



Issue 8 | Dec 10 / Jan 11

**WELCOME TO IPVEA**

## IPVEA Working for Members

In less than two years as an established association, IPVEA has quickly turned into an action-based centralized voice for PV manufacturing demonstrating that there's strength in numbers.

Our collective bargaining already has resulted in show organisers to take into account the needs of PV equipment manufacturers, who— before the creation of IPVEA – generally were not taken into account by other players in the solar energy industry.

### In the past year, consider these association highlights:

- Our own PV Production Forum co-located within the auspices of EU PVSEC
- Publication of a PV equipment directory, as well as three magazines
- Establishment of an interactive 'Matrix' detailing the entire solar industry supply chain (page X)

Membership provides numerous benefits, including substantial financial savings for being able to exhibit at international solar energy trade shows that would otherwise might be cost-prohibitive.

### Example of how IPVEA membership pays for itself and more!

RAW BOOTH SPACE COSTS:		OTHER IPVEA MEMBER DISCOUNTS FOR:	
64 sqm. at EU PVSEC 2010	€19,200	■ Registrations at IPVEA events	
IPVEA DISCOUNT	<b>€1920</b>	■ Publications and advertising	
64 sqm. SNEC in China	€19,200	■ Sponsored, non-IPVEA events	
IPVEA DISCOUNT	<b>€1920</b>	■ IPVEA supported research assignments	
<b>IPVEA MEMBERS SAVE</b>	<b>€3840</b>	■ Events and Exhibit solutions via the	
IPVEA annual membership just	€3,000	IPVEA-preferred partner network	

### But it is not just financial, IPVEA members can shape the industry:

- The opportunity to participate on IPVEA committees to discuss current trends and emerging technologies
- Assist in figuring out IPVEA's roadmap, which is being developed by members for members

Look for an email requesting a call for papers for IPVEA's second annual PV Production Forum to be presented at EU PVSEC in Hamburg Sept. 5-8, 2011.

### IPVEA membership helps your company build value:

- Networking opportunities at group meetings and trade shows
- Inclusion in the group's press materials
- Inclusion on appropriate panels at key industry trade events
- Exposure through the website [www.IPVEA.org](http://www.IPVEA.org)
- Use of the IPVEA logo to brand your business
- Listing in IPVEA PV Directory and quarterly newsletter

### Access to information and technology services & products:

- Industry News portal
- Industry Event Rating System
- IPVEA Technical Committee Resources
- Members-Only Section of IPVEA website



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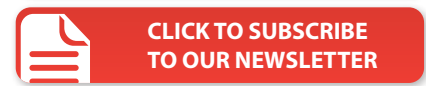
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## IPVEA MEMBERSHIP

IPVEA currently has 76 of the PV industry's leading companies as members. These members range in size and services, but all benefit from the exchange of ideas, as well as ways to develop business opportunities and strategic partnerships. In 2010, we were joined by 10 new companies with many new enquiries for 2011.



**VISIT IPVEA.ORG TO SEE ALL IPVEA MEMBERS PROFILES**

3S Swiss Solar Systems AG  
 ABB Automation GmbH  
 ACI Ecotec GmbH & Co. KG  
 AEG Power Solutions GmbH  
 AIS Automation Dresden GmbH  
 AMB Apparate + Maschinenbau GmbH  
 Applied Materials  
 Bekaert Advanced Coatings N.V.  
 Bosch Rexroth AG  
 BTU International Inc.  
 Centrotherm Photovoltaics AG  
 DECKER Anlagenbau GmbH  
 Dek International GmbH  
 Diamond Materials Tech, Inc.  
 Dr. Schenk  
 dr. schwab  
 E+H Metrology GmbH  
 Ferrotec GmbH  
 Gebr. Schmid GmbH + Co.  
 GfE Matalle und Materialien GmbH  
 Heateflex Corporation  
 Hennecke Systems GmbH  
 Honeywell Analytics  
 Innolas GmbH  
 ISRA VISION  
 Jonas & Redmann Photovoltaics Production Solutions GmbH  
 KITEC microelectronic technologie GmbH  
 Komax Holding AG  
 KUKA Roboter GmbH  
 KUKA Systems GmbH  
 LayTec GmbH  
 LPKF SolarEquipment GmbH  
 LSW Maschinenfabrik GmbH  
 Lotus Systems GmbH  
 M+W Group  
 Manz Automation AG  
 Meier Solar Solutions GmbH  
 Meyer Burger AG  
 Meyer Burger AG – Swiss Slicing Systems  
 Meyer Burger Automation GmbH  
 Newport Spectra Physics  
 Oerlikon Leybold Vacuum  
 Oerlikon Solar Ltd, Trubbach  
 Oerlikon Systems  
 Ortner c.l.s. GmbH  
 OTB Solar Europe  
 Otto- Chemie  
 Pall GmbH  
 Pasan SA  
 Reis GmbH & Co. KG Maschinenfabrik  
 RENA GmbH  
 RICMAR Technology GmbH  
 Robert Bürkle GmbH  
 Rofin BAASEL Lasertechnik  
 Roth & Rau AG  
 SCHAEFFLER KG  
 SCHILLER AUTOMATION GmbH & Co. KG  
 Semilab Zrt.  
 Sierra Therm  
 SINGULUS TECHNOLOGIES AG  
 SLS Solar Line Saxony GmbH  
 Soleras Ltd  
 SOMONT GmbH  
 Spire Solar  
 STANGL Semiconductor Equipment AG  
 STEIN Automation GmbH & Co. KG  
 Synova SA  
 Targray Technology International Inc.  
 Team Technik Production Technology  
 Tecnofimes S.r.l  
 Tempress Systems B.V.  
 TRUMPF Laser- und Systemtechnik GmbH + Co. KG  
 Veeco Instruments GmbH  
 VITRONIC Dr.-Ing. Stein  
 VON ARDENNE Anlagentechnik GmbH

## IPVEA Welcomes New Members Q4 2010:

### Gebr. Schmid GmbH + Co.

Schmid manufactures production equipment and process solutions for the Photovoltaic industry, and in particular, thin-film applications and the manufacture of solar wafers, cells and modules. The product portfolio comprises single equipment and turnkey production lines, with guaranteed performance parameters such as production capacity and degree of efficiency. The Schmid Group covers the entire solar value-creation chain with a high percentage of in-house production. Its PV systems are in their fifth generation, focusing on customer-orientated process solutions, economical concepts and a continuous development of new process technologies in the company's research centers. The Schmid Group produces in Germany, Taiwan, Japan, China and U.S., and is represented worldwide with numerous service branches.



**Headquarters:** Freudenstadt, Germany

**Year founded:** 1864

**Employees worldwide:** 2,200 (as of October 2010)

**www.schmid-group.com**

### Btu International Inc.

BTU International is a leading global supplier of advanced thermal processing equipment and processes to the alternative energy and electronics assembly markets. BTU equipment and know-how are used in solar cell, nuclear fuel and fuel cell manufacturing and in the production of printed circuit board assemblies and semiconductor packaging. BTU offers solar processing equipment for both silicon and thin-film photovoltaics. For silicon photovoltaic applications, BTU's systems are used for metallization and in-line diffusion processes. In thin-film photovoltaics, BTU's equipment is used for the processing of flexible and rigid substrates. BTU has operations in the U.S. and Shanghai, China with a sales and service presence in over 30 countries. Roughly half the company's approximately 400 employees are located outside the U.S. BTU celebrated its sixtieth anniversary in 2010. Since 1950, and with over 10,000 units shipped, BTU International has been the trusted name for high-tech customers with a need to solve high-volume thermal processing challenges. The company has more than 200 patents and patents pending.



The Global Leader in Thermal Technology

**Headquarters:** North Billerica, Massachusetts, U.S.

**Year founded:** 1950

**Employees worldwide:** 400

**www.btu.com**

### Lotus Systems GmbH

With its focus on wet-process applications, chemical management, and cleaning applications, Lotus Systems GmbH is a leading manufacturer in the use of chemical substances to optimize the production process for photovoltaics, semiconductors, and MEMS. The company was founded in 2001; its core team is led by CEO Joachim Mink and brings more than twenty years of experience at companies such as STEAG and Mattson to the table. Lotus Systems was one of the first to apply expertise from semiconductor production to photovoltaics, thus increasing efficiency and throughput. In just three years, we have become the "solar player" and are making a major contribution to shaping the climate in the international photovoltaics landscape. With globally renowned major turnkey projects in the production of solar cells, we are one of the most important links in the production chain as a cooperation partner - thanks to equipment concepts which are constantly being technically refined and a forward-thinking sense of innovation. The company employs over 100 people and has service branch offices around the globe.



**Headquarters:** Geisingen, Germany

**Year founded:** 2001

**Employees worldwide:** 100+

**www.lotus-systems.com**

## EVENTS

### IPVEA-Supported Events in 2011

Following a canvassing of members, IPVEA has decided to support four solar industry trade shows in 2011. They are: in Asia, at SNEC in Shanghai, China on February 22-24; in Europe, the 26th European Photovoltaic Solar Energy Conference and Exhibition (EU PVSEC) in Hamburg, Germany, September 5-8; and in North America, Solar Power International, Dallas, Texas, October 18-20 and also Intersolar, San Francisco, CA, July 12-15.

The reason for the association supporting two North American shows, according to IPVEA managing director Bryan Ekus, is that the board has recognised that the continent is being viewed as a “growth market” by the solar industry. Solar Power International just had a very strong show in Los Angeles in October (SEE PAGE 4). Meanwhile, Intersolar is renown for its technical conference, and is expecting 800 exhibitors and 22,000 trade visitors for the 2011 exhibition, co-located with SEMICON West.

#### Add Them to Your 2011 Calendar:

DATE	SHOW	LOCATION
February 22-24	SNEC	Shanghai, China
July 12-15	Intersolar	San Francisco, U.S.
September 5-8	EU PVSEC	Hamburg, Germany
October 18-20	Solar Power International	Dallas, U.S.

The SNEC 2011 PV Power Expo will feature more than 1,600 exhibitors including world-famous brand companies in the PV industry from more than 60 countries and regions, such as Germany, U.S., Japan, France, Austria, Netherlands, Switzerland, Belgium, Singapore, Spain, Taiwan, etc. It is expected that 4,000 experts and scholars, over 80,000 professionals, and 5000 companies, including buyers, suppliers, integrators, etc.

Having occupied 65,000 square meters in Hamburg in 2009, the exhibition area for the 26th EU PVSEC will be expanded in 2011. Further modern exhibition halls in section A of the International Fair Hamburg will be integrated to offer a total exhibition space of more than 80,000 sqm. In addition to a more comprehensive Scientific Conference Programme, the 26th EU PVSEC will be complemented by sessions on PV industry related topics, with new applications, ideas and solutions for cell and module production.

*“We are very pleased with the outcome of our participation as an exhibitor in this event, especially because of the great number of international PV specialists attending. We were able to initiate many new contacts and promising business activities.”*

– IPVEA board member Ludger Wahlers, president of Solar Vision, speaking about the 25th EU PVSEC in Valencia

*“This 25th EU PVSEC in Valencia was the most important conference and exhibition in 2010. We met business partners from all over the world and had many constructive discussions about both technologies - crystalline silicon and thin-film production systems. We clearly decided to join the 26th EU PVSEC in Hamburg next year.”*

– IPVEA board member Patrick Binkoswka

- [www.snec.org.cn](http://www.snec.org.cn)
- [www.intersolar.us](http://www.intersolar.us)
- [www.photovoltaic-conference.com](http://www.photovoltaic-conference.com)
- [www.solarpowerinternational.com](http://www.solarpowerinternational.com)

## EVENTS

### IPVEA Providing Input for Future EU PVSECs

IPVEA has been providing input to WIP on how its annual European Photovoltaic Solar Energy Conference and Exhibition (EU PVSEC) can be improved in the future.

The input began immediately following the conclusion of EU PVSEC this past September in Valencia, Spain, where 57 IPVEA member companies exhibited. We made many suggestions about how their future events can be shaped for our members.



I am pleased to report that they have been very receptive to our ideas and several will be included in the planning of the 26th EU PVSEC in Hamburg next year.

WIP will also be inviting all exhibitors that have booked exhibition space for next year’s event to an Exhibitor Day that will be held Monday, 13 December 2010 at the Hamburg Messe.

For more information relating to the EU PVSEC Exhibitor Day, please contact directly by email [Gabriela.Mundlos@wip-munich.de](mailto:Gabriela.Mundlos@wip-munich.de). Prior to this meeting, we will be sending you a poll, of which the results we intend to share with WIP as an IPVEA member point of view for future consideration.

– Bryan Ekus, IPVEA managing director

**IPVEA**  
*would like to wish all our members, associates and readers season’s greetings and best wishes for the new year.*

## EVENTS

### Trade Show Recap: Solar Power International Breaks Exhibitor Records

**Solar Power International 2010**, the largest B2B solar energy conference and expo in North America and supported by **IPVEA**, broke previous records for exhibitors and exhibit space for the sixth consecutive year.

Taking over more than 1 million square feet of total gross space at the Los Angeles Convention Center this past Oct. 12-14, the sprawling exhibit floors featured 1,122 companies across the entire solar value chain, compared to 929 companies last year. Solar Power International confirmed its position as a premiere annual event for solar industry professionals, utility executives, investors and policy makers, drawing 23,300 industry attendees.

Solar Power International is presented by the **Solar Electric Power Association (SEPA)** and the **Solar Energy Industries Association (SEIA)**.

#### Solar Power International 2010

**LOCATION:** Los Angeles

**DATE:** October 12-14

**EXHIBITORS:** 1,122 companies (up from 929 in '09)

**FLOOR SPACE:** 1 million+ gross square feet

**ATTENDEES:** 23,300 individuals

**INTERNATIONAL EXHIBITS:** 32% of total

**COUNTRIES REPRESENTED:** 111 nations

The show's global presence also grew this year, with 32% of the exhibits featuring an international company and industry professionals attending from 111 countries.

**SEPA president and CEO Julia Hamm** said, "We strive to make this show relevant to solar veterans and newcomers alike, and relish the annual opportunity to bring together people with diverse business perspectives who share a common interest in solar energy."

**SEIA president and CEO Rhone Resch** said, "Solar energy is the fastest-growing new energy source in the United States and is driving job creation and investment in all 50 states. But to reach a goal of installing 10 gigawatts of solar capacity every year by 2015, the solar industry needs to unite as a team, fight for policies to create a level playing field and remind our lawmakers that solar is an industry, not an issue. We hope people left Solar Power International excited about the future of our industry and energized to ignite change."

Next year, Solar Power International 2011 is scheduled for Oct. 18-20 in Dallas, Texas. Show management expects more than 1,200



exhibiting companies and more than 23,000 industry attendees. The 2011 show floor has been expanded to 1.2 million gross square feet.

Industry news announced at this year's conference included:

- U.S. Secretary of the Interior, **Ken Salazar**, reported on the progress of new, first-ever permits for solar projects on public lands, and signed a record of decision on stage after his remarks for the first large-scale solar project approved for construction on public lands in Nevada;
- The SEPA Utility Solar Business Models Report demonstrates that utilities are increasingly identifying unique business models to integrate solar energy into their energy portfolios;
- SEIA and GTM Research's U.S. Solar Market Insight midyear report showed growth of the U.S. solar market for the first half of 2010 and forecasted growth for the second half of 2010 and for the next five years;
- SEIA and SCHOTT Solar's Barometer annual public opinion poll found that 94% of Americans think it is important for the U.S. to develop and use solar energy and 80% thought Congress should consider shifting subsidies for fossil fuels to solar;
- The Solar Foundation's first census of the solar workforce in the U.S., currently 93,000 strong, showed that hiring is expected to grow 26% over the next year.

"We know that to build a safer, more secure energy future, we must continue to expand on the progress we have made in the past two years on the renewable energy front," said Secretary of the Interior **Salazar**.

**Secretary of Labor Hilda L. Solis** in a press statement about the solar jobs census results, said, "Among other things, this [solar jobs census] study shows that investments made through Recovery Act – including the \$2.3 billion in tax credits to U.S. based clean energy manufacturing – are already generating positive results. The solar energy sector is an increasingly important source of good jobs for Americans."

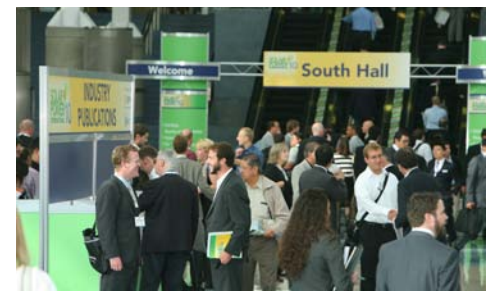
[www.solarpowerinternational.com](http://www.solarpowerinternational.com)



Rhone Resch, President and CEO of SEIA



Julie Hamm, President and CEO of SEPA



A busy show draws over 23,000 attendees

## INSIDE IPVEA

### New IPVEA Board of Directors

On Friday, November 5, 2010, IPVEA's Board of Directors (BoD) met in Frankfurt, Germany. During the meeting, **Carsten Busch**, **Ludgar Wahlers** and **Patrick Binkowska** signed in the presence of a notary public, thus becoming the new board members of the International Photovoltaic Equipment Association.

The three newest board members were elected in September 2010 by the members' assembly during the 25th European Photovoltaic Solar Energy Conference and Exhibition (EUPVSEC) in Valencia, Spain.

The BoD further decided that current Board Member **Stefan Schiller**, Managing Director of Schiller Automation, and newly elected **Binkowska** of Singulus Technologies, each will serve as Vice Presidents of the association.

<b>President</b>	Sven E. Jarby (Oerlikon)
<b>Secretary</b>	Andreas Schöni (Ecolution Engineering)
<b>Treasurer</b>	Steffen Guenther (Reis Robotics)
<b>Assistant Treasurer</b>	Richard Grundmüller (InnoLas GmbH)
<b>Vice President</b>	Stefan Schiller (Schiller Automation)
<b>Vice President</b>	Patrick Binkowska (Singulus Technologies)
<b>Board Member</b>	Carsten Busch (ABB Automation)
<b>Board Member</b>	Ludgar Wahlers (ISRA Solar Vision)
<b>Managing Director</b>	Bryan Ekus

 [CLICK TO VISIT IPVEA.ORG AND READ MORE ABOUT ITS BOARD AND MEMBER SERVICES](#)

## Questions with...



### IPVEA Board Member Stefan Schiller & Schiller Automation

Stefan Schiller started his mechanical engineering career in 1989 at BSG Schalttechnik, in Balingen, Germany, following his graduation from the University of Applied Sciences, Karlsruhe, where he studied precision engineering. After two years at BSG, he joined Schiller Automation, a family business, in 1990. For the first four years, he was a management assistant and in 1995 he was promoted to manager. In 1999 he was named managing director. Since 2001 he is president and CEO of Schiller Automation.

#### How optimistic are you about 2011?

2011 will be a better year for Schiller Automation than 2010 and 2009 have been. Business will pick up in all areas that Schiller Automation works in.

#### How has 2010 been for your company?

We were still suffering from the slow PV industry in Europe and especially the almost complete stop of Thin Film PV.

#### Where is the growth coming from?

The growth in 2011 is based on several solid fundamentals: a) the pickup of the Thin Film PV, b) the market introduction of several new technologies in the cell manufacturing area and c) the strong growth of the other industry areas we are serving. In addition to this, our new developments in the post-lamination back-end area of module manufacturing leads to even more growth in the next years. We expect this to start in 2011.

#### Any particular current trends?

Not for the public.

#### What changes have there been recently in solar cell prices and the causes?

I'd prefer not to speculate.

 [CLICK HERE TO VISIT SCHILLER AUTOMATION'S WEBSITE & READ MORE ABOUT THE COMPANY](#)

#### Are you sensing less enthusiasm for solar from governments?

There seem to be reductions of feed-in-tariffs all over the world. Nevertheless, this technology cannot be stopped anymore. Growth might slow down and the industry will become cyclical. We also see that some governments try to protect their domestic economy by claiming local content in PV installations in the future. This way they can combine the growth and the stimulation of renewable energies with the creation of new jobs within their economy.

#### Are advancements in technology and cell efficiency happening fast enough?

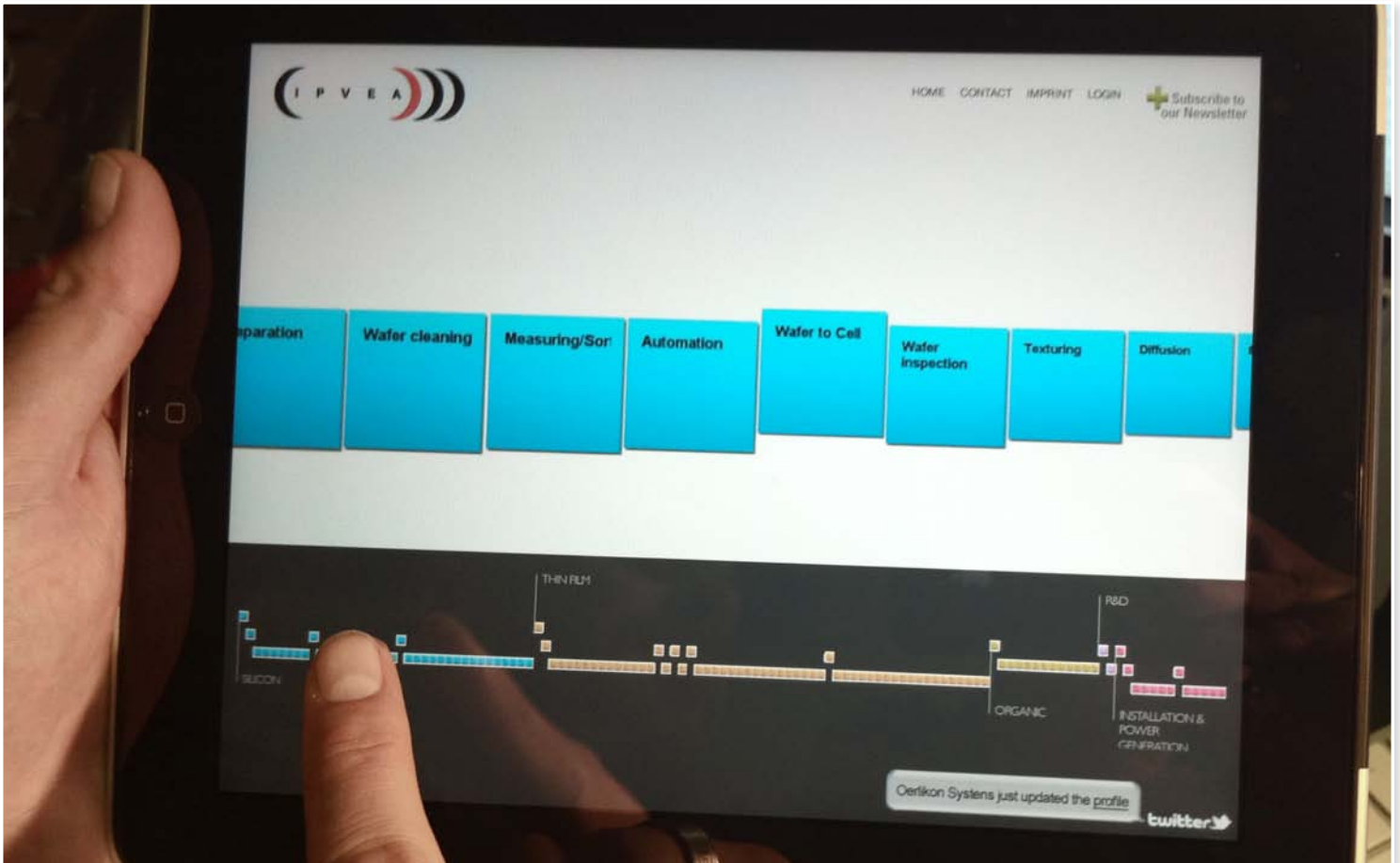
As we are going to see grid parity in the very near future, I do think that the technological progress is going fast enough. In combination with technological progress, the reliability and longevity of the products is of a major importance for the whole industry. If products fail before their economically needed 20-year lifetime, this will cause damage to the Photovoltaic in general.

#### What keeps you up at night?

Good food, good friends, good wine.

#### How did you end up in the PV solar business?

We were asked to automate some very specific processes for a new customer. As we were able to do this well, we more and more could establish ourselves as a major player in the field of automation. This will be enhanced towards process technology step by step.



## TECHNOLOGY

### Introducing Matrix 2.0

Earlier this year, IPVEA launched a Web-based interactive tool that covers the entire PV value chain, and how it all fits together, thus providing manufacturers, suppliers and users of PV equipment a central source of information to connect these groups and keep the most updated information at everyone's fingertips. And so the "PV Matrix" was created with the main purpose of linking the solar supply chain.

By the first quarter of 2011, we will be ready to roll out a new version of the tool, "Matrix 2.0," which will illustrate and link the complete PV Value Chain with new functionality and more robust data than the initial version.

While it remains at [www.matrix.ipvea.org](http://www.matrix.ipvea.org) the Matrix soon will be also accessible via an app for mobile devices, such as the iPhone, iPad, Android phone or a Blackberry, as opposed to it previously working only through a computer.

The Matrix's content will be bolstered by an easier-to-use, check-off template for IPVEA members to provide more detailed information of what particular specialties a company provides.

The PV Matrix separates solar technology into four main segments: silicon, organic, R&D, and installation & power generation. Each segment expands to show categories within that technology. For example, silicon expands to raw material to wafer, wafer to cell and cell to modules. From there, each subsection further breaks down.

The new interface will be designed to be useful from everyone from the solar newcomer to the savvy financial investor trying to figure out what technology to fund.

Another new feature to the Matrix will be the ability for providing additions through Wikipedia-like pages.

Changes to the Matrix will be underway next month, and members should keep a look out for email updates regarding further developments.

Silicon	Thin Film	Organic	R&D	Installation & P
Raw Material to Wafer		Category Profile		
<input type="checkbox"/> Automation <input type="checkbox"/> Crystal growing / foundry <input type="checkbox"/> Sawing <input type="checkbox"/> Raw material cleaning <input type="checkbox"/> Separation <input type="checkbox"/> Wafer cleaning <input type="checkbox"/> Measuring/Sorting		<input type="button" value="EDIT"/> <input type="button" value="EDIT"/> <input type="button" value="EDIT"/> <input type="button" value="EDIT"/> <input type="button" value="EDIT"/> <input type="button" value="EDIT"/> <input type="button" value="EDIT"/>		
Wafer to Cell				
<input type="checkbox"/> Automation <input type="checkbox"/> Wafer inspection <input type="checkbox"/> Texturing <input type="checkbox"/> Diffusion <input checked="" type="checkbox"/> Etching <input type="checkbox"/> AR Coating / Passivation <input type="checkbox"/> Metallization <input type="checkbox"/> Fire front / backside contact <input checked="" type="checkbox"/> Edge isolation <input type="checkbox"/> Testing / Sorting		<input type="button" value="EDIT"/> <input type="button" value="EDIT"/> <input type="button" value="EDIT"/> <input type="button" value="EDIT"/> <input type="button" value="EDIT"/> <input type="button" value="EDIT"/> <input type="button" value="EDIT"/> <input type="button" value="EDIT"/> <input type="button" value="EDIT"/>		
Cell to Modules				
<input type="checkbox"/> Automation		<input type="button" value="EDIT"/>		

### Inspection

Category Information

Vitronic Dr. Ing. Stein...

ISRA Vision

Dr. Schenk GmbH...

Dr. Schwab Inspection...

### VITRONIC Dr. Ing. Stein Bildverarbeitungssysteme GmbH

Inspection Company Profile

Our Inspection Process is separated into known phases which are: connection, inspection, and data processing. The data processing is done in a separate phase.

Ut nisi enim ad remm vestiam, quis nostrud essent latium ullamcorper suscipit lobortis nisl ut aliquip ex ea commodo consequat. Duis autem vel eum irure dolor in hendrerit in vulputate velit esse molestie consequat, vel illum dolore eu feugiat nulla facilisis at vero eros accumsan et justo odio dignissim qui blandit praesent luptatum dolord eugiam duis dolores in fugiat nulla facilis. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat.

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Images for Inspection

Downloads for Inspection

VITRONIC Inspection Process  
27.8 KB

**CLICK HERE TO VISIT THE MATRIX**  
[www.matrix.ipvea.org](http://www.matrix.ipvea.org)

## EVENTS

### IPVEA Member Pavilions (New for 2011)

With solar energy growing exponentially throughout the world, new markets for PV components and materials are opening up. The IPVEA is considering to host member pavilions at trade shows in emerging markets, such as Africa, India and Turkey.

Association-sponsored pavilions may be a low-cost method for IPVEA members to test such events that they wouldn't be to otherwise afford, and also not worry about shipping and erecting expensive booths.

As envisioned, IPVEA will secure space on a trade show floor that will offer a company-specific tabletop measuring 3 x 3 square meters (or 10 x 10 square feet), and also provide communal services, such as an area where members can conduct private business meetings, have coffee, or make a presentation.

IPVEA will be soon surveying members on their suggestions of which events should be considered. Once that information is gathered, the association's leadership will then be contacting the organizers of the selected events, and the costs for participation will be determined.

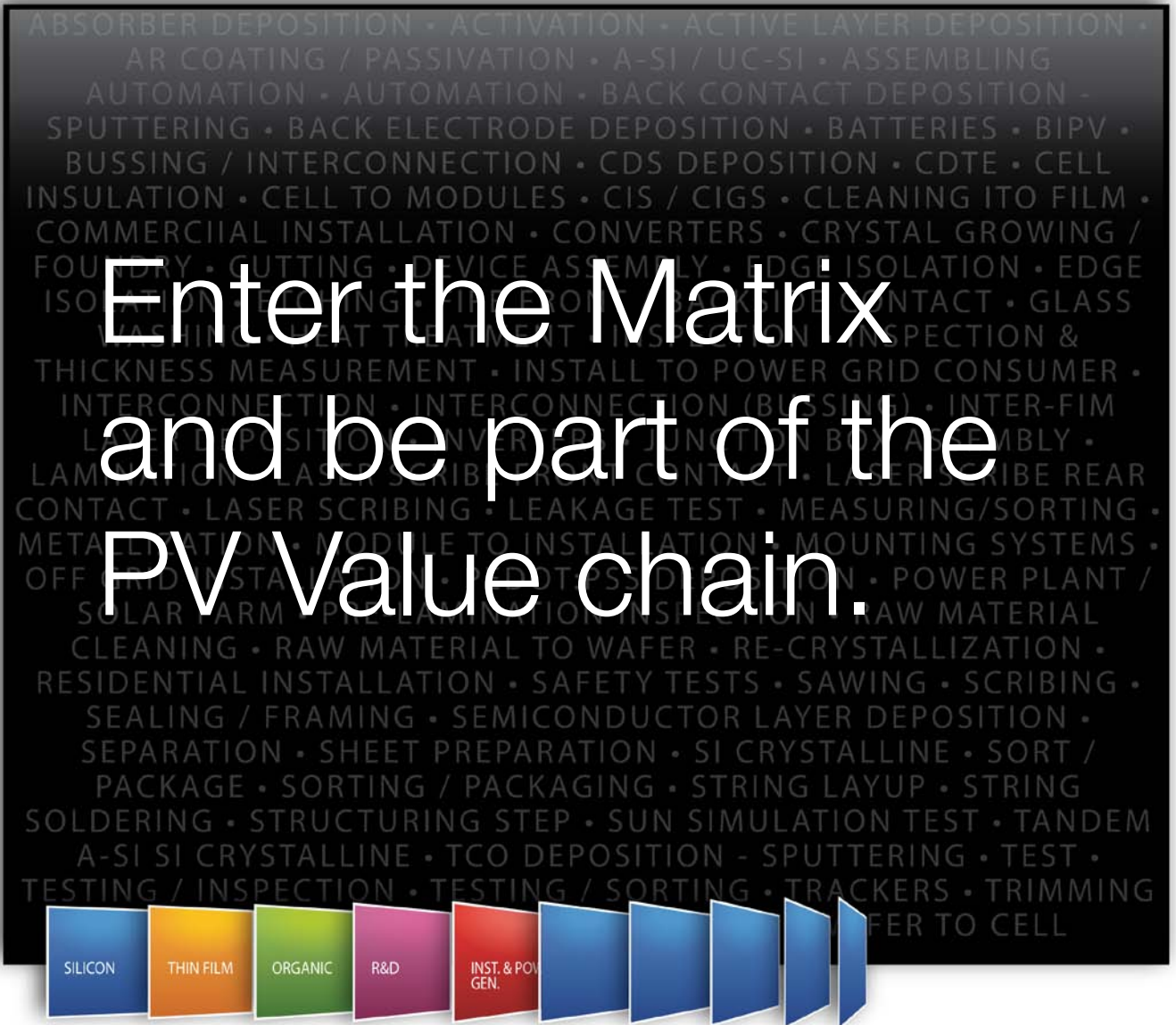


ABOVE: Artist impressions of IPVEA Pavilion concept

## SELECTED JAN 2011 EVENTS

- January 11-13, 2011  
SolarTech Bangladesh  
Dhaka, Bangladesh
- January 11-12, 2011  
Glass Performance Days (GPD)  
Mumbai, India
- January 12-14, 2011  
Glasspex India  
Mumbai, India
- January 12-13, 2011  
Electric Energy Storage  
Phoenix, Arizona, USA
- January 13-14, 2011  
5th China New Energy Int. Forum  
Beijing, China
- January 13, 2011  
1st Solar Industry Summit India  
Mumbai, India
- January 17-20, 2011  
World Future Energy Summit  
Abu Dhabi, UAE
- January 19-20, 2011  
Clean-Tech Investor Summit  
Indian Wells, California, USA
- January 19-20, 2011  
Proxima Cité 2011  
Lyon, France
- January 19-21, 2011  
Synergistic SuperGrid for  
Transmitting Energy Overseas  
London, UK
- January 22-27, 2011  
SPIE Photonics West  
San Francisco, California, USA
- January 24-25, 2011  
1st Inverter & PV System Tech Forum  
Berlin, Germany
- January 25-26, 2011  
Solar Power Generation USA  
Las Vegas, Nevada, USA
- January 25-26, 2011  
Networked Solar  
Jersey City, New Jersey, USA
- January 25, 2011  
2nd Int. Conf. on PV Module Recycling  
Madrid, Spain
- January 25-26, 2011  
The Solar Future: Belgium  
Brussels, Belgium
- January 26-27, 2011  
SunWize Training Summit for Solar  
Installers  
Honolulu, Hawaii, USA
- January 26-28, 2011  
Semicon Korea 2011  
Seoul, South Korea
- January 27-29, 2011  
InterSOLUTION 2011  
Ghent, Belgium
- January 28-30, 2011  
Int. Conf. & Exhibition on Alternate  
Energy Products & Backup Systems  
Gujarat, India
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The IPVEA PV Matrix is a web based tool that will be the industry's central resource for information. With the Matrix you will be able to;

- Increase your company's sales
- Increase your company's profile and exposure
- Identify key suppliers
- Improve your network
- Work and interact with other companies

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