

First Half 2009 Newsletter

August 3rd, 2009

Dear CPV Consortium Members:

Over the past six months the Consortium has moved forward with a number of actions outlined in our last member letter. I want to review these events and conferences for you and provide further information regarding the activities of our workgroups. Over the next six months the CPV Consortium plans to attend multiple conferences, hold its annual meeting, upgrade the website, further workgroup involvement, and increase membership. Details on these activities are included in this letter, as well.

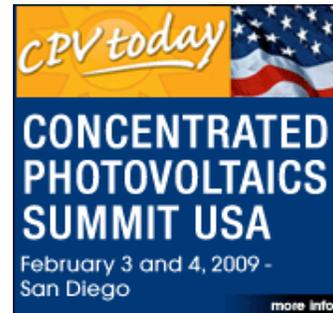
I appreciate all of the work everyone has put in to ensure that this organization succeeds in promoting the success of CPV as a mainstream energy source, and I hope that this same enthusiasm continues to grow throughout the rest of this year.

January 2009 – July 2009 in Review

The CPV Consortium participated in several activities from January 2009 - July 2009.

Concentrated Photovoltaics Summit USA

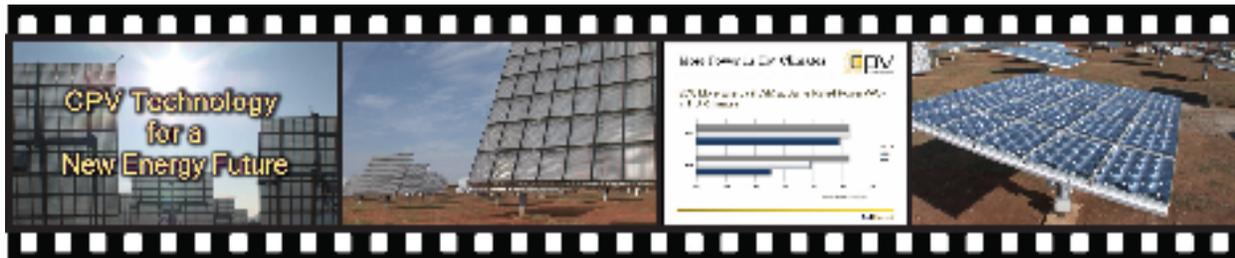
The conference was held in San Diego, CA on February 3rd and 4th. The CPV Consortium was an endorsing-sponsor of the summit, which focused on CPV technology moving to the commercial arena and how to build, maintain, and run a profitable CPV plant. The CPV Consortium had an information kiosk and display table to promote the Consortium. Nancy Hartsoch (SolFocus) representing the CPV Consortium, Vicente Díaz Luque (Isófoton), and Richard Pardell (Sol3g) were a part of a panel discussing the market realities for CPV technology. Pedro Banda (ISFOC) gave an ISFOC CPV technology update regarding case study experience on lessons learned and pitfalls to avoid. Dr. John Iannelli (Emcore) spoke on a panel regarding improving the efficiency of CPV technology and lowering the cost of installing solar energy. Yilang Yang (Arima EcoEnergy Technologies Corporation) spoke on harnessing the power of CPV technology and the superior benefits of CPV over traditional flat panel PV.



Solar Power Generation

The conference was held in Barcelona, Spain on February 23-24. Nancy Hartsoch, on behalf of the CPV Consortium, was asked to deliver the keynote address for the CPV segment of the conference. Due to travel complications, the keynote address was prepared as a video presentation, which was introduced

by Pedro Banda. The keynote included a view of the state of the industry, the value proposition for the technology, and included a virtual video tour of ISFOC. If you would like to view the keynote, you can do so on the new CPV Consortium website scheduled to go live mid-August 2009. The Solar Power Generation conference was a two-day event which brought together the leading players in CST/STEG, CPV and Large Scale PV to address the key issues in developing large scale solar projects.



Mid-August: Full video available on CPV Consortium website

Concentrated Photovoltaics Summit Toledo, Spain

On April 28th & 29th the CPV Consortium was an official partner of the 2nd Concentrated Photovoltaics information summit that focused on overcoming CPV challenges in order to reach the next level of market development. The CPV Consortium held an information meeting and had a display table for the distribution of Consortium information.



The members of the Consortium who spoke on behalf of CPV technology included: Vicente Díaz (Isofotón), Andrew Tzen (Arima EcoEnergy Technologies Corporation), Ignancio Imaz (SolFocus), Hansjörg Lerchenmüller (Concentrix Solar), Richard Pardell (Sol3g), Francisca Rubio (ISFOC), and José Luis Sánchez (3M).

PV Industry Forum



The conference was held on May 25th and 26th at the International Congress Center in Munich and focused on the current and future developments in the international markets. Dr. Andreas Bett of the Fraunhofer Institute for Solar Energy Systems chaired the session on “Silicon PV Outlook – Concentrating PV” at which Consortium members presented on a variety of subjects. Nancy Hartsoch opened the session speaking for the CPV Consortium on the State of the Industry. Also presenting in the session for their respective companies were Dr. Andreas Gombert, CTO of Concentrix and Dr. Andrew Yen-Chang Tzeng, President of Arima EcoEnergy.

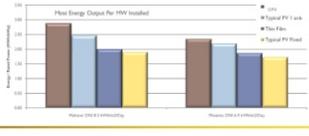


**Concentrator PV
Advanced Technology
Becomes Commercial
Energy Solution**

Nancy Hartsoch
Chairman/Director, CPV Consortium
VP Marketing, SolFocus

CPV for High Energy Output 

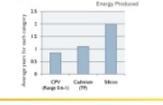
- Higher Energy Production per Area of Land
- Highest Energy Output per MW Installed
- Less Installed Equipment for Same Energy Output
- Tracking Provides Higher Energy Yield Matched to Peak Demand



Technology	Energy Production (kWh/MW/yr)
CPV	~1000
Typical PV 1 axis	~750
Typical PV 2 axis	~650
Typical PV fixed	~550

The Environment Needs CPV 

- Minimum Use of Photovoltaic Materials
- Low Land Use
- Short Energy Payback
- High Recyclability
- Less Permanent Shading
- Emissions Free Electricity
- No Water Consumption

Technology	Energy Payback Time (EPBT) [years]	Energy Consumed [kWh/kWh]
CPV	~1	~0.5
Coal	~10	~10
Gas	~5	~5

Mid-August: Full presentation available on CPV Consortium website.

Membership Meeting

A membership meeting was held in conjunction with the CPV Summit in San Diego, CA. The majority of the meeting was dedicated to discussing the Marketing and Technical Work Group organization and priorities for the CPV Consortium. Pedro Banda (ISFOC), Chairperson of the Technical Group, led the group to create their first two initiatives: CPV roadmap and reliability. Nancy Hartsoch (SolFocus), Chairperson of Marketing Group, led the group to form the first two subcommittees: messaging and events/sponsorship.

Marketing and Technical Work Groups

Marketing Work Group

Nancy Hartsoch, the chairperson, established the two subgroups for the Marketing Work Group: messaging and sponsorship. The messaging subcommittee is responsible for ensuring that the CPV message is well defined by creating a Frequently Asked Questions (FAQ) page to post on the Consortium’s website and develop a glossary of terms to establish “one voice” for CPV technology. This group is also in charge of removing the myths regarding CPV technology, including the myth that CPV costs are too high and the size of installations and limitations for CPV. The sponsorship subcommittee is developing an events calendar and plans to leverage these events as a key outlet for CPV awareness and education. Claire van Zuiden, the CPV Consortium Administrator, has assisted the Marketing Work Group by updating the CPV Consortium brochure and creating generic business cards for members to distribute at conferences. In addition, she is in the final stages of upgrading the website, which will provide education and awareness of the CPV Consortium and CPV technology in general.

Technical Work Group

Pedro Banda, the chairperson, established two subgroups of the Technical Work Group: reliability and the CPV roadmap. The committee on reliability focuses on: reliability (IEC related issues) and quality, grid connection issues, tracking systems, solar cells manufacturing, tests, and packaging, and optics, including design and materials. This subcommittee has been drafting a paper of the CPV Consortium’s

point of view of reliability and gaining a better understanding of the real issues of the CPV community. The committee plans to finish the paper and push the industries thoughts and standards through the IEC. The CPV roadmap committee has begun drafting a paper discussing how the CPV technology is evolving and the necessary improvements for the success of the industry. Pedro looks forward to increased participation in these areas in the upcoming months.

Both work groups have defined their goals and initiatives and have begun to accomplish these goals. However, in order for the work groups to achieve their objectives the CPV Consortium needs further participation from its members, specifically the Steering Committee and General Members.

2009 Schedule and Events

Sept. 9 & 10: Solar Economics Forum USA, Washington D.C.

- CPV Consortium is conducting a 3 hour CPV 101 Workshop. We would like as many members to participate as possible.
- For more information and registration: <http://www2.greenpowerconferences.co.uk/v8-12/Prospectus/Index.php?sEventCode=SP0909US>

Sept. 21-25: European Photovoltaic Solar Energy Conference and Exhibition: Hamburg, Germany

- Annual Meeting: Thursday 24th, 2009 at Radisson BLU Hotel. See below for more information.
- For more information and registration: <http://www.photovoltaic-conference.com>

October 7th-9th Photovoltaic Taiwan

- This year there will be a specific exhibit for CPV technology.
- For more information and registration: <http://www.pvtaiwan.com/>

Oct. 27-29: Solar Power International, Anaheim, CA

- CPV Consortium is conducting a CPV 201 workshop on an advanced look in CPV and where the industry is and going.
- For more information and registration: <http://www.solarpowerinternational.com>

Annual Meeting Information

What: CPV Consortium Annual Meeting and Lunch

Where: European Photovoltaic Solar Energy Conference and Exhibition: Hamburg, Germany

Radisson BLU Hotel
Marseiller Strasse 2
D-20355 Hamburg, Germany
Tel: +49 (0)40 3502 0
Fax: +49 (0)40 3502 3530

When: Thursday September 24th, 2009. 11:30 a.m. – 2:30 p.m.

Who: All members are invited and encouraged to attend

RSVP: Please confirm your attendance by September 1st, 2009 by emailing Claire van Zuiden at cvanzuiden@cpvconsortium.org

Other News

New Administrator for CPV Consortium: As of June 29th, 2009 the CPV Consortium has hired a new, dedicated Administrator who will be continuing the duties of managing the membership, activities, and committee work for the group. Claire van Zuiden graduated with honors from University of California, Davis and received her bachelor's degree in Political Science. She has already begun to upgrade the website, research grant options, and increase membership for the Consortium. You will hear from her shortly as she begins to gather information from members for the website and create materials to make the CPV Consortium a more well-known and efficient organization.



We have made significant progress in the first half of 2009, but the CPV industry still in the developmental stage. Therefore, it is necessary to continue to work hard during the latter half of 2009 to build up the CPV Consortium and continue the momentum of the CPV industry.

Sincerely,

A handwritten signature in black ink that reads 'Nancy Hartsch'.

Nancy Hartsch
CPV Consortium, Chairman and Director