

April 2006

In a groundbreaking move, Warner Bros. Pictures and Participant Productions have made *Syriana*, a multi-layered political thriller about the global oil industry, the first major motion picture to be “climate neutral” by offsetting 100% of carbon dioxide emissions generated by the production during filming – an estimated 2,040 tons – with investments in renewable energy. Investments will be made in wind and methane power and, specifically, in projects that may not otherwise happen without this support.

France has only 6W of installed wind capacity per person, the lowest amongst the old EU-15 nations, compared with Denmark’s 588 W. In a move to correct this France has transposed the EU’s Renewable Directive into national law, obliging it to generate 21% of its power from renewable sources by 2010, this being approximately 10,000 MW of new renewable capacity. The law obliges the state run Electricite de France (EdF) to buy wind power at the initial fixed price of EUR 83 per MWh, dropping to EUR60-30 over a 15 - year period. This is a generous tariff that should allow returns on investment (ROI) of 20% for the 15-year contracts. Other countries in Europe tend to be 15% over 20 years. Further France has lifted the 12 MW ceiling on local wind farms and introduced development zones where wind projects could be fast - tracked.

The US Advanced Energy Initiative released as part of the recent budget and in an effort to kick an oil addiction, have targeted clean energy and transport. The focus has been placed on:

- Wind energy
- Zero emissions coal fire plants
- Clean safe nuclear energy
- Second generation technologies for producing ethanol from wood chip, stalks or switch grass
- Increasing research into battery technology, hybrid and electric cars plus pollution free cars that run on hydrogen.

US Retailer Walgreens has announced plans to install solar electric systems in 112 of its stores, 96 of which are in California and 16 inn New Jersey. Both states have large-scale programmes for the promotion of solar power.

The European Union on Renewable Energy Resources (EUFORES) has called for the implementation of an Energy Efficiency Watch to ensure co-ordination and exchange of best-practice in the field of energy efficiency within the EU. The group stated that large commercial opportunities exist for the EU to become the global technology leader in energy efficiency.

BP has announced that it will provide US\$9.4 million in funding for a study being conducted by the Energy Resource Institute in the south indian state of

Andhra Pradesh. The project will aim to plant 8000 hectares of Jatropha, enough to produce around 9.0 million litres of biodiesel per year. A full assessment will then be conducted to try and estimate the pros and cons of such a cultivation.

Besides having the best wind, wave and tidal resources in Europe, the UK has fallen to fourth place in the latest Renewable Energy Country Attractiveness index. The US and Spain's place at the top of the Long-Term Index remains unchallenged. Germany takes 3rd place as activity in Eastern Germany sustains development momentum. The UK drops to 4th place due to grid limitations in Scotland. India consolidates its position in 5th place whilst Italy jumps up the table to 6th. Australia is 15th, while New Zealand does not feature out of the twenty countries listed in the Ernst Young Index.

The South Jeolla province in South Korea has announced they are to start construction on the largest photovoltaic plant with a capacity of 17 MW. Germany had the previous largest plant under construction with a planned capacity of 10 MW.

Ocean Power Technologies will install its PowerBuoy as part of the South West Wave Hub being planned for the southwest of England. The Wave Hub is effectively a socket on the seabed, which will provide a test bed for marine generation technologies and allow them direct access to the grid. The OPT generator will have a capacity of 5 MW being made up of 30 PowerBuoy devices with each having a capacity of 150 up to 250 kW.

German wind turbine manufacture Nordex has announced its successful entry into the Italian market with a contract to supply turbines for a 21 MW wind farm on the island of Sardinia. Nordex has agreed a 44 million deal to supply 42.5 MW of turbines to two wind farms in Scotland. Both projects will help Scotland achieve its target of deriving 18% of the region's electricity from renewable energy sources by 2010.

Construction has now started on the £100 million pound biomass fired power plant near Lockerbie in Scotland. This had been reported as a trial in an earlier Energy NEWS item. However now the new plant will come on line in 2007 producing 44 MW at peak and provide electricity for approximately 77,000 households.

The Governor of New York State, George Pataki, has announced a series of measures designed to reduce the State's dependence on imported fuels and make it the centre of renewable energy and investment. The package includes the elimination of state taxes on renewable automotive fuels, the creation of renewable fuelling stations across the state, a tax credit and toll discounts for hybrid vehicles. The plan also establishes a new US\$24 million alternative fuel vehicle research lab as well as tax benefits for renewable energy companies that provide jobs.

The UK company SolarCentury explains why it has made the construction of "green" buildings in London a lot easier for builders. The company's "Complete Solar Roof" is the first integrated solar electric/solar thermal

product that can be installed like a regular roofing tile, says Martin. SolarCentury consider the ease of installation means that building contractors will be more willing to embrace solar technology.

Pennsylvania has opened the first of 11 of the facilities Agra, the biodiesel production company, is planning to construct. The facility produces up to 11 million litres of biodiesel per year, made largely from locally grown soya. The Commodity Credit Corporation subsidy payment effectively reduces the variable cost of soybean oil biodiesel production by \$1.49 to \$1.12 per gallon. The current price for petrol is US\$2.29 per gallon.

By 2008 all large vehicles operating in Greater London must meet the minimum Euro III particular and nitrous emission standards or face a fine of up to £200 per day to drive in the city.

A bill tabled in the UK's upper house has called on the government to support the development of so-called 'intelligent devices' – appliances that can interact with the grid and adjust their power usage accordingly.

Two of the world's most important vegetable oil production companies will be establishing two separate biodiesel refineries in Singapore. German based Peter Gremer GmbH is planning to construct a 200,000-tonne-per-year plant while Wilmar Holdings and Archer Daniels Midland are looking to build 150,000-tonne-per-year facility. The total investment is expected to be around US\$80 million.

Seven north-eastern US states have announced an agreement to implement a 'Regional Greenhouse gas initiative', which will regulate carbon dioxide emissions from fossil fuelled power plants in those states. The initiative is typical of a strong state and regional approach in the US to tackle climate change, despite the countries unwillingness to co-operate with the Kyoto Protocol.

China needs 40GW, (equal to two-thirds the total installed capacity of the UK), of new plant every year if it is to meet the massive demand for power by the businesses and consumers in China over the next 15 years.