

## End of 2011 Newsletter

January 2012

Dear CPV Consortium Members:

In the second half of 2011 the CPV Consortium continued to execute its key initiatives outlined earlier in the year by the membership. This newsletter will update you on some of the specific activities we have accomplished in the past six months and a brief look ahead to 2012.

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### Second Half 2011 Events in Review

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#### Environmental Impact Study Media Event & Updated Report

July 13, 2011

Intersolar North America

W Hotel, San Francisco, CA

A media breakfast was held at Intersolar North America to announce the release of the Environmental Impact Study that we commissioned Dr. Kammen and his team at the Renewable Energy Laboratory at UC Berkeley to complete.

Dr. Kammen opened the presentation with a video describing the importance of realizing the environmental impacts of energy technology and how CPV technology is advantageous. James Nelson, a PhD Candidate at UC Berkeley presented the findings and fielded questions from the media. Members of the Consortium in attendance were: SolFocus, Amonix, Cyrium Technologies, and Soitec and were called on by the media to provide real-world perspective on land, water and materials use of CPV. While some in the audience were familiar with the environmental footprint of CPV, attendees learned new details about the energy payback period of CPV and specific information on system cleaning and dual-purpose land use.

Since the media event, UC Berkeley received feedback from the life cycle analysis community with respect to the CPV Environment Impact Report released in June. To facilitate proper comparison between CPV technologies, UC Berkeley has normalized life cycle metrics for energy payback time, greenhouse gas emissions, land use and water use to the location of Phoenix, AZ. They have also updated a few of the report's data sources. The largest impact of this normalization and update is reduced values for both PV and CPV for all of the life cycle metrics, as Phoenix, AZ has higher solar insolation than many (but not all) of the sites assumed in the cited studies. For example, both PV and CPV in the revised report have minimum energy payback times of 0.5 years, whereas in the previous version of the study these values were 0.7 and 0.8 years, respectively.



*Claire sent out the updated report and a wrap up report with details of the event and all coverage. The updated report is also available on the website.*

### **Solar Power International**

October 17, 2011

Dallas, Texas

#### *Full-day CPV Workshop*

This was the CPV Consortium's fourth workshop at Solar Power International. The agenda was divided into four sessions: CPV Technology and Market, CPV Deployment, CPV Analytics and What's on the Horizon for CPV. While CPV company representatives presented some material, this year we had both Brett Pryor of GTM Research and Paul Mints of Navigant Consulting participate in the event.

While early registration was light, we ended up with a group of about 40, and a highly-engaged group of attendees. One of the highlights of the workshop was release by the CPV Consortium of the Roadmap Study for CPV technology that was completed by GTM Research. Brett Pryor presented the findings, and since has engaged with many members and media people on understanding the findings.

*Claire sent all slides presented at the workshop to members. Please contact her if you would like an additional copy or did not receive a copy.*

#### *Membership Meeting*

The CPV Consortium semi-annual membership meeting was held in conjunction with Solar Power International. The agenda included the status of the 2011 initiatives which include:

- near and long term cost analysis
- CPV industry rating proposal
- competitive positioning between CPV and other solar technologies
- common industry voice on scalability
- continue to educate financial, utility and developer audiences
- leverage environmental study
- engage in a government position.

Many of these initiatives were advanced during 2011, but still have work to be done. The Consortium members agreed to continue work on many of these in 2012. Further refining will be done on the 2012



initiatives, with the Steering Committee expected to release recommendations and establish workgroups/leads in February 2012.

We also discussed the upcoming Board of Director election.

*Claire sent the slides and membership meeting minutes to all members. Please contact her if you did not receive a copy and you would like it resent.*

### **Board of Director Election**

In November 2011 the CPV Consortium sent out ballots to the General Membership for the election to fill four (4) Board of Directors seats which were open as of January 1, 2012. In accordance to our bylaws, the newly elected board members will serve a two year term from January 2012-December 2013. The four board seats up for election this year are currently held by Hansjörg Lerchenmüller and Nancy Hartsoch, with two open Board seats left vacant when Brian Gibson and Pedro Banda left their respective companies earlier this year. Continuing board members serving until the end 2012 are Vahan Garboushian, Russ Jones, Andreas Bett and Martha Symko-Davies. Based on membership votes, Hansjörg Lerchenmüller (Soitec), Nancy Hartsoch (SolFocus), Vicente Diaz (Isofoton), and Steve Scott (Reflexite) were elected the CPV Consortium Board of Directors.

The 2012 CPV Consortium Board of Director includes: Martha Symko-Davies (NREL), Vahan Garboushain (Amonix), Russ Jones (Spectrolab), Andreas Bett (Fraunhofer) and recently re-elected/elected members Hansjörg Lerchenmüller (Soitec), Nancy Hartsoch (SolFocus), Vicente Diaz (Isofoton), and Steve Scott (Reflexite). The 2012 Board of Directors will elect the Consortium officers in the next few weeks.

*Claire will send out notification after the next Board of Directors meeting.*

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### **Welcome New Members**

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Innovated Technology is located in Korea and joined as a trial member.

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### **Upcoming Events in 2012**

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#### **CPV-8**

April 16-18, 2012

Toledo, Spain

The CPV Consortium will be hosting a Membership Meeting at the upcoming CPV-8 conference in Toledo, Spain. Specific date, time and location of our Membership Meeting will be sent out via email.

**SolarExpo**

May 9-11, 2012

Verona, Italy

Due to the success of last year's full day workshop at SolarExpo in Verona, Italy, the CPV Consortium has been asked to host another workshop at this year's conference. We are working with the conference organizers to determine date, time and location of our next workshop in 2012.

**Other 2012 Events the Consortium Plans to Attend/Participate**

Intersolar North America

Utility Scale Solar Summit

Solar Power International

**2012 Initiatives**

As 2011 came to a close, we reached out to our membership to discuss the CPV Consortium's initiatives for 2012. Below are our completed 2011 initiatives and drafted ideas for our 2012 initiatives that were discussed at our most recent Membership Meeting. Please review the proposed 2012 initiatives and provide any comments or concepts for further initiatives to Claire van Zuiden. Claire has received some comments, but looks forward to continued member participation. We will be scheduling a conference call in early February for the members to discuss and finalize the initiatives.

Our 2011 Initiatives are below:

- ✓ Create a Near and Long Term Cost Analysis (GTM Research Study)
- ✓ CPV Industry Rating Proposal (In IEC Committee)
- ✓ Create a Common Voice on Scalability of CPV Technology (Released at SPI Workshop)
- ✓ Continue to Educate Developer and Utility Audiences (SolarExpo and SPI Workshops)
- ✓ Leverage Environmental Advantages of CPV Technology (Media Event at Intersolar NA)
- Develop Competitive Positioning of CPV vs. CSP/PV (carry into 2012)
- Engage in Government Position for CPV Technology (carry into 2012)

Some ideas for 2012 Initiatives are below:

- Continue to Educate Developer and Utility Audiences (SolarExpo, Utility Scale Solar Summit and SPI Workshops)
- Develop Competitive Positioning of CPV vs. CSP/PV
- Engage in Government Position for CPV Technology
- Annual Energy Modeling--specifically modeling in conditions other than clear sky because currently there are no good, validated models
- Report of CPV Installations Around the World—possibly work with Navigant

**In conclusion**, 2011 was a progressive year for the CPV Consortium. As an industry group, we continued to hold workshops and speak around the world to help educate audiences on the commercial availability and scalability of CPV technology. We created a new structure for the organization, allowing all members to propose and execute key initiatives within the CPV Consortium. We were able to meet the majority of our initiatives for 2011 and plan to carry those that were not fully executed into the beginning of 2012. We look forward to the continued growth of the CPV Consortium and the CPV industry and appreciate member involvement as we begin to implement our initiatives for 2012. As we move into 2012, I am eager to find ways to gain even higher participation from our growing membership. As you have ideas and suggestions, please feel free to call or email me so that we can tailor the organization to the needs of our full membership.

Claire is also available for discussions on any of our initiative as well as suggestions on 2012 activities.

We look forward to a progressive 2012.

Sincerely,

A handwritten signature in black ink, reading 'Nancy Hartsoch'. The signature is written in a cursive, flowing style.

Nancy Hartsoch

CPV Consortium, Chairman