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EnviroDaq 100
(as of 31/07/08)

85.90



Today: -0.67
Last 7 days: -25.62

News In Brief

Renewables seen as "Green Gold Rush"

Soaring fossil-fuel prices and concerns over the carbon dioxide emissions that fuel global warming, have helped investment in clean energy from sources like wind, solar and biofuels last year rise three times faster than predicted by the UN Environmental Programme (UNEP).

"Just as thousands were drawn to California and the Klondike in the late 1800s, the green energy gold rush is attracting legions of modern day prospectors in all parts of the globe," said Achim Steiner, head of UNEP.

Wind power attracted the most capital last year at US\$50.2 billion, or a third of all clean energy investment, UNEP's Global Trends in Sustainable Energy Investment 2008 report said.

To read more click [here](#).

Britain Seeks to Set Pace in Carbon Capture Quest

Britain has announced a shortlist of firms in a tender to build the world's first commercial-scale power plant to burn coal and gas without adding to global warming.

Carbon Capture and Storage (CCS) promises a technological solution to soaring emissions of the greenhouse gas carbon dioxide from fossil fuel burning power plants -- but with strings attached.

"It is the great panacea. It would mean not having to do the hard things like changing the way we live," said Michael Grubb, chief economist at Britain's Carbon Trust. "The trouble is that while everybody says it can be done, no one has yet done it. There are very big companies out there with very deep pockets but even they are not doing it." The winner of the British competition will get help from the government which is likely to run into hundreds of millions of pounds.

To read more click [here](#).

Toyota Struggles to Meet Hybrid Demand

Toyota executives said a dwindling inventory of vehicles, such as the Prius, Yaris and Corolla, had forced the automaker to scramble to try to keep up with demand in June, a month when industry-wide US auto sales dropped almost 9 percent.

Sales of Toyota's Prius, the top-selling hybrid in the US market, fell 26 percent as dealers ran

short of inventory and customers faced a six-month waiting list. Toyota said it would only partly be able to satisfy the backlog of demand from its dedicated Prius factory in Japan this year.

Hybrids command about a US\$5,000 price premium compared with equivalent vehicles without the expensive battery. "It is very doubtful that there is going to be a lot of recovery this year to be able to satisfy consumer demand and that is very unfortunate," said Jim Lentz, Toyota's head of North American sales, referring to the Prius.

To read more click [here](#).

Matsushita Eyes US\$942 Mln in Fuel Cell Sales by 2015

Panasonic maker Matsushita Electric Industrial Co Ltd aims for 100 billion yen (US\$942 million) in sales from its nascent home-use fuel-cell business by 2015 as demand grows for greener energy sources.

Matsushita, which started production of fuel cells for domestic use last month in Japan, said on Tuesday it aims to sell 200,000 units of fuel-cell systems in 2015. Fuel cells produce electricity from hydrogen using a chemical reaction and are considered environmentally friendly because the primary by-products are water and heat, which can be harnessed to make hot water.

Matsushita, which competes with Sony Corp in flat TVs and digital cameras, plans to invest about 20 billion yen in research and development of its fuel cells by 2015, on top of 30 billion yen it has already spent on the business.

To read more click [here](#).

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EnviroDaq 100 Company News

Catalyst Launch Programme stimulates New Commercial Activity for ACTA

Over the next three weeks, ACTA will launch six important new catalysts for four market applications in line with its stated milestones for 2008. These catalysts are targeted at markets which already have a large number of potential industrial customers, representing an addressable catalyst market of over \$5bn with mass commercialisation.

Acta has launched two catalysts for hydrogen generation from ammonia by reforming (using catalysts and heat to break down ammonia into hydrogen and nitrogen). Ammonia is an excellent hydrogen carrier for carbon-free energy supply. It provides more hydrogen energy by volume and by weight than any stored form of hydrogen and any hydrocarbon fuel. The range also includes catalysts for waste treatment, ammonia decomposition, water electrolyzers and fuel cells.

The launch of these new catalysts is part of an ongoing programme of customer support and innovation. Further new catalyst launches will be made in the second half of 2008 in order to complete Acta's portfolio of products for its chosen markets.

To read more click [here](#).

Hightex gets Letter of Intent for New Canopy for Terminal 4

Following the recent opening of Terminal 5, BAA is now embarking on a major upgrade of the other existing facilities at Heathrow, aiming to increase the amount of natural light entering the building, improve the facilities for check-in and build modern departure lounges.

The canopy will run along the entire 190 metre façade of the terminal and will consist of some 2,300 square metres of two layer translucent ETFE pneumatic cushions. The canopy will extend out 12 metres from the façade, thereby giving good coverage to passengers, and will be finished with a dot shading pattern similar to that used at Terminal 5.

In a separate development, Hightex also announces that it has now started work on the final phase of the contract at the All England Lawn Tennis Club, Wimbledon, to install the new

retractable roof over the Centre Court for which Hightex is providing the membrane. Charles DesForges, Chairman, stated that "Hightex Group is delighted to have been selected for these significant and prestigious projects".

To read more click [here](#).

Progress on flexible photovoltaic product

Hightex has also announced that its flexible photovoltaic product "PV Flexibles", has been selected to be one of 20 innovative products to be shown in the 11th International Architecture Exhibition at the Venice Architecture Biennale 2008.

The PV Flexibles consist of extremely thin, highly flexible and very light photovoltaic cells. They are the first in the world capable of being integrated individually in both foil and membrane structures. This product will enable a membrane roof to incorporate photovoltaic elements, thereby allowing buildings to generate part of their own electricity requirements. Hightex sees the PV Flexible product as a significant advance in the development of the 'intelligent' building.

Dr Charles DesForges, Chairman of Hightex, said "PV Flexibles will prove to be a major innovative advance for architectural membrane structures such as sports stadia, airports, rail stations, shopping malls and various other applications. Hightex is delighted to have been selected to present this new exciting product at the Venice Biennale 2008."

To read more click [here](#).

Successful Operation of World's First Commercial Full Scale HTS Induction Heater

Zenergy Power plc has announced that it has completed the successful installation and operation of the world's first commercial full scale HTS induction heater for Weseralu GmbH & Co. KG at its manufacturing facility in Minden, Germany. The HTS induction heater is based on Zenergy's proprietary technology and is specifically designed for heating large aluminium billets that can be manipulated when softened and shaped for innumerable products in the automotive, aerospace and machine building industries.

Mr. Hagemann, owner and managing director of Weseralu, commented "Zenergy's HTS technology represents a quantum leap for our industry and I am delighted to be the first in the world to utilise this technology. I am confident that it will prove advantageous on an economic and ecologic basis in comparison to any existing billet heating equipment".

Dr. Jens Müller, chief executive officer of Zenergy, commented "The successful continuous operation of the world's first full scale commercial HTS induction heater for Weseralu represents a landmark achievement for Zenergy that we are convinced will enhance Weseralu's reputation of delivering outstanding and high quality products to its customers".

To read more click [here](#).

Catalytic Solutions win Honda Contract

Catalytic Solutions, Inc. has announced that in addition to the Honda Accord, the Company has also begun supplying catalysts for the 2009 model year Acura TSX. The new second generation TSX, with improved fuel economy and lower emissions, began selling in April 2008.

As noted by Honda at the 2008 New York International Auto Show, the TSX is classified as an affordable luxury sports sedan in a market segment projected to grow by over 7 percent by the year 2012. With gasoline prices on the rise, Honda considers an increase in fuel economy equally important as the gain in performance, with the engine also being cleaner and now meeting aggressive EPA and CARB emission standards, which have been recently implemented.

Catalytic Solutions and Honda have worked together since 2000, with the first catalysts supplied in 2001 for Honda's light-duty gasoline vehicles. Since then, Catalytic Solutions' catalysts have been used on an increasing number of Honda vehicles and continued testing is underway for potential new programs. Commenting on the agreement, Charles F. Call, Chief Executive Officer of Catalytic Solutions, Inc., said "Catalytic Solutions is pleased with this new business win as it further solidifies our relationship with Honda. We are very pleased to assist in

their drive toward greener vehicles”.

To read more click [here](#).

PolyFuel Prototype Notebook Computer Fuel Cell

PolyFuel, Inc. has announced that it has developed the first functional version of its prototype power supply for notebook-class computers that can provide continuous non-stop runtimes with the simple hot swap of small cartridges of methanol fuel. The consumer-friendly design is fully integrated with a representative notebook - the Lenovo T40 ThinkPad®. PolyFuel has developed the prototype as a technology demonstrator and proof of concept for OEM electronics manufacturers.

The prototype represents a key step towards the attainment of PolyFuel's goal to create a reference design with the size, appearance and performance consumers require for increasingly power-hungry notebook computers. PolyFuel will demonstrate this prototype to customers and potential development partners in the coming weeks.

Jim Balcom, CEO of PolyFuel, commented: "I am delighted with the further progress we have achieved. Creating a functioning prototype is a critical step toward the development of a fuel cell reference design with the performance characteristics that can beat lithium-ion batteries, and brings closer the achievement of our ultimate objective, the widespread commercialisation of portable fuel cell technology."

To read more click [here](#).

Planning approval granted for Loscar Wind Farm

Renewable Energy Generation Limited has received planning approval for its wind project of approximately 4MW at Loscar near Rotherham, South Yorkshire in the United Kingdom. The three turbine project is located in a green belt area and was considered by the Local Planning Authority (LPA) in March this year. It gained significant majority support from the planning committee members, having been recommended for approval by the planning officer.

Subject to the satisfactory discharge of planning conditions, turbine orders will be placed and power production is expected to begin in 2009.

Commenting on developments, Andrew Whalley, Chief Executive Officer of REG, said "In the past 18 months, we have commissioned four new wind farms in the UK and we have a further two projects in construction currently. Loscar is a welcome further addition to our UK programme."

To read more click [here](#).

Construction of Czech Republic Manufacturing Plant

Catalytic Solutions, Inc has announced that construction of the Company's new European catalyst manufacturing facility in the Czech Republic has commenced. With a fully established manufacturing facility already in the U.S., the Company elected to add a second manufacturing facility located in the Centrepoint Verne Industrial Park near the town of Klášterec Nad Ohří in the Northwest Region of the Czech Republic. The new plant will meet expected demand following key orders from Renault and other potential European customers.

The Company selected the Czech Republic for its high level of infrastructure development, well educated and trained workforce, and good geographical location for key customers. Construction of the new manufacturing facility is expected to be complete by the end of 2008 with production commencing in early 2009.

Charles F. Call, Chief Executive Officer of Catalytic Solutions, Inc., commented "In line with our stated strategy, the launch of our new facility in the Czech Republic marks a milestone in the Company's history and establishes a manufacturing presence for us in Europe. We believe that a local manufacturing capability is essential to compete effectively in the European market place and the Czech Republic facility will position us well for future growth."

To read more click [here](#).

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Venture News

Double deal for G24i

Welsh solar technology developer G24 Innovations has raised \$50 million in two major investments.

Morgan Stanley Principal Investments provided \$20 million in June, as lead investor in the firm's ongoing fundraising. Just six weeks later, G24i announced a \$30 million fundraising from new Luxembourg-based fund 4RAE.

G24i is developing dye-sensitised thin-film solar cells based on titanium dioxide. The technology is fundamentally the same as that being developed by US firm Konarka, which is a shareholder in G24i. The Welsh company has the European manufacturing rights to the technology, and is planning 'significant expansion' of its 187,000 sq ft roll-to-roll manufacturing facilities.

To read more click [here](#).

Intelligent Energy fuelled for growth

Intelligent Energy has raised \$13.6m growth funding from undisclosed private investors. The Loughborough-based firm is developing hydrogen fuel cells for partners including Suzuki, Peugeot Citroën and Boeing. A joint venture with Scottish and Southern Energy is meanwhile developing CHP systems for the domestic and small business markets.

Intelligent Energy has its roots in research on proton exchange membrane fuel cells at Loughborough University during the 1980s.

To read more click [here](#).

£6m goes to Alternative Waste

Alternative Waste Solutions, a Newcastle-based plastics recycler, has raised £6 million follow-on funding from E-Synergy and new investor Robeco. The investment goes towards expanding the firm's bottle-processing plant in Lincolnshire.

Technology specialist E-Synergy previously backed AWS in a £2 million round in January, alongside NorthStar Equity Investors.

To read more click [here](#).

Better Energy aims for US

London-based Better Energy Systems has secured around \$5m from Californian investor TBL Capital. The firm produces solar chargers for mobile gadgets, including the well-received Solio. The new funding goes towards growing sales in North America.

To read more click [here](#).

Foresight backs biomass provider

Biomass fuel provider Silvigen has raised £1.75m from Foresight Group. Based close to the Drax power station in North Yorkshire, Silvigen is currently developing a biomass processing plant to serve the power industry. The firm is also establishing a programme to exploit fast-growing tree species which it says will provide a return for landowners within four years.

To read more click [here](#).

Family funding for Segen

Aldershot-based renewables group Segen has raised £1 million growth funding from Cape Verde Capital. Cape Verde is the renewable energy investment wing of the Wates Family Enterprise, a

family trust associated with the eponymous construction group, and takes a 20% stake in Segen.

Segen supplies and installs a range of small-scale renewable generation systems, including solar PV, wind turbines and CHP. The firm is also developing a pilot concentrating solar plant in Andalusia.

To read more click [here](#).

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Company Case Study

The following case studies of companies in the EnviroDaq index were penned by the companies themselves and have not been edited by the EnviroDaq editor. We therefore accept no liability for the accuracy of the information contained within them and they should not be used as a prospectus for investment purposes.

Company: ITM Power

ITM Power is a developer of low-cost hydrogen technologies. The Company has developed new materials and processes that dramatically reduce the cost of fuel cells and electrolyzers. The patented membrane materials used in the devices have higher performance and are 1% of the cost of the industry standard materials.

Electrolyzers work by converting water and electricity into hydrogen and oxygen. The hydrogen produced can be used as a replacement for fossil fuels and facilitate zero carbon domestic housing and pollution free motoring.

ITM Power has unveiled a hydrogen refuelling station and a hydrogen powered car which could revolutionise commuting while cutting fuel costs and CO2 emissions.

The conventional petrol-engined Ford Focus, which has completed successful urban commuting trials, has been converted to run on hydrogen, which burns without emitting CO2, and could ultimately reduce drivers' dependence on fossil fuels.

ITM Power says further research and current engine and fuel-saving developments could well double the car's range and the shape of the standard pressurized hydrogen tank fitted to the demonstration vehicle could be engineered to maximise space.

ITM Power has also revealed a hydrogen home refuelling station, capable of producing the gas from water and electricity, which it says could ultimately offer drivers an alternative to conventional fuels and provide a new power source for homes and businesses. The station overcomes one of the fundamental stumbling blocks to a hydrogen economy – the lack of hydrogen refuelling infrastructure and utility supply network.

It has taken scientists and chemists at the company's Sheffield research base, currently Europe's largest electrolyser and fuel cell development centre, eight years to create a low-cost means of manufacturing hydrogen. Its patented electrolyser based refuelling station uses a unique low-cost polymer which dispenses with the need for expensive platinum and can be manufactured at 1 per cent of the cost of traditional membrane materials.

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About EnviroDaq

The EnviroDaq 100 Index is the first index for UK-listed environmental technology companies. It indexes the 100 largest UK-listed companies which derive at least 60% of their turnover from environmentally-focused goods and services. These include renewable energy; energy

efficiency equipment; renewable materials; waste management; water and waste water treatment; air pollution control equipment; environmental monitoring and instrumentation; and cleaner technology processes.

The EnviroDaq 100 website (<http://www.envirodaq.com>) provides detailed company information, including key financials, company background, broker recommendations and investment ratios. It includes a graphing feature which allows you to create flexible and customisable share graphs for each of the EnviroDaq component securities.

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