varied from just over £3,000 to £16,000, and solar hot water systems prices varied from £1,000 to £8,000. YouGen helps people to choose a good installer by inviting people who have already used them to rate their service on the website.

"In such a new market, it's often not possible to ask a friend or colleague for recommendations," added Cathy. "Recommendations on YouGen aim to plug that gap and help people to choose a supplier. To encourage people to come to the site and rate their supplier, we enter everyone who does into a draw each month to win a GEO Minim Home Energy Hub."

Voting for the Green Energy Awards is open until 31 December 2009 at

<http://www.nigelsecostore.com/green-web-awards/vote/>.

### **Dartmoor Farms Carbon Audit**

Aims of the project

- to visit farmers within the Dartmoor National Park boundary to undertake a carbon audit, and afterwards suggest short and long-term measures that will help to reduce carbon emissions from the farm enterprise. A further half-day of follow-up advice is offered - either soil sampling to focus on nutrient management, or a visit from Devon Association for Renewable Energy (DARE) to advise on the potential renewable energy opportunities for the farm.

The project was launched earlier this year, and a second open event was held near Chagford on the edge of Dartmoor in very wet and windy conditions in early October. The day, courtesy of Gordon and Julie Mortimore, was well attended and included presentations on nutrient management by scientist Dr Alan Hopkins and renewable energy options for Dartmoor farms by Richard Pymm of Devon Association for Renewable Energy (DARE). Local farmer and FWAG member, Jim Stephens gave a personal viewpoint on the value of clover in providing fertility and forage. After lunch and more discussion the group moved off to look at a hydro scheme near North Bovey. There are still more farms to be visited, so to book a visit, contact FWAG adviser, Annabel Martin on 07713 333208, or call the Exeter office.

### **Prince of Wales Award 2010**

One of the prime purposes of the Devon County Show is to encourage and highlight innovation and good practice, not only in farming, but in the rural community more widely. This is partly achieved through the Prince of Wales Award.

Next years award has been refocused to highlight projects being led by rural community organisations which are helping to build local sustainability. For the

winner, a cash prize of £1000 is awarded, along with a signed and framed certificate from the Prince of Wales.

Participants can be from a number of organisations including clubs, schools, societies etc, and projects should be designed to achieve greater sustainability at the local level. Examples include community composting, development of allotments for "grow your own", or growing floral decorations to improve village appearance.

Mervyn Hosking, Chief Executive of the DCAA, said: "One of the prime purposes of the Devon County Show is to encourage and highlight innovation and good practice, not only in farming, but in the rural community more widely. The Prince of Wales award has been focussed to highlight projects being led by community organisations, schools and local partnerships in an effort to achieve greater sustainability at a local level.

This award is vitally important in this context, and matches the priorities for Devon's rural community in the 21st century. Communities have a vital role to play in finding sustainable solutions to issues like waste disposal, reducing food miles and cutting carbon emissions. Devon is one of the leading counties in this respect, and we want both to highlight what is being done already, and encourage other communities to get involved."

Application forms are now available and can be requested from the Devon County Agricultural Association on 01392 353710. The closing date for entries is 26th February 2010.

### **Governed by the ill wind of deception**

This weekend it was revealed that a report commissioned by a government department into the noise created by wind turbines and the effect on those who live near them has been quietly doctored. In 2006, the acoustics firm Hayes Mackenzie was commissioned to measure noise on three wind farms.

Its findings were most inconvenient. The noise made by the turbines were significantly higher than those foreseen in the Government's 1996 guidelines. The 43 decibel level permitted by law was too high and had the potential of keeping people awake at night. The "absolute noise criterion" for night time should be revised downwards to 38 decibels and, where there was evidence of aerodynamic modulation, the limit should be 33 decibels.

Naturally there was a cover-up. A request by the Den Brook Judicial Review Group to see early drafts of the report under the Freedom of Information Act was rejected by officials on the grounds the information was not in the public interest. Only when the Department of Energy and Climate Change was forced by the Information Commissioner's Office to release the document was the truth revealed.

*Terence Blacker The Independent 16<sup>th</sup> December 2009*

### **Burning Ambition For Power**

Drax power station sees the answer to its yearly carbon output of 21 million tonnes in the warehouse of oat husks and olive cakes and the unprepossessing piles of forestry waste. Drax is already co-firing using a mixture of coal and biomass. A trial facility is running at about 400,000 tonnes per year and the new 1.5 million tonne unit starts commissioning this month. By next June, biomass will account for 12.5 per cent of Drax's fuel, cutting its carbon emissions by 2.75 million tonnes per year. Biomass will produce up to 500 of the station's 400 Megawatt output, equivalent to 600 wind turbines.

The biggest challenge is developing the biomass market. And that points the finger at regulation. Current renewables laws cap the proportion of biomass a coal power station can use.

The argument is not only about what is best for Drax. "The cap is limiting investment and will constrain the renewables boom – which is about finding not only the ultimate solution but also a transition path from where we are now. It doesn't make sense

because co-firing is a perfect transition to renewables, and it is important to have that core demand to drive the young biomass market.” Said Ms Thompson CEO of Drax.  
*The Independent 3<sup>rd</sup> December 2009*