

# Weekly News Update

Saturday 21st January 2012 - Friday 27th January 2012



## *Clean coal plants and biomass to lead boom, Minister pledges*

A NEW generation of environmentally-friendly power stations and vast offshore wind farms will maintain Yorkshire's role as the UK's centre of electricity production, the Energy Secretary pledged while on a visit to the region.

Speaking in Leeds yesterday, Energy and Climate Change Secretary Chris Huhne said the Government will give every support to a proposed wave of "clean coal" projects and biomass power plants which should see hundreds of millions of pounds flooding into the region over the coming years.

The coalition has come under fire from the green energy industry over recent weeks, after cutting subsidies for new biomass power stations and cancelling plans for the UK's first "clean coal" plant – using pioneering carbon capture and storage technology (CCS) – at Longannet in Scotland.

Mr Huhne insisted both technologies remain hugely important to Britain as it pushes ahead with efforts to slash carbon emissions by the end of the decade.

## *Carbon study captures funding*

Australia - A grant of more than \$200,000 has been announced to fund a study into the impact of carbon capture at Loy Yang Power.

As power generators seek ways to significantly reduce CO<sub>2</sub> emissions, the potential costs of carbon capture and storage measures will need to be better understood, according to LYP.

The Global Carbon Capture and Storage Institute has just announced it will provide \$226,000 to support a Worley Parsons study into the "impacts of retrofitting post-combustion capture (PCC) on an existing pulverised fuel power plant". LYP will support the study by providing plant information and performance data.

## *Masdar eyes CDM for carbon capture project*

Abu Dhabi state-owned Masdar said Wednesday it would investigate opportunities to register its carbon capture and storage (CCS) project under the U.N.'s Clean Development Mechanism, which could make it the first such scheme to gain approval under the Kyoto Protocol offset market.

Masdar, along with the Abu Dhabi National Oil Company (ADNOC), will seek to capture around 800,000 tonnes of carbon dioxide a year generated at Emirates Steel's plant in Mussafah.

The pilot scheme is scheduled to start capturing CO<sub>2</sub> at the end of the year and a Masdar spokesperson said it may seek to get the project registered under the Clean Development Mechanism (CDM).

## *Marine Planning in the East of England (no link)*

Public invited to marine planning drop-in sessions. The MMO are holding 12 public sessions along the East coast of England in February to explain what marine planning is, and what it means to coastal communities. Any individuals, marine groups or networks in the plan area are welcome, and can drop in to make sure their views are heard. From residents who enjoy a walk on the beach to keen sailors and anglers, the MMO would like to hear from as many people as possible.

These sessions will run between the 13<sup>th</sup> to 23<sup>rd</sup> February 2012 from 11 am to 3 pm and 5 pm to 8 pm, with the exception of the evening session on the 15<sup>th</sup> February in Wells-Next-The-Sea in Norfolk which will run from 6 pm to 8 pm.

You can see the full timetable, with dates and locations, at [www.marinemanagement.org.uk/marineplanning](http://www.marinemanagement.org.uk/marineplanning)

Registration is not required for these drop-in sessions, and please do let us know if you would like any posters to advertise the event, or want to request more information. As always, we can be contacted on [planning@](mailto:planning@marinemanagement.org.uk)

[marinemanagement.org.uk](http://marinemanagement.org.uk)



### ***Cleanest Coal Plant in the World Under Construction***

The cleanest coal plant in the world is under construction, and although most people in our field say carbon capture and sequestration is too expensive to be realistic, this technology looks pretty interesting.

A clean coal demonstration project, The Texas Clean Energy Project (TCEP), announced the first power purchase agreement for a commercial-scale carbon capture plant in the US.

CPS Energy, the largest municipally-owned utility in the nation, will buy 200 MW of power a year from TCEP when it comes online in 2015.

The Texas Clean Energy project is the first in the US to combine Integrated Gasification Combined Cycle (IGCC) and carbon capture and storage technologies.

### ***BOC joins forces with Alstom and Drax in flagship CCS project (no link)***

Industrial gases provider BOC is joining Alstom and Drax as a co-developer on the 426 MW oxy-fired carbon capture and storage (CCS) project currently under development at the Drax site in North Yorkshire. BOC was selected following a competitive process and brings world-leading technology in the field of air separation, as well as complementary plant engineering and integration capabilities from its parent The Linde Group that will further enhance the deliverability of the project.

The project will link into the Humber Cluster CO<sub>2</sub> transport and off-shore storage network currently under development by National Grid. The key partners in this industry initiative represent Europe's strongest-ever industrial alliance to fast-track the commercialisation of CCS technologies. Full Press Release attached to original Weekly News E-mail.

### ***CPS Energy to buy 200 MW from Texas 'clean coal' project***

CPS Energy of San Antonio will annually pay for 200 megawatts of electricity generated by Summit Power Group Inc.'s \$2.4-billion, 400-MW Texas Clean Energy Project, a carbon capture and storage project which uses coal gasification, carbon dioxide sequestration and urea production technologies, when the facility is completed by 2015.

The plant will be receiving \$450 million in funding from the United States Department of Energy's Clean Coal Power Initiative, of which \$211 million came from the American Recovery and Reinvestment Act of 2009.

The Texas Legislature enacted House Bill 469 in 2009 to help incentivize the T.C.E.P. The project received its final air quality permit from the Texas Commission on Environmental Quality on December 28, 2010.

### ***HTC Technology Integrated Into UK's Largest Coal Fired Power Plant CO<sub>2</sub> Capture Project***

Technology for CO<sub>2</sub> capture from coal flue gas provided by Regina, Saskatchewan-based HTC Purenergy Inc. is now operational at Scottish and Southern Energy's Ferrybridge Power Station located in West Yorkshire, United Kingdom.

Ferrybridge is the first plant of its size in the U.K, capturing 100 tonnes per day of CO<sub>2</sub> at 90 per cent CO<sub>2</sub> recovery rate based on five Megawatts Electric (MWe) slipstream from the 2,000 megawatts (MW) coal power station.

### ***Save the Date (no link)***

IEA-EOR Enhanced Oil Recovery Research Program 33<sup>rd</sup> Annual Symposium announced. To be held in Regina, Saskatchewan, Canada on August 26<sup>th</sup> to 30<sup>th</sup> 2012. Please see attached document on the original Weekly News email for an outline programme.



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## ***A Surprising Call From The Investment Community***

A recent Reuters article reported from a UN session on climate risk and energy solutions:

UNITED NATIONS, Jan 12 (Reuters) – Institutional investors with a collective \$26 trillion under management opened a new front on Thursday in the fight against climate change, urging the private sector to mobilize, follow the money and find new technologies to cut greenhouse gas emissions. Putting a price on climate-warming carbon emissions, which has been instituted in parts of Europe and elsewhere with limited success, would be “nice to have” but not essential, said Kevin Parker, global head of Deutsche Asset Management.

## ***Masdar Carbon and ADNOC to go ahead with carbon capture facility at Emirates Steel complex at Mussafah***

Masdar Carbon, one of the five integrated units of Masdar and the Abu Dhabi National Oil Company announced that discussions on the carbon capture facility adjacent to Emirates Steel complex at Mussafah have yielded agreement on various areas allowing the project to proceed to tender.

The two organizations have made sufficient progress on the commercial principles and have now commenced drafting Head of Terms to govern future detailed delivery agreements.

The carbon capture facility is part of the collaboration between Masdar and ADNOC to explore feasibility of joint projects to reduce the carbon footprint of the emirate and make available CO<sub>2</sub> for potential enhanced oil recovery operations in the future.

The Emirates Steel project, the first in an ambitious long term CCUS program, is the result of concerted efforts from both the organizations in laying the ground for kick starting and taking the carbon capture initiative forward in Abu Dhabi. A CO<sub>2</sub> injection pilot project on enhanced oil recovery at an onshore field completed two years last November and the wealth of data collected over the period has encouraged the two partners to go ahead with the Emirates Steel project.

## ***Utility to Purchase Electricity from Innovative DOE-Supported Clean Coal Project***

Under the agreement - the first U.S. purchase by a utility of low-carbon power from a commercial-scale, coal-based power plant with carbon capture - CPS Energy of San Antonio will purchase approximately 200 megawatts (MW) of power from the Texas Clean Energy Project (TCEP), located just west of Midland-Odessa.

The 400-MW TCEP plant is a first-of-its-kind Integrated Gasification Combined Cycle (IGCC) poly-generation facility believed to be the cleanest coal-fueled power plant operating anywhere in the world. The facility is capable of capturing 90 percent of the carbon dioxide (CO<sub>2</sub>) it produces, as well as 99 percent of sulfur dioxide, 90 percent of nitrogen oxide, and 99 percent of mercury.

TCEP was a third round selection under DOE's Clean Coal Power Initiative, a cost-shared collaboration between the Federal government and private industry aimed at stimulating investment in low-emission coal-based power generation technologies through successful commercial demonstrations. The \$ 2.4 billion plant will receive \$ 450 million in funding from the Clean Coal Power Initiative; of this, \$ 211 million comes from the American Recovery and Reinvestment Act of 2009. The facility is expected to be fully operational in 2015.

## ***China, UK Announce Joint Scientific Research Projects***

During his two-day visit to Beijing this week, the U.K. Chancellor of the Exchequer George Osborne said that the United Kingdom had signed deals with China to conduct joint research on stem cells and smart grids. A total of GBP6.8 million (US\$10.52 million) will be injected into these projects.

Both the UK and Chinese sides plan to invest around GBP3 million to support the research work on smart grids being carried out by the Research Council's UK Energy Program and the National Natural Science Foundation of China (NSFC).



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The new cooperation is an extension of a series of joint research projects previously conducted in the energy field, according to a report by the British Embassy. There are a total of 24 ongoing joint research projects between the two countries so far, primarily focused on renewable energy production, carbon capture as well as storage, and the clean production of fossil fuels.

### *EU energy policy drives changes in UK – with mixed results*

Energy has been one of the most active areas of EU legislation: the ban on old-style lightbulbs, the introduction of renewable energy targets, an obligation to mix biofuels in petrol, carbon trading for energy-intensive businesses, the scrapping of ageing coal-fired power stations, support for pioneering new power plants that capture and store carbon dioxide, the development of smart meters and energy efficiency labels on electrical appliances.

All of these have driven changes in the UK, from the obvious such as changing lightbulbs to the more subtle such as farmers growing energy crops destined for power stations or use in petrol.

Joss Garman, a campaigner at Greenpeace, says many of the shifts have been wholly positive. "The renewables directive has driven a change in Whitehall culture to take advantage of Britain's unparalleled homegrown clean energy resources, with the opportunity to move our economy away from an over-reliance upon imported gas and coal. This can reduce our vulnerability to spikes in international fossil fuel markets."