



SolarThermalMag on Twitter



Solar Thermal Mag's RSS Feed



Subscribe to Solar Thermal Magazine NEWSLETTER

Solar power plants
photovoltaic technology solar trackers
www.riosrenovables.com

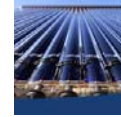
Maine's Energy Crisis
Maine Needs Energy Independence. Support Les Otten's Long Term Plan.
LesOtten.com

Solarworx
Solar Electric (PV) System Design & Installation in Houston & Texas
www.SolarWORXte.com

Enter your email address:

 Free **NEWSLETTER**

Ads by Google



« [Solar Hybrid Demonstration Plants – Adding Solar Energy to Fossil Fuels](#)

[Hybrid Solar-Biomass Refinery – New Mexico](#) »

Testing begins on Advanced Parabolic Trough Solar Radiation Collector Technology



Cleveland, Ohio, and Berkeley, California. – Solar Trust of America, LLC, an integrated industrial solar solutions company, has announced that its wholly-owned subsidiary, Solar Millennium, LLC, has begun testing the advanced parabolic trough solar radiation collector technology called HeliOTrough at an existing solar power plant in the southwestern United States. The testing is designed to assess performance efficiency under commercial operating conditions before being deployed at proposed solar thermal energy power plants throughout the world.

Developed by The Solar Millennium Group's technology subsidiary, Flagsol GmbH, and its partners, the HeliOTrough

demonstration "loop" consists of two rows of collectors with a total length of 800 meters and was installed between September and November 2009. Flagsol also developed the previous generation of solar radiation collectors called Skal-ET, which was also developed by the Solar Millennium Group and is in operation at the Andasol solar thermal power plants in Spain and at the hybrid solar field power plant in Kuraymat, Egypt, which is currently under construction.

Uwe T. Schmidt, Chairman and Chief Executive Officer of Solar Trust of America, said the next-generation solar collector technology represents a breakthrough in design, engineering and performance. "HeliOTrough is designed to be the most highly efficient and cost-effective parabolic trough solar collector available. We expect this technology to represent a breakthrough for solar thermal power plants and to further expand our leadership in the market."

Before being installed at the operating power plant for testing, the new HeliOTrough technology was first deployed in a German factory to test the innovative design and assembly concepts and verify the geometric precision of the collectors. The early phases of the research and development for the HeliOTrough were supported by the German Federal Environment Ministry. The set up, testing and operation of the HeliOTrough collectors at the commercial operating plant in the southwestern United States are supported by a financial award from the U.S. Department of Energy.

Dr. Henner Gladen, Chief Technology Officer of Solar Millennium AG, is optimistic that the new HeliOTrough collector technology will be a success. "Although final reports on the HeliOTrough collectors' efficiency can only be made once the performance measurements are completed, preliminary results indicate that the HeliOTrough technology may represent a significant step forward in collector technology," said Dr. Gladen. "We are one step closer to our goal of making solar thermal technology as cost-effective as fossil-fuel power plants."

One of the objectives for developing the new HeliOTrough collector technology was to simplify its design as much as possible to decrease construction costs, while concurrently increasing its precision to maximize its efficiency. The large HeliOTrough collectors are constructed in an entirely new geometry. Its simplified design makes it less expensive to build and install and is significantly more efficient than earlier collector designs. Both the mirrors and the absorber pipes of the HeliOTrough collectors are larger than current systems and provide for economies of scale and additional savings.

Solar Trust of America and Solar Millennium, LLC currently has multiple solar thermal power plants in advanced stages of permitting and development in California that will utilize the HeliOTrough technology. These proposed solar thermal plants are to be located near Ridgecrest, Palen and Blythe, California, and represent approximately 1750 megawatts of electricity generation capacity. The company also has solar power plants in early stages of development in Nevada.

Solar Training - Texas
IREC - NABCEP Based Curriculums 20 + Solar and Green Jobs Courses

Install Solar Panels
Enter Your Zip Code & Connect To Pre-Screened Solar Panel Installers

Ads by Google

Why are you interested in Solar Thermal and Concentrated Solar Power? You must be your answering our poll!

Votes: 46

- I'm not. I landed on the wrong page
- I like the pictures and technology
- I want to stick it to Big Oil and Coal and Solar Thermal may hold the key!
- I am an investor looking for industry sector tips.
- I sell solar goods and services.
- I am a student , intellectually curious
- I am looking for a job or career change and solar thermal seems to hold promise.
- I work for BP and want to see what is like to loved!
- I really dont have a clue about any of this...

SodaHead.com

[Questions](#) [View Results](#)

Readers Favorites

- [High Concentrated Solar PV Plant Approved for Feed-in Tariff \(10\)](#)
- [Green Wind Solar Begins Investigation of German Concentrated Solar Technologies \(10\)](#)
- [A.O. Smith enters Strategic Agreement Israeli Solar Water Heating Developer \(9\)](#)
- [Thirteen Concentrated Solar Energy Projects receive U.S. R&D Funding \(9\)](#)
- [U.S. Army Lab to add Roof Mounted Solar Heating System \(8\)](#)
- [Solar Hybrid Demonstration Plants - Adding Solar Energy to Fossil Fuels \(8\)](#)
- [Boeing Licenses XR700 Solar Thermal Power Technology to Stirling Energy Systems \(8\)](#)
- [Hybrid Parabolic Solar Thermal Power Plant Nears Completion \(8\)](#)
- [Testing begins on Advanced Parabolic Trough Solar Radiation Collector Technology \(7\)](#)
- [Arizona to Introduce Legislation to make it more Affordable for Schools to Install Solar Power Systems \(7\)](#)
- [Solar Thermal and Ocean Thermal Energy Conversion Technology Hybrid Announced - OASIS \(7\)](#)
- [Siemens Introduces Next-Generation Solar Receiver to Increase the Thermal Output of Solar Thermal Power Plants \(7\)](#)
- [Tucson Includes Concentrated Solar Power Systems in their Renewable Energy Portfolio \(7\)](#)
- [State Governments Need to Lead By Example for Renewable Energy & Conservation Technologies \(6\)](#)
- [New Residential Hybrid Solar Air Conditioner - Reducing your CO2 Footprint \(6\)](#)
- [Alcoa and NREL Partner to Test New Concentrated Solar Power Technology \(6\)](#)

These proposed plants were recently granted "Fast Track" status by the U.S. Department of Interior's Bureau of Land Management (BLM) and are currently under regulatory review by BLM and the California Energy Commission (CEC).

Popular Posts:

- [Solarized Gas Turbine System: Hybrid Power for Distributed Generation](#)
- [Stirling Energy System Announces A New Division to Manufacture Solar Thermal Suncatchers](#)
- [Commercial Solar Thermal Generator Uses Sterling Engine Technology](#)
- [ACME and eSolar Partner to Meet India's Soaring Energy Needs with 1000 Mw of Solar Thermal](#)
- [A Residential CHP Unit Using a Free Piston Stirling Engine](#)
- [Solar Water Heater Incentives paid up-front based on estimated first year kWh displacement.](#)
- [Cyclone Power Technologies & Renovalia Team up on Solar Thermal Generation](#)

If you enjoyed this post, make sure you [subscribe to my RSS feed!](#)

Be the first of your friends to like this.

February 13th, 2010 | % Category: [Solar Millenium](#), [Solar Thermal Companies](#), [Solar Trust of America](#) | [Z comments](#)

7 comments to Testing begins on Advanced Parabolic Trough Solar Radiation Collector Technology

[Testing begins on Advanced Parabolic Trough Solar Radiation ... | Germany today](#)

February 13th, 2010 at 8:03 pm - Reply

[...] the rest here: Testing begins on Advanced Parabolic Trough Solar Radiation ... Share [...]

[Testing begins on Advanced Parabolic Trough Solar Radiation ... | Drakz Free Online Service](#)

February 13th, 2010 at 11:32 pm - Reply

[...] post: Testing begins on Advanced Parabolic Trough Solar Radiation ... Share and [...]

[Testing begins on Advanced Parabolic Trough Solar Radiation ... | Drakz News Station](#)

February 14th, 2010 at 12:19 am - Reply

[...] more: Testing begins on Advanced Parabolic Trough Solar Radiation ... Share and [...]

[Testing begins on Advanced Parabolic Trough Solar Radiation ... | Drakz Free Online Service](#)

February 14th, 2010 at 2:38 am - Reply

[...] more from the original source: Testing begins on Advanced Parabolic Trough Solar Radiation ... Share and [...]

[Testing begins on Advanced Parabolic Trough Solar Radiation ... | egypt News Station](#)

February 14th, 2010 at 3:07 am - Reply

[...] the original post: Testing begins on Advanced Parabolic Trough Solar Radiation ... Share and [...]



[Hien Xyong](#)

March 5th, 2010 at 4:38 pm - Reply

A Treehugger report claims that solar panels may not be as environmentally-friendly as was initially thought given the potential for waste generated from the life-cycle of a solar panel. The article discusses the early development of a recycling plan as a plausible solution.



[abstract art](#)

April 30th, 2010 at 8:35 pm - Reply

I enjoyed checking out your blog today and I will be back to check it more in the future so please keep up your good quality work. I love the colors that you chose, you are quite talented!

Find us on Facebook

Solar Thermal Magazine on Facebook

Solar Thermal Magazine has 1,947 fans

Editors Choice

[SolarThermal UK 2050](#)

[SolarHeart Engine](#)

[Greenhouse Heating](#)

[Heat Transfer Appliances](#)

[Dirty Solar?](#)



[Africa to provide 15% of EU power](#)

[Storing Solar energy in UltraCapacitors](#)

[Cyclone Power Technologies](#)



[Solar thermal energy in India](#)

[eSolar](#)



Sterling Dish Concentrator

