

Call for Papers

DOE SunShot CSP Symposium

ASME 2012 6th International Conference on Energy Sustainability

July 23–26, 2012, San Diego, California

The U.S. Department of Energy's (DOE's) SunShot is calling for papers for the **SunShot Concentrating Solar Power (CSP) Symposium** at the ASME 2012 6th International Conference on Energy Sustainability to be held July 23–26 in San Diego, California.

The DOE [SunShot Initiative](#) is a collaborative national effort to make solar cost-competitive with other forms of energy by the end of the decade. Reducing the installed cost of solar energy systems by about 75% will drive widespread, large-scale adoption of this renewable energy technology and restore U.S. leadership in the global clean energy race.

Highly disruptive CSP technologies that meet the \$0.06 per kilowatt-hour SunShot cost target will require new concepts in the collector, receiver, thermal energy storage, and power cycle subsystems. Transformative concepts with the potential to achieve these goals may include:

- Novel materials and designs for collectors with rapid field assembly that can achieve a cost target of less than \$75/m² with high optical performance of ≤ 4.0 mrad pointing accuracy and $\geq 95\%$ weighted spectral reflectivity while maintaining sufficient flux
- Novel receiver materials and selective coatings for efficient high-temperature operation at target temperatures greater than 650°C (heat transfer fluid exit temperature), thermal efficiencies greater than 90%, and high reliability
- Thermal energy storage at temperatures above 600°C, exergetic efficiency greater than 95%, installed costs below \$15/kWh_t, and heat capacity ≥ 25 kWh_t/m³
- High-efficiency, high-temperature novel or integrated power cycles toward achieving a net solar thermal to electric conversion efficiency greater than 50% using dry cooling
- High temperature heat exchangers, pumps, and materials compatible with solar integrated advanced power cycles.

These targets present many challenges and opportunities to researchers from academia, national laboratories, and industry alike. The **SunShot CSP Symposium** aims to showcase the latest developments and research solutions to enable CSP to achieve the SunShot goal. Authors are invited to contribute technical papers on research advances and innovative solutions toward these technical targets, to be considered for presentation at the symposium and publication in a proceedings volume.

Submission Guidelines and Timeline

Authors should submit a 400-word, text-only abstract by ~~Dec. 8, 2011~~ **Dec. 19, 2011 (deadline extended)**, to the [6th International Conference on Energy Sustainability Track 1-12 Concentrating Solar Power](#) as a technical publication. Submissions should indicate "**SunShot CSP Symposium**" in the title or abstract to be considered for the symposium. Subject to abstract acceptance, full-length draft manuscripts for review are due by Feb. 2, 2012. The complete publication schedule is available at the [conference website](#).

For additional **SunShot CSP Symposium** information, please contact
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