

CARBON

August 2010

REDUCTION BULLETIN

ELECTRIC VEHICLES

Birmingham to Coventry

Electric car drivers in Birmingham and Coventry can now use a network of charge points in the latest stage of the UK's largest ultra low carbon vehicles trial.

The network has been installed by E.ON on behalf of the Cabled project, a trial of 110 vehicles by "real world" users over the next 12 months.

A convoy of eco-friendly cars travelled between the two cities to officially launch the latest stage of project.

Charles Bradshaw-Smith, head of innovation at E.ON – and himself a participant in the project – said: "Coventry and Birmingham were the birthplace of the British car industry and it's great that these two cities are now leading the way in bringing low-carbon motoring to our streets.

"Electric cars are perfect for commutes and for shopping trips to town – and we're proud to help make eco-driving even easier by being the energy behind these charging points.

"Electric vehicles are a genuine alternative to petrol and diesel cars – I speak as

someone who has driven 7,000 commuting miles in my electric vehicle."

Birmingham City Council deputy leader Paul Tilsley said: "As a city with a rich motoring heritage, our challenge is to be at the forefront of low-carbon vehicle technology – and the development of a charging point network for this initiative is a vital step towards this goal.

"Last year we drew up the Birmingham declaration on climate change in which we committed to only buy electric or LPG vehicles by 2015. That is why we are delighted to be working with partners to deliver the infrastructure that will underpin this."

Linda Bigham, cabinet member for city development at Coventry City Council, said: "Coventry has purchased 45 electric vehicles as part of an ongoing programme to replace its fleet vehicles.

"These will be in use from September, and more are planned in the years ahead. These vehicles will produce fuel savings of almost 20%, while also reducing carbon

emissions by 20%."

Christina Fell, project manager at Arup, the consultancy heading the consortium running the project, told *CRB*: "What we're trying to do is find out how people use these electric vehicles in everyday life, which will help us establish where to put charging infrastructure.

"We have a chicken and egg situation where people say they don't want to buy electric cars because there's no infrastructure, but councils don't want to put in the infrastructure because there are no cars."

Cabled is part-funded by the Technology Strategy Board, which held a competition leading to eight consortiums around the country trialling electric cars.

Fell said: "We're the largest of those, I think there are around 340 vehicles of which we account for 110. We also have funding from the RDA, and all the partners are putting in match funding as well."

● www.cabled.org.uk

GUIDANCE

Eunomia waste emissions standard

Eunomia Research & Consulting has been appointed by the Greater London Authority to develop an emissions performance standard for the capital, which will form a key element of mayor Boris Johnson's municipal waste management strategy, to be published in late summer.

The EPS will allow the GLA to set emissions levels for the management of municipal waste and will function as a guideline for boroughs and joint waste authorities when letting contracts.

The London EPS will measure carbon performance across all municipal waste management activities

associated with collection, recycling, treatment, recovery, and final disposal of waste.

GLA environment programme officer for waste Doug Simpson said: "The GLA is keen to promote infrastructure that delivers real climate change mitigation benefits. While we recognise the importance of setting high targets for recycling, these must have a demonstrable link to reductions in carbon emissions."

Principal consultant Adam Baddeley told *CRB*: "We're putting in place a quantifiable standard in tonnes of carbon dioxide per tonne of waste managed, which all waste

authorities will need to be in compliance with.

"The EPS is going to recognise the financial constraints on waste authorities and has a focus on actual carbon efficiency – it will recognise waste management is about managing emissions and not just tonnes handled. Why use limited resources to collect huge quantities of glass if it's simply going to be turned into aggregate?"

"It should be easily transferable to other cities. We'll also be publishing an associated web tool for use by the London boroughs in managing waste in a carbon efficient manner."

IN BRIEF

Council generation

A ban on councils selling green electricity into the national grid will be overturned, Climate change secretary Chris Huhne has announced.

In a speech to the Local Government Association annual conference, Huhne said he wants councils to be allowed to sell electricity they produce from renewables to the national electricity grid.

Huhne said: "It's ridiculous that the 1976 Local Government Act prevents councils from selling electricity from local wind turbines, or from anaerobic digestion.

"I want to see this repealed and by the end of the year I hope local authorities will be able to sell electricity from renewables – generating revenue to help local services and keep council tax down."

The carbon footprint of every council in England has also been published for the first time. The figures calculate the carbon dioxide produced by councils in powering and heating their buildings as well as emissions from transport.

Huhne said: "By calculating their own emissions and the estimated costs of energy use, local councils will be able to identify how to save emissions and save money.

"Wasting energy means money that could be spent on local services is also being wasted. These new statistics should put energy wastage and energy efficiency at the forefront of the minds of councillors and council officials."

WELCOME

Welcome to Carbon Reduction Bulletin – a supplement to Air Quality Bulletin, Noise Bulletin and Contaminated Land Bulletin.

If you want your own copy of future supplements sent individually, please email crb@empublishing.org.uk.

● Rob Bell, Editor

IN BRIEF

Mouchel deal on hold

Under pressure consultancy Mouchel will have to wait until September to find out if Bournemouth Council will go ahead with an out-sourcing proposal the council said would save it money and “deliver a significant number of new jobs for the town”.

The plan would see Mouchel take over a number of functions from the council – IT, revenues, benefits and facilities management services, while saving Bournemouth over £1million a year for the next decade.

Mouchel’s commitment to the proposed deal includes the creation of some 150 jobs in environmental industries and a further 200 jobs in services such as carbon reduction, IT, project management and business improvement, through a shared service hub providing services to councils and agencies across the south.

After announcing Mouchel’s preferred bidder status for the project in June, Bournemouth’s cabinet member for resources John Beesley said: “It’s essential that any potential partner saves the council money and improve services while keeping jobs local. What Mouchel has been able to guarantee, in addition to meeting our service quality, value and staff welfare requirements, is something very special for the town. Mouchel is offering inward investment that will generate 350 new jobs in Bournemouth, through the creation of a national centre of excellence for carbon reduction and a shared service hub to support other public sector organisations.”

Mouchel’s carbon centre would “deliver innovative and sustainable new technology energy solutions for the public and private sector”.

However, Bournemouth has deferred a decision to a further meeting due to uncertainty about local government funding moving forward, which Mouchel told *CRB* would not take place until September when councillors were back from summer holidays.

ENERGY MANAGEMENT

Giant strides for Poole CREW

Borough of Poole Council has succeeded in reducing carbon emissions by over 11% in the last 14 months. Cabinet portfolio holder for the environment Don Collier told *CRB* empowering staff to take action on energy has been key to Poole’s success.

The council published a carbon management plan in 2008, setting a target of cutting its carbon footprint by 25% by April 2013. A recent review of energy efficiency projects found Poole has already achieved 11.08% savings, with electricity spend for 2009/10 falling by over £136,000.

Collier said: “Sometimes when you start from a low baseline you can achieve a lot quickly, but we weren’t starting from a low base. What we’ve got in Poole is a lot of very keen, very enthusiastic staff, who naturally do these things.

“We found there was all kinds of stuff they were doing anyway, but it had never been documented. One of the first things we had to do was produce a benchmark. There are certain things we do desperately need to improve, like energy consumption, but there’s a huge enthusiasm to achieve it.

“So we formed a team called the CREW – carbon reduction energy wardens – who report to myself, the strategic director in charge of environment and the energy manager himself. It’s a bit of an unusual set up because we float above all of the service units, so we’re not a service unit in ourselves, we don’t have a service unit structure, there are just three of us who sit down and deal with carbon, which is mind-blowing for a council isn’t it?”

Collier and his management colleagues decided an important route to success was to empower staff from anywhere in the organisation. He told *CRB*: “CREW members can come from anywhere in the organisation, basically these people could be fairly junior members of staff or senior management, but they are part of the CREW. They come together under carbon reduction manager Paul Cooling regularly to chat and compare ideas, do things, and also spread the word

– enthuse people and get them taking action. This has resulted in some stunning, measurable energy reductions in a very short time, just by changing people’s hearts and minds.”

A number of carbon reduction projects have already been completed, including fuel efficient driver training for the council’s fleet vehicle drivers, the conversion of light fittings in street bollards to LEDs, route optimisation of refuse and recycling vehicles and an extensive programme of printer and server rationalisation within council buildings.

Collier said: “We’ve got hold of quite small budget stuff – for example we’ve got a situation where normally power stays on

all the time, but what this equipment does is isolate machines that have to stay on, so monitors go into one set of sockets and essential equipment goes into another, and when you leave at the end of the day you press one button by the door that kills all of the unnecessary stuff, which cuts a great deal of energy consumption.

“It’s the silly little things that make the difference, and over the course of a week you save a massive amount of energy.”

Collier is proud of the council’s achievements so far. He said: “We made over £130,000 of energy savings –

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Councillor Don Collier tests out low-carbon transport in Poole

POLICY

Cuts and local self-sufficiency

Climate change minister Greg Barker has launched the first stage of the government's plans to help communities become more self-sufficient in the way they use heat and power.

According to the government, empowering communities to generate their own energy on both a large and small scale will not only create income but also help save money on fuel bills and increase energy security.

Homes, schools and businesses are guaranteed cash payments through the feed-in tariff for producing their own green electricity through technologies such as solar panels or small wind turbines, as well as for selling it to the national grid.

Around 100,000 homes and organisations have installed this kind of technology so far.

Barker said: "I want to see more homes, communities and businesses generating their own energy. We can literally bring power back to the people.

"By becoming more self-sufficient we can create sustainable local energy economies. People and communities can save money on their fuel bills at the same time as generating an income and cutting carbon. "

Chief executive of the Micropower Council Dave Sowden said: "We're delighted the government is embarking on the development of a new vision for a true mass market UK microgeneration industry and bringing sustainable energy self-production in reach of every citizen. Greg Barker, Chris Huhne and Charles Hendry have long supported this exciting industry and we welcome the wish now they are in government to see this industry thrive and grow.

"Microgeneration is already a notable British manufacturing, servicing and export success story. It brings a unique personal touch for citizens to "do their bit" in tackling the country's energy efficiency and sustainability needs, as well as helping supply security, fuel poverty relief and creating thousands of green jobs in recent years. We look forward to working closely with the government on a new policy framework to allow every citizen, business, school, hospital and other organisations to grow their own energy."

However, it was not all good news, with the DECC making its announcement as to how it intends to slash spending. Of

the £85 million DECC is contributing to overall departmental savings, £34 million will come from expenditure on low carbon technology.

Three million pounds come from closing the Low Carbon Buildings Fund early. The remainder of the cuts will come from £6.1 million efficiency savings and under-spending on programme budgets within DECC; £4.7 million through cancelling the final funding rounds of the Bio-Energy Capital Grants Scheme and the Bio-Energy Infrastructure Scheme;

One million will go from funding for development of deep geothermal generation, which will still receive £1 million this year; £3 million by reducing the scope of the Offshore Wind Capital Grants Scheme; early closing of the Energy Saving Trust technology trials, saving £700,000 from the £3 million programme; reducing the scope of the Central Government Low Carbon Technology Programme saving £2.9 million; and a cut to the Carbon Trust's grant for low carbon technology and business support funding of a £12.6 million.

IN BRIEF

IEMA EIA guidance

The UK's first set of "crucial" practitioner guidance on climate change mitigation in environmental impact assessment for business, planning and development has been launched by the Institute of Environmental Management & Assessment, the largest professional membership body for the environment in the UK.

The aim of its *Principles on climate change mitigation & EIA* is to provide over-arching practical advice on the integration of climate change mitigation within environmental assessment.

The guidance document has been developed as part of IEMA's focus on improving the integration of climate change in environmental assessment.

IEMA said it has provided the UK's first wide-ranging guidance on EIA and climate change mitigation.

The document covers the case for considering greenhouse gas emissions in EIA; directions on scoping, assessing and mitigating emissions; and advice on effective reporting and follow-up.

The Institute's lead on environmental assessment Josh Fothergill said he believes organisations as well as practitioners will benefit from following the guidance.

"The relationship between climate change mitigation and EIA is now established and it is clear action is needed to ensure EIA practice effectively delivers the climate change mitigation and adaptation information needed by decision-makers," he said.

"Therefore, these principles are crucial to the confidence and competence of environmental assessment practitioners, developers and planning, or other consenting, authorities."

IEMA said its advice will be expanded throughout 2010 to include principles on climate change adaptation and EIA, advice notes and case studies.

● www.iema.net/eia-cc

ENERGY MANAGEMENT

Poole takes leadership role on cuts

● Continued from page two

and if we'd had a warmer winter it would have been more – we saved all of that in one of the coldest winters we've had in many years.

"Our people know that is £130,000 they can use to help people. Our real challenge here is to take as much cost out of energy and carbon as we can so we can deliver what little money we've got on frontline services.

"It's one of our core priorities, which means people take it seriously."

Collier said Poole's work will help cut the carbon footprint of the wider community. He told *CRB*: "Showing leadership is so

important to Poole. What we've achieved in such a short period of time means we can actually go out to people and say 'we're not perfect, but we've done this and we can help you do more'.

"We're getting people who appreciate that we're doing a good job and they come to us for help, advice and support.

"That's brilliant, it means the people who don't know how to cut carbon we can help, and people who are really ahead of the game can say to us 'you should have done this'"

The council is establishing 'carbon clubs' in the town focusing on reducing carbon, Collier said: "We've got a lot of very successful businesses in Poole, so a lot of people are

going to be part of the Carbon Reduction Commitment.

"We're trying to get all the energy managers together so they can compare notes and help each other.

"And then below that there are people who don't have to comply with the CRC, we're going to try to encourage them to get together with the Small Business Federation and other so they can get help with simple little things like we've done with the switches.

"Sharing ideas and helping people – effectively creating a CREW for the business community in Poole – is the phase we're working on right now."

RESEARCH

Switching off lights has a greater impact than you thought

Switching off lights, turning the television off at the mains and using cooler washing cycles could have a much bigger impact on reducing carbon dioxide emissions from power stations than previously thought, according to a Imperial College London study published in *Energy Policy*.

The study found the figure used by government advisors to estimate the amount of carbon dioxide saved by reducing people's electricity consumption is up to 60% too low.

Power stations that supply electricity vary in their carbon dioxide emission rates, depending on the fuel they use: generally only the fossil fuel power stations are able to respond instantly to changes in electricity demand.

Dr Adam Hawkes, the author of the study from the Grantham Institute for Climate Change at Imperial, said the government

should keep track of changing carbon emission rates from power stations to ensure policy decisions for reducing emissions are robust.

The study suggests excluding power stations with low carbon emission rates, such as wind and nuclear, and focusing on those that deal with fluctuating demand would give a more accurate emission figure.

Scientists advising government on the best ways to reduce electricity demand currently use an estimated figure for emission rates.

The study shows, at 0.43 kilograms of carbon dioxide per kilowatt hour of electricity consumed, this figure is 60% lower than the actual rates observed between 2002 and 2009 (0.69 kilograms of carbon dioxide per kilowatt hour), meaning policy studies are under-estimating the impact of people reducing electricity use.

Hawkes, visiting fellow at the Grantham Institute, said: "One way governments are trying to mitigate the effects of climate change is to encourage people to reduce energy consumption and change the technologies they use in their homes. However, the UK government currently informs its policy decisions based on an estimate that, according to my research, is lower than it should be."

Hawkes told *CRB*: "While changing the technologies and resources we use in our energy system is very important for climate change mitigation, personal behaviour is also critical to achieving long term emissions targets. The way we live our day-to-day lives gives rise to the vast majority of energy demand, so we can all do something to reduce our impact. The aggregate effect of this can be very substantial. "Strategically, the findings

impact on the best pathways to achieving long term emissions reductions. We should also be mindful of the long term target – we want to achieve significant final emissions reductions and need to be careful to avoid locking into technologies that cannot ultimately provide this."

The main finding of Hawkes's report is that turning off unneeded lights may have larger impact than previously thought. He said: "Fossil fuel power stations respond to changes in electricity demand. This means any reduction we make in our electricity use could have a bigger impact on emissions than we thought."

"However, this also acts in reverse: a small increase in the amount of power we use could mean a larger increase in emissions, so we need to make sure we do everything we can to reduce our electricity use."

EVENTS 2010

August 10-12

6TH AUSTRALIA-NEW ZEALAND CLIMATE CHANGE & BUSINESS CONFERENCE

To be held in New South Wales, Australia. Visit www.climateandbusiness.com/

August 17

ZERO CARBON BUILDINGS WORKSHOP

A Chartered Institution of Building Services Engineers event to be held in Chelmsford. Visit www.cibse.org

September 6-7

ENERGY FROM WASTE 2010

An SMI event, to be held in London. www.smi-online.co.uk/events/overview.asp?is=5&ref=3445

September 9

WHERE NOW WITH WIND TURBINE IMPACT ASSESSMENT?

An Environmental Protection UK event, to be held in Birmingham. Visit www.environmental-protection.org.uk?

September 9-10

COST-EFFECTIVE, BEST-PRACTICE O&M STRATEGIES

A Windpower Monthly event, to be held in Hamburg. www.windpowermonthly.com

September 23-24

CLIMATE CHANGE 2010; A NEW CLIMATE DEAL?

A Chatham House event, to be held in London. Visit www.chathamhouse.org.uk/climatechange10

October 19-21

EUROPEAN FUTURE ENERGY FORUM

To be held in London. Visit www.europeanfutureenergyforum.com

November 3

CLEANER AIR ON A SHOWSTRING

An Environmental Protection UK air quality update. To be held in Birmingham and as guest speaker featuring the legendary editor of *CRB* Rob Bell. www.environmental-protection.org.uk

CARBON REDUCTION BULLETIN

Carbon Reduction Bulletin is a supplement to *Air Quality Bulletin*, *Noise Bulletin* and *Contaminated Land Bulletin*.

Readers of our newsletters have told us that they need extra information about what they are supposed to be doing now – or in the future – about carbon reduction. Sign up for future issues sent directly to you – tell your colleagues, they can have their own copy too!

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