

ENERGY NEWS REPORT

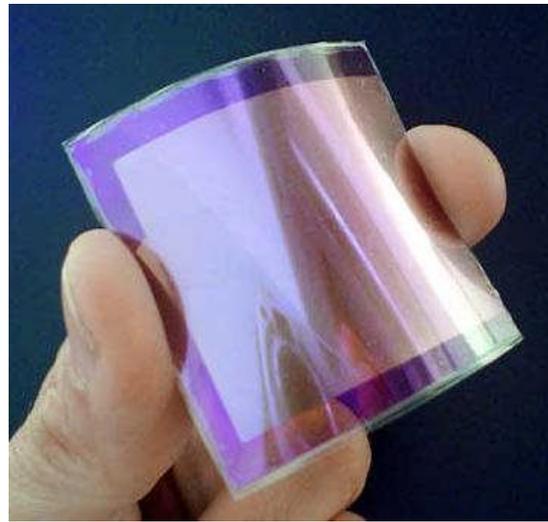
October 2007

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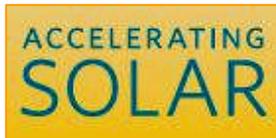


BUSINESS NEWS

Thin Film Solar Wearing Thin - Some Taiwan-based players who are developing thin-film solar cells are considering quitting the segment because of the high technological barrier, difficulties in sourcing funding and marketing concerns, according to market sources. So far, nine Taiwan-based companies claim to be developing thin-film solar cells. But there are huge investments required for R&D needed to get conversion efficiency beyond the current 5-8%. Once the costs are recognized, some of the 9 companies are considering quitting that segment or look into selling their thin-film units. Motech Industries said if the conversion efficiency of thin-film solar cells stays at the current levels, they would be products that no one would want. Motech is not developing thin-film solar cells because of the low conversion and they are difficult to volume produce and to market. Kaneka, a Japanese solar company, recently warned that fellow industry players could hardly survive the race with crystalline silicon-based solar cell makers if they cannot achieve a power conversion rate of 12-13%. *While solar has been "same old" for decades, it's really too early to tell how some of the newer approaches will work out. So don't count out thin film, or plastic film, just yet.*



SunFab Solar R&D in Germany - Applied Materials is moving quickly with an ambitious solar technology development plan and will open its SunFab Solar Technology Center in Alzenau, Germany. The 2,0000m² center will serve as Applied's principal solar research and development center and includes PECVD and ATON PVD systems, laser tools and fab automation software. There is a complete sequence of equipment representative of the Applied SunFab Thin Film Line for large-volume manufacturing of solar circuits. Since launching its plan to enter the photovoltaic market last year, Applied has made a number of acquisitions and moves to stake a solid place in the fast-growing renewable energy realm. Source: EDN



SOLAR ENERGY



Solar Economics - SunPower makes and installs solar photovoltaic panels for businesses and homes, expects to **generate revenues of more**

than \$1-billion and profits of about \$160-million next year. Its customers include Wal-Mart, Johnson & Johnson, Microsoft, Macy's, Tiffany, FedEx, Toyota, Target, Lowe's, the governor of Colorado (who has solar panels on the roof of his mansion), and the Department of Defense (which uses solar energy to power Nellis Air Force Base in Nevada). Since going public two years ago, **SunPower's stock price** has grown by about **450%**, from \$18 a share to \$82 when FORTUNE went to press, giving the company a market capitalization of nearly \$7 billion. The Holy Grail of solar is a concept called "grid parity" meaning that it costs no more to generate your own solar energy than it does to buy electricity retail, off the grid and there's smart money betting that solar will get there soon. In the case of SunPower, that money comes from a legendary Silicon Valley character named T.J. Rodgers.



While the solar industry remains small, **less than 1%** of the electricity in the US, it's exploding. The market for solar photovoltaic (PV) panels, which use cells made of crystalline silicon to turn sunlight into electricity, has grown by an average of 42% annually since 2002. Industry leaders, most based in Japan and Germany, are ramping up production, as are Chinese manufacturers like Suntech. Big companies, including BP, General Electric, Mitsubishi, Sanyo, Sharp, and Shell, all want to grow their solar businesses. In Silicon Valley, meanwhile, venture capital investors like John Doerr and Vinod Khosla, entrepreneur Bill Gross, and Google founders Larry Page and Sergey Brin are backing startups that claim they will revolutionize the industry. The market value of the world's publicly traded solar companies stood at about \$1-billion in 2004. Now, after a slew of IPOs, they are worth about \$71-billion. If the U.S. enacts legislation to counter global warming and it adds to the cost of making electricity from coal, natural gas, and oil, solar energy will be among the winners and the opportunity for solar companies will be tremendous. SunPower stands out for several reasons. It's arguably the leading U.S. solar company, its solar cells are currently the industry's most efficient, and it is vertically integrated, meaning that it makes both its solar cells and the panels on which they are mounted, and designs and installs systems for customers. Little known outside the industry, the company wants to build a consumer brand. But there's plenty of competition. The solar PV industry remains fragmented, with as many as 100 manufacturers working to drive down costs.

Sharp is the leading one, followed by a German firm called Q-Cells, Kyocera, Suntech, and Sanyo, with SunPower ranked tenth.



But it still **costs too much to make electricity from the sun**. Prices vary widely, but it costs about \$0.25 to \$0.35 kwh-h of electricity from solar while retail electricity average \$0.11 in the U.S. but can be twice that in parts of California, New York, and Connecticut. Today's biggest markets for solar PV are Germany and Japan, with the former accounting

for more than 50% of global demand. That's not because it's always sunny in Düsseldorf; it's because government policy requires utilities to pay above-market prices for solar-generated electricity. Solar PV, even without subsidies, could reach grid parity in much of the U.S. in four to eight years. No technological breakthroughs are required to get there - it's a matter of incremental improvements. But when you take federal and state subsidies into account, solar is already competitive. SunPower offers some commercial customers a deal that sounds too good to be true no upfront costs, instant savings on their electricity bills, and long-term price stability. That's because of a financing mechanism known as a power purchase agreement, or PPA, that's increasingly popular in the solar business. Instead of making a capital investment of \$1-million or more in solar panels, a big customer like Wal-Mart can sign a ten- or 20-year agreement to buy at a fixed price electricity generated by the solar panels on its roof. Ownership of the solar installation is retained by SunPower or sold to an institutional investor. No wonder retail customers are clamoring for more: When **Wal-Mart** entered into PPAs with SunPower, BP Solar, and Sun Edison covering a total of **22 sites** in California and Hawaii, David Ozment, Wal-Mart's director of energy, said the retailer would begin saving money "as soon as the first day of operation. But the more immediate task for SunPower and its rivals is to drive down costs so that solar energy can compete with fossil fuels and nuclear power without subsidies. SunPower says it can cut its costs in half by 2012, getting the price of solar down to about 12-cents a kilowatt-hour reaching grid parity with much of the nation. Source: Semiconductor International.



Spanish Solar - Photovoltaic solar power plants are springing up throughout Spain,



capitalizing on special tariffs for renewable energies and exceeding the government's expectations. Spain will be over its target

for 2010 of 400 megawatts (MW) of photovoltaic (PV) power by next summer, possibly having somewhere between 800 MW and 1,200 MW with the current momentum. Feed-in tariffs, initiated in 2004 to reach the European Union's goal of increasing renewable energy use to 20% by 2020, guarantee energy produced from renewable resources will be bought at three times the normal market value for 25 years. The utility is required to provide a connection point to the grid. The reason there are incentives is to reduce the cost since PV is still too costly. Spain has factories, but it's still very limited capacity - every factory can provide 40 or 50 MW a year... for another 900 MW they need a lot of supply. All factors included, PV solar plants can cost about \$8.5-million per megawatt, about 30% more than solar thermal power and roughly 5-times as expensive as a coal-fired plant. Spain's current renewable energy consumption is 19% with wind and

hydroelectric power making up the bulk. At 1,200 MW, PV power would still only account for 0.4% of total power. Spain's Ministry of Industry estimates that at the current production rate it will have 200,000 new jobs by 2010. Investors and politicians are optimistic that in six years the incentives will no longer be necessary. Costs are expected to fall as competition spawns cheaper, more efficient solar technologies allowing firms in the sector to sustain themselves at normal market prices, they say. Industry Ministry officials said that once there are 1,200 MW of PV solar power, the tariff rate would be reduced by 5 percent each year. Source: Reuter.

Taiwan's Photovoltaic - The industry is expected to grow at brisk rate in the coming years, with its output value forecast at \$4.6-billion in 2010, quadruple this year's projected value of \$1.2-billion according to the minister of economic affairs, yesterday. The industry's projected output value this year is 88.7% growth over 2006. The hefty growth is in line with the rapid growth of the global photovoltaic industry, whose output grew at annual clip of 30-40% during the 2000-2006 period, hitting \$36.8-billion in 2006, and is expected to continue advancing 40-60% annually during 2006-2010. Taiwan excels especially in the solar-cell industry, whose output is expected to top 300-MW this year, up from 2006's 177.5-MW, with its global ranking advancing to fourth place, from 2006's fifth place. Taiwan's solar-cell industry will ascend to the third place worldwide and has the potential to become No. 2 or even No.1, as its solid semiconductor industry and TFT-LCD industry can lend it strong support, respectively, for development in both the traditional silicon-based solar-cell production and the next-generation thin-film solar-cell production. In fact, since 1997, the government has invested \$21-million in solar cell R&D. In order to speed up development of the solar-cell industry, the government plans to enact the "Statute for Development of Renewable Energy," aiming to boost the number of domestic households with solar-cell device to over 100,000 by 2015, with total installed capacity of 320-MW, up from 2004's 0.5-MW. The government will subsidize every municipality about \$1-million next year for setup of pilot photovoltaic buildings, to expand the domestic demand. Source: CENS



Neo Solar - Taiwanese solar-cell maker Neo Solar Power Corp. recently signed a contract to supply European solar module maker Scheuten Solar for \$151-million worth of cells over the next three years beginning in 2008. The Netherlands-headquartered Scheuten is the oldest solar-energy company in Europe; founded in 1950. Scheuten now operates branches in Germany, Belgium, Spain, Italy, France, and South Korea. Neo Solar manufacturing has been recognized for quality and is first-tier. Neo Solar has unveiled a high-performance technology, codenamed "Super Cell," which claims over 16% conversion; present average is 15.4% on polycrystalline-based cells. Neo Solar began

volume production late last year with a line capable of turning out 30-MW of cells a year and is installing a second production line that is ready for mass production. In addition, the company plans to set up one line by the end of this year and plans to move this line into commercial production early next year. Output will triple after the two new lines enter into production. They expect to hit at least 570-megawatts by 2011, ranking it among the world's top three solar cell makers [*but everyone else is expanding*]. Source: CENS.

Improved Solar Cell Efficiency - IMEC claims a thin-wafer silicon solar cell manufacturing process that yields an efficiency of **17.4%** and expects to reach 20%. The i-PERC process uses silicon layers with a thickness of less than 180-micron, in which the classical aluminum back surface field which covers the whole rear of the solar cell is passivated by a dielectric stack. In this stack, the contact openings can be realized by laser ablation, the IMEC researchers explain. Subsequently, an Al contact layer is evaporated which is then fired in a belt-line furnace to create local back-surface fields. Further fine-tuning brings the efficiency to 17.4 percent. This was achieved on thin large-area multi-crystalline silicon substrates using screen printing to implement the contacts. While the iPERC process is described as industrially applicable, the researchers have successfully proved that the efficiency can even be driven up further. In lab trials, an efficiency of 19.4 percent was achieved. Source: EETimes.



Semi-transparent solar facade at IMEC - Belgium (Courtesy: IMEC, Belgium)

World's Largest Solar Complex



Renewable Energy (Oslo, Norway) will build a \$4.3-billion solar manufacturing complex in Singapore that will be the largest in the world. The complex will be an integrated facility that will produce solar wafers, cells and modules, which are parts of solar panels, and will also conduct research and development. It will have the potential of becoming the world's largest complex of its kind according to the company. When fully developed, the manufacturing complex could hold a production capacity of up to 1.5-gigawatts annually, compared to a total global industry output of 2-gigawatts last year. The company signed an agreement with Singapore's Economic Development Board to commit to investment to build the plant. The investment will be over five years, and the plant, located in the western part of Singapore, is expected to begin production by 2010. The plant is expected to employ 3,000 workers. This project will catapult Singapore into the solar industry world map and be a powerful boost to accelerate the development of the new solar industry in Singapore.



SOLAR PRODUCTS

Outside Lighting - Energy density, efficiency, lifetime, and style are major concerns for solar voltaic cell applications, especially since market demand depends on practicality and aesthetics. *[But, unlike windmills, most don't object to the rather unobtrusive solar arrays]*. Solar Outdoor Lighting (Palm City, FL) designs lights for transit and municipal applications, particularly in rural or developing areas that may not have access to a power grid or in instances where trenching costs are prohibitive for a connection to the grid. A fairly efficient panel is needed for streetlight to keep the size of the panel down, and those tend to be the polysilicon rather than the thin film, which are less efficient. The thin film are thinner and some wavelengths travel through without being absorbed completely, thus, lower efficiency, but the unit is less intrusive. Source: Design News.



Solar Chargers - Voltaic Systems (New York) has developed backpacks and bags with integrated solar panels used to charge personal electronic devices. The bags use a monocrystalline cell to charge a lithium-ion battery, which then distributes the charge to an iPod or cell phone and to a laptop. A single cell is approximately 184 mm by 88 mm, has a peak voltage of 10.2V, a peak current of 133 mA and a peak watt rating of 1.36W. The average time to charge a cell phone in direct sunlight is 4-6 hours and to completely charge the battery would take 8-10 hours.



SOLAR MATERIALS

More Solar Si - After launching a solar-grade silicon feedstock material derived from metallurgical silicon last year, Dow Corning anticipates that **capacity to triple** to 3,000 tons per year this year. Dow Corning manufactures PV 1101 silicon in Brazil with a current capacity of 1,000 tons per year. The amount will expand to 3,000 tons per year by the end of 2007 as supply has been continuously falling short of demand ever since the product was launched in September 2006. PV 1101 can help meet polysilicon supply shortfalls since it can be mixed with polysilicon or other materials. PV 1101 is an initial and immediate material that Dow Corning developed to meet short-term demand, but will continue developing

DOW CORNING

new materials with a more complex mixture. Dow Corning supports the aggressive polysilicon expansion plan of Hemlock Semiconductor, of which it is a shareholder. The company is now developing a new technology that utilizes silicone to improve the power efficiency of solar modules and per watt production cost. Source: DigiTimes.

Solar Paste - Ferro Corp will begin construction in Q4-07 on a 16,500m² facility in Suzhou, China, where it will produce **aluminum pastes** for the Southeast Asia **solar cell manufacturing** market. The new site is expected to begin production in the Q3-08 and will include



expansion capacity to accommodate expected growth of the company's business positions in China and Asia for products such as silver pastes, surface technology products, multi-layer materials, electronic glass, and precious metal powders. The production capability will be complemented by the company's existing local applications laboratories in Suzhou and in Tsukuba, Japan, which serve customers with custom paste production, technical support and application problem solving. The solar paste production site will adjoin other Ferro facilities in the Suzhou Industrial Park, where the company currently produces frits and colors used in tile and porcelain enamel coatings and electrolytes used in the manufacture of lithium batteries and other specialty chemical products. Source: Tech On

FUEL CELLS

Fuel Cell Player - Toshiba prototyped a portable media player incorporating a direct methanol fuel cell and exhibited it at CEATEC Japan 2007 as a reference presentation. The company has prototyped similar players thus far, but they have a player block and a fuel cell block provided separately from each other. In contrast, the player and fuel cell blocks are integrated in the latest prototype. The prototype came close to becoming an actual product, but launch will



be around 2008. The fuel used in the cell is nearly 100% methanol. The player has an indicator that enables users to check the remaining amount of methanol fuel, although the capacity of the internal fuel tank is not specified. Users can fill the fuel tank from the side face of the console. The player has the air electrode of the fuel cell on the backside of the console. It does not have an outlet or other means for discharging the vapor that is generated, but rather it lets the vapor evaporate naturally, said the company. The player has a built-in 1seg tuner and allows continuous 1seg playback for about 10 hours. Toshiba also exhibited a fuel cartridge, a prototype notebook computer equipped with a fuel cell, and other items in addition to the portable media player. Source: TechOn.

SOLAR PANEL MANUFACTURING



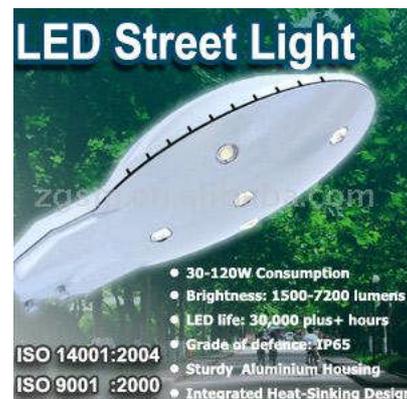
More Solar Lines - Applied Materials expects the market for solar power to grow significantly over the coming years as costs in production decline. Tight supplies of polysilicon will ease from this year, helping growth to pick

up. Applied is the world's largest maker of chip making equipment, but sees solar energy as a big growth area. They predict a growth rate of 25% to 30% over the next 3 - 5 years. Applied also produces equipment to make solar panels used to power such things as streetlights or water heaters. It has contracts to deliver production lines to eight customers. In August, it raised its estimate of contracts to be signed in its solar business in 2007 to more than \$600-million from \$400-million, amid growing demand for alternative-energy sources as oil prices soar. Applied Materials' production of solar-equipment lines is also growing with the introduction of manufacturing lines that produce thin-film silicon solar modules that can reduce costs of large installations by more than 20%. Based on a 5% decrease in production cost and price, seen already over the last 15 years and which, and that should hold for the next 15 to 20 years, that will bring today's \$0.20 to \$0.40/kilowatt hour for a household to \$0.05 - \$0.10/kwh and that's comparable to clean-coal large-plant production cost of electricity. For the last 2-years, the limiting factor for the growth has been limited polysilicon, but the big chemical companies have decided to invest in our industry. So later this year and next year, there will be plenty of silicon coming along. Top players in the two markets include Motech Industries, E-Ton Solar, Suntech Power and JA Solar Holdings. Source: Reuters.



LIGHTING

LED Streetlights - *It had to happen sooner or later, LED white lights. Traffic lights converted ages ago, but they did not require the higher intensity, and low maintenance was the more important attribute, not efficiency.* Now, Ann Arbor, MI will be installing light-emitting diodes, or LEDs, to replace about 1,400 streetlights. The eco-friendly city about 30 miles west of Detroit says it will be the nation's first to convert all downtown street lights to LED technology, which uses less than half the energy of traditional bulbs and could save the community \$100,000 a year. LEDs pay for themselves in 4-years, according to the mayor. They provide the same light and will last 10 years; old ones are replaced every two years. Lighting consumes 22% of the electricity produced in the United States, according to the U.S. Department of Energy, and widespread use of LED technology could cut consumption in half. The two-year project is being funded by a \$630,000 grant from the city's Downtown Development Authority. Durham, N.C.-based Cree is making the components for Ann Arbor's new lights. Source: Associated Press



Better OLED Lighting - *While white LED lighting is already being deployed, the technology still can improve.* Universal Display Corporation (NJ), who developed



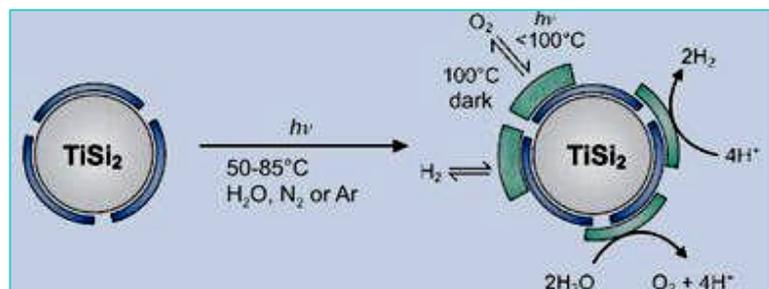
PHOLED™ phosphorescent OLED technology, has been awarded a **\$750,000** SBIR Phase II grant from the U.S. Department of Energy (**DOE**) under the DOE’s solid-state lighting program. The Phase II work will focus on the demonstration of a simpler white OLED design that should **reduce manufacturing costs**, without compromising performance. The new white OLED design will use two PHOLED emitters that will be specially designed to emit broadly so that the color spectrum can be optimally covered. The device is targeted to have a high color-rendering index (CRI), an important metric for lighting applications, as well as excellent power efficiency. White OLED lighting may be at the forefront of potential solutions that the DOE believes may help stem the tide of energy consumption and save billions of dollars in energy costs. White OLEDs also offer superior lighting and design characteristics, based on their color tunability, emission uniformity and novel form factor.

Currently, **25% of U.S. energy consumption is lighting** and now a focus of industries and lawmakers looking to reduce the global carbon footprint. With support from the DOE, Universal Display has demonstrated record-breaking power efficiencies using its PHOLED technology, which is up to four times more efficient than what was previously considered possible. Such energy efficiency gains have significantly enhanced the potential for OLED lighting to reduce energy consumption, greenhouse gas emissions and lighting costs worldwide. Universal Display is working with Princeton University, the University of Southern California, the University of Michigan, PPG Industries, DuPont Displays, Inc., Konica Minolta Technology Center, Inc., LG.Philips LCD Co., Ltd., Samsung SDI Co., Seiko Epson Corporation, Sony Corporation, Tohoku Pioneer Corporation and Toyota Industries Corporation. Universal Display currently owns or has exclusive, co-exclusive or sole license rights with respect to more than 800 issued and pending patents worldwide. Source: their website.



HYDROGEN

Solar H₂O to H₂ - Scientists have developed a new catalyst that splits water using sunlight and stores the hydrogen and oxygen produced. A team at the Max Planck Institute for Bioinorganic Chemistry (Germany) found that titanium disilicide (TiSi₂) could split water using a photocatalytic process. The semiconductor was also able to separate and store the hydrogen and oxygen released -



overcoming a problem with earlier methods which released a highly flammable mix of the two gases. The key to how this catalyst works lies in the thin layers of titanium oxide (TiO₂) and silicon oxide (SiO₂) that form on the surface of the TiSi₂. These layers protect the catalyst from further corrosion but also give rise to catalytically active centers that enable the reaction to take place. The oxide layers absorb the reaction products, hydrogen and oxygen are absorbed onto the surface and hold it there. Although storage space is limited, the two gases can be released in different ways. Hydrogen can be released when the catalyst is cooled to ambient temperature, but oxygen is only released when the catalyst is heated to 100°C in the dark. Semiconductors suitable for use as photocatalysts have been difficult to obtain, with unfavorable light-absorption characteristics, or decompose during the reaction. However, TiSi₂ absorbs light across a broad spectrum and is also cheap and readily available. Efficient large-scale production of H₂ and possibly O₂ may require a different combination of elements or the use of large surfaces at elevated temperatures. No timetable on commercialization, but a company is being formed. Source: RSC.

OSMOTIC

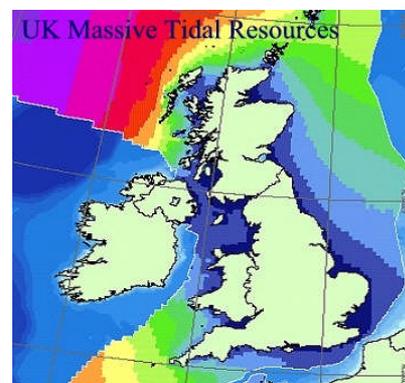
First Osmotic Power Plant - *This is a new one for the list, and it sounds feasible.*



Norway plans to build the world's first osmotic power plant, a renewable energy source that uses the pressure built up between seawater and fresh water. Project is headed by the Norwegian energy group Statkraft. Osmotic power is based on the natural process of osmosis. In an osmotic power plant, seawater and fresh water are separated by a membrane. The seawater draws the fresh water through the membrane, thereby increasing the pressure on the seawater side. The increased pressure is used to produce power with a turbine. Osmotic power is a very promising technology that has not been adopted until now. It is clean and emission-free, and could become competitive in the future. The technology could produce some 1,600 terawatt hours (TWh) worldwide and that is equivalent to 13 times the annual hydroelectric production of Norway; today, the country covers almost all of its energy needs with hydropower. The potential for osmotic power in Europe is estimated at around 200 TWh according to Statkraft. The small prototype of the osmotic power plant is being built in Hurum in southeastern Norway and could produce between two and four kilowatt-hours (KWh). Construction is scheduled to be completed next year. Source: Agence France-Press.

TIDAL

More UK Tidal - The UK is looking to the sea for some of its future power. The plans for a huge wave-powered electricity generation scheme are getting encouragement from government leaders. Estimates are that 5% of the UK's entire power needs could be met with single tidal plant. But, there are always detractors who worry that one of the most ambitious civil engineering challenges in the world would



significantly affect the visual and marine environment more than 30 miles around it and have mixed long term economic and ecological impacts. At least 10% of UK's power needs could be met with tidal energy. The Severn project is expected to cost as much as \$40-billion and would include 200 turbines to convert the tidal energy. The Severn is a good location because its geography creates high tides and low tides. The power is generated by trapping high tides and then letting the ocean water flow back down to the low tide level through generating turbines. Source: ZD Net.

CONVENTIONAL;

More Coal More CO₂ - China's coal production will likely exceed 2.5-billion tons (to generate over 9-billion tons of CO₂) this year as the nation builds large coal production bases and restructure small coalmines to raise the coal output by 400-million tons between 2006 and 2010. China's coal output has nearly doubled to 2.38 billion tons in 2006 from 1.25 billion tons in 2000. The annual output growth of 11.5% on average has helped to meet the increasing energy demand of China's double-digit economic growth. China, the world's second largest energy consumer only after the U.S., heavily relies on coal for energy, which makes up around 70% of the country's total consumption. There are 219 coalmines that have been rated as safe and highly efficient. Their combined approved production capacity reaches 702-million tons, 34.59% of the country's total. Source: Xinhua.



China Sucks Up Oil Faster - China's net imports of crude oil in the first 8-months rose 18.1% from the same period last year to 108.2-million tons, according to latest customs figures. From January to August, China imported 110.4-million tons of crude oil and exported 2.18-million tons, said the General Administration of Customs (GAC). Domestic output of crude oil reached 124.7-million tons in the period, up 1.3% year on year, which was 0.4% lower than the rise for the whole of last year. Meanwhile, the country's imports of refined oil reached 24.28-million tons, exceeding exports by 14 million tons, compared with a gap of 17.5 million tons in the same period of last year. In the first 8-months, China produced 39.9-million tons of gasoline, up 8.8%, 7.68 million tons of kerosene, up 17.5% and 81.5-million tons of diesel oil, up 6.3%. Source: Xinhua

STORAGE

Li-Ion for Cars - Sanyo Electric exhibited a Li-ion rechargeable battery module for hybrid vehicles and a Li-ion rechargeable battery cell for plug-in hybrid vehicles at the Tokyo Motor Show this month. The battery module for hybrid vehicles measures 800 × 322 × 120-mm and weighs 37.5kg. Using 72 cells connected in series and the module



generates a voltage of 266V. The company did not reveal the electric power capacity and output of the module. But assuming that the current capacity of the cell is 6-6.5Ah, which is on par with that of the existing Ni-MH rechargeable batteries designed for hybrid vehicles, the power capacity is expected to reach approximately 1.6-1.7kWh. The cell has achieved an energy density of 90Wh/kg and output density of 3,500W/kg and this allows an input density of 3,300W/kg even at the time of regeneration. The company also exhibited a Li-ion rechargeable battery cell for plug-in hybrid vehicles at its exhibition booth. The cell has a current capacity of 20Ah. Source: TechOn.

WIND



While wind is the most cost-effective renewable energy, today, it has progressed more slowly than “sexy” solar, for many reasons, but #1 is probably esthetics. Aerowatt is in talks with Mauritius to invest about \$100-million in a wind farm that could produce 5% of the Indian Ocean island's electricity needs. Some 40 windmills generating 1-MW each could be up and running as early as the end of next year. Mauritius seems like a logical choice to since it's an island with energy needs, concerns about energy independence, and it has wind. The company is not worried that the cyclone-prone island might not be the safest place for 40 windmills; the company had wide experience of projects in several overseas French territories, including Reunion, close to Mauritius. Source: Reuters.

