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# Solgløtt

Nyhetsbrev fra  
Norsk solenergiforening  
Årg. 7 Nr. 8 Aug 2005

## Ny termisk solfanger produsert i Norge

"Aktiv Sol Varme" er en ny termisk solfanger for lavtemperatur varmeanlegg. Absorbatoren er laget i aluminium, rammen er produsert i tre, og dekkplaten er av polykarbonat. Rent vann blir brukt som varmemedium, og solfangeranlegget er selvdrenerende når det er for liten solinnstråling til å kunne hente ut en energigevinst.



Konstruksjonen er en ny, teknisk løsning som er patentsøkt.

Aktiv Sol Varme blir laget i moduler, 2400mm (bredde) x 600mm (lengde) x 70mm (tykkelse) og veier 16,5 kg. Hver modul har 1.2 kvm aktiv absorbator. Inntil 10 moduler kan kobles sammen og dekket av en polykarbonatplate.

Aktiv Sol Varme blir serieprodusert i mindre skala i Re kommune. Salget skjer inntil videre direkte fra produsent gjennom nettstedet: [www.norsksolfangerproduksjon.no](http://www.norsksolfangerproduksjon.no). Dette produktet er ideelt for alle som ønsker å gjøre-det-selv.

Mer info: [www.norsksolfangerproduksjon.no](http://www.norsksolfangerproduksjon.no)

## Ekstra tilskudd til "Karakter" som solhus

Dobbelt uttelling for heldig boligkjøper i Vestfold; Den første som bygger det prisbelønte huset "Karakter" fra Systemhus som solhus vil få 60 000 kroner i tilskudd fra Enova, og ytterligere 30 000 kroner fra henholdsvis Perpetum og Skagerak Energi. Karakter er Norges første

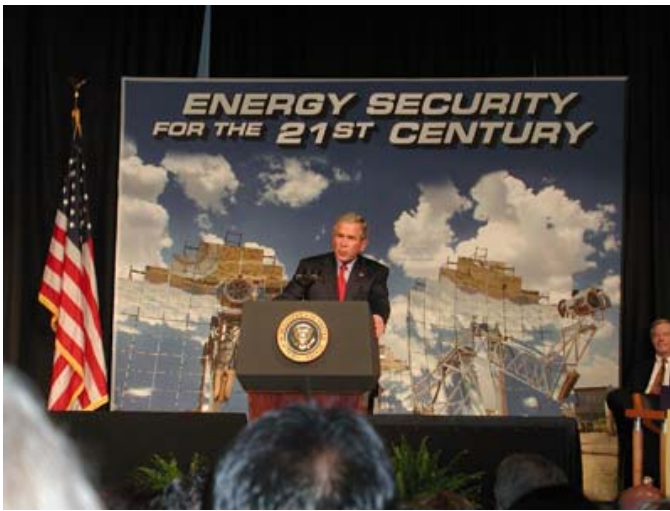
ferdighus med integrert solvarmesystem. Store deler av sørveggen på huset kles med solpaneler hvor vann sirkulerer og siden nyttes til oppvarming og varmtvann i huset. Solarnor leverer de varmeproduserende solfangerne som har oppnådd stor internasjonal anerkjennelse. Dette må være drømmehuset for de virkelig miljøbevisste som vil ha alternative løsninger. Gratis energi, fleksibilitet, komfort og estetikk er sydd sammen til en sunn og økologisk enhet. Hustypen "Karakter" er tegnet om for å beholde de samme praktiske og fleksible løsningene innvendig når store deler av sørveggen nyttes til solpaneler. Dette var en medvirkende årsak til at vi fikk Boligprodusentenes Nyskapspris i 2003. Sivilarkitekt MNAL Bjørn Larsen har tilpasset vindusløsningene slik at tapet av lys fra kortveggen med solpaneler ikke blir påfallende, forteller markedssjef i Systemhus Norge, Anders Paulsen.

Mer info:

[http://www.systemhus.no/templates/Page\\_2555.aspx](http://www.systemhus.no/templates/Page_2555.aspx)

## USA: President Bush Signs Pro-Solar Energy Bill

(Washington, DC) - "The Solar Energy Industries Association (SEIA) applauds President Bush and the Congress for producing the strongest national policy for solar power in two decades," said SEIA President Rhone Resch.



"The President toured the National Solar Thermal Test Facility at Sandia National Laboratories today, underscoring the message that Washington wants solar power to play a significant role in our nation's future energy supply. The solar tax provisions in this Energy Bill will help the U.S. solar industry to meet that challenge.

For the first time since 1985, homeowners who install solar energy systems will receive a tax credit worth 30% of the system cost, capped at \$2,000. Businesses that purchase solar equipment will also receive a credit worth 30% of the system cost. These tax credits will bring solar power costs over the tipping point in many areas of the country, and the United States has the best solar resources of any country in the industrialized world."

Mer info:  
<http://www.seia.org/solarnews.php?id=2109>:  
[http://www.stirlingenergy.com/breaking\\_news\\_photos.htm](http://www.stirlingenergy.com/breaking_news_photos.htm)

#### USA: Megawatt Solar Dish Stirling Contract

Southern California Edison and Stirling Energy Systems have signed an agreement to build a one Megawatt test facility using 40 of the company's 37-foot-diameter dish assemblies. The 20-year power purchase agreement, which is subject to California Public Utilities Commission approval, also calls for a potential 500 Megawatt solar project 70 miles northeast of Los Angeles using Stirling Energy Systems' dish technology. The agreement includes an option to expand the project to 850 MW. If implemented in full, the project would result in construction of a massive, 4,500-acre solar generating station in Southern California calling for 20,000-dish arrays constructed near Victorville, California during a four-year period.

Mer info:  
<http://www.solarbuzz.com/News/NewsNAPR537.htm>

#### Spain: Nine Megawatts in Turnkey PV Projects

ATERSA has recently signed several contracts with different clients for setting up a series of photovoltaic plants with solar tracking in Almeria, Huelva, Cuenca, Toledo and Las Palmas (Gran Canaria), amounting to 9MWp. The basic systems will be 125 KWp ones, connected to a 100-kVA inverter.

The photovoltaic plants are equipped with an East-West tracking system that improves annual production. The solar trackers are of the single axis type, especially designed to occupy the same surface area as a fixed installation, a substantial advantage over conventional trackers because of the space saving involved. Likewise, one single motor will move each set of 125 kW.

Mer info:  
<http://www.solarbuzz.com/News/NewsEUPR220.htm>

#### China: Rooftop Plan for Solar Power Production

SHANGHAI: A government-funded project, to turn the city's roofs into sites for solar-energy production, will soon be submitted for final approval.

If the project becomes operational, 100,000 of the 6 million roofs in Shanghai, a city plagued by chronic power shortages, will be used to supply solar energy to local residents, revealed Professor Cui Rongqiang, director of the Institute of Solar Energy at Shanghai Jiaotong University and the head of the project, over the weekend.

Mer info:

[http://www2.chinadaily.com.cn/english/doc/2005-08/08/content\\_467072.htm](http://www2.chinadaily.com.cn/english/doc/2005-08/08/content_467072.htm)

USA: GT Equipment Technologies Research Awards to Focus on Production Process Advances

GT Equipment Technologies a company that produces semi-custom specialty equipment for the photovoltaic and semiconductor industries, said it has won three technical grants from the U.S. Government totaling nearly \$1 million.

Two of the grants have been awarded under the Small Business Innovation Research Program (SBIR) and one grant under the Small Business Technology Transfer Program (STTR).

The first SBIR grant (Phase 1) will focus on a novel low cost process for production of crystalline silicon for wafers that will enable higher efficiency and cost savings in solar cell production, which is key to the continued growth of the photovoltaic industry.

A second SBIR grant (Phase 2) will investigate the production of silicon wafers for solar cells directly from metallurgical grade silicon material instead of more expensive solar grade silicon. This project will lead to a new U.S.-based technology for the photovoltaic industry where solar grade silicon is in short supply.

Mer info:

<http://www.solarbuzz.com/News/NewsNACO344.htm>

Israel: TiO<sub>2</sub> start up raises funds

Dye-sensitized titanium-dioxide (TiO<sub>2</sub>) solar cell start up Orionsolar Ltd. reported second-round financing of \$750,000 in mid-May through the New York investment group 21 Ventures LLC. But the Israeli-based joint venture declined to say when – or if – it had been licensed to use the technology by its inventor and patent holder, Michael Graetzel. CEO David Wainmann would only confirm that the company, which raised \$500,000 in the first round, is not seeking any more funding at the moment.



Orionsolar, founded in 2003, claims it can bring the production cost for the cells to below 40 euro cents (51.9¢) per W by »revising the concept and design« of the cell. Wainmann gave no details, saying only that the business plan called for non-vacuum production lines costing less than €2 million (\$2.6 million) apiece. The company has grandiose production plans which call for four separate 15 MW capacity lines in different locations, not necessarily in Israel. Commercial production would not start before the end of 2006, Wainmann says.

Mer info: [http://www.photon-magazine.com/news/news\\_2005-05%20af%20sn%20Orionsolar%20Financing.htm](http://www.photon-magazine.com/news/news_2005-05%20af%20sn%20Orionsolar%20Financing.htm)

Israel: Researchers produce hydrogen from sunlight

The Weizmann Institute of Science is using its concentrating solar facility to produce hydrogen fuel from direct sunlight. The project involves collaboration with the Swiss Federal Institute of Technology, the Paul Scherrer Institute in Switzerland, Institut de Science et de Genie des Materiaux et Procèdes - Centre National de la Recherche Scientifique in France, and ScanArc Plasma Technologies in Sweden. The project is supported by the European Union's FP5 program.

The technology uses the 64 concentrating mirrors at Weizmann's facility in Rehovot to heat zinc oxide to 1,200 degrees Celcius in the presence of wood charcoal. The process splits the ore, releasing oxygen and creating gaseous zinc, which then is condensed to a powder.

The zinc powder will react with water to yield hydrogen for use as a fuel, and the zinc oxide is recycled back to zinc

in the solar plant. In recent experiments, the 300 kW installation produced 45 kg of zinc powder from zinc oxide in one hour, the centre explains.

Hydrogen is expected to become a pollution-free fuel of the future, but nearly all current hydrogen is produced by expensive processes that require combustion of fossil fuels, and there are storage and transportation constraints. This new process creates a storable intermediate energy source from metal ore and the “innovative solar technology may offer a green solution to the production of hydrogen fuel,” says scientists who released the test results at the Solar World Congress of the International Solar Energy Society in Florida.

Mer info:

<http://www.sparkdata.co.uk/refocus/showdoc.asp?docid=40244693&accnum=1&topics=>

#### Australia: `Brain-Sport` -World Solar Challenge

The eighth World Solar Challenge will depart from the Australian city of Darwin on September 25, and travel 3,021 km across the continent to Adelaide in cars powered by the sun.



Mer info:

<http://www.sparkdata.co.uk/refocus/showdoc.asp?docid=66968936&accnum=1&topics=>

#### Solenergi mot glatte vegger

Britene starter i høst forsøk med varme i vegbanen. Solen skal være energikilden for forsøkene. Om de viser seg vellykkede kan britene få varmerør på kortere strekninger som er spesielt utsatt for isdannelse om vinteren, Teknikken skal også være aktuell å benytte på rullebaner.



Teknikken går ut på å samle solvarmen fra asfaltdekket for å lede denne ned i grunnen og lagre varmen der for vinterbruk. Selskapet Icax står bak.

Mer info: <http://www.tu.no/nyheter/bygg/article38529.ece>

#### Hungary: SANYO Plans Market Growth in Europe

SANYO Electric Co., Ltd. (SANYO), based on its new vision 'Think GAIA', will expand its solar energy business by increasing sales and production of HIT1 modules in the strong solar market of Europe.

SANYO completed a new HIT photovoltaic module factory inside the grounds of SANYO Hungary Kft. (Dorog City, Hungary) and commenced production recently. SANYO will introduce the newly developed 270W module and a double sided module with highly increased power output to the European market, beginning with Germany from January 2006.

Mer info:

<http://www.solarbuzz.com/News/NewsEUMA77.htm>

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