IEA-PVPS Workshop on Photovoltaic Performance and Reliability

PtJ, Berlin, Germany,
September 25-26, 2008

Results of Task 13 preparatory meeting, on 3rd September Milan 2007

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INTERNATIONAL ENERGY AGENCY
PHOTOVOLTAIC POWER SYSTEMS PROGRAMME

Your Personal Invitation to the International Dinner Meeting:
Planning of the future activities of PVPS in the field of performance, reliability and analysis of PV systems - today Task 2
Doria Grand Hotel, Viale Andrea Doria, 22, 20124 Milan (Italy)
Monday, 3rd September 2007 at 7:30 pm
www.adihotels.com/adihotels/ita/doria/home_doria.html

The Dinner Meeting

Why Should You Attend?
The opportunity of the EU PV Conference in Milan is used to allow important experts and stakeholders to participate in the process. This is your chance to influence the decision making process of the present Task 2 and the ExCo of PVPS for future activities in this field.

Objectives:
The meeting will address a number of questions for the planning of the future activities:
- Which is the value and the future of the existing PV Performance Database?
- How important is the technical assessment and the analyses of technology trends by PVPS?
- How shall the activity "PV system cost over time" be continued in future?
- What are the major stakeholders and partners to be included in the PVPS team? Countries, Industry, Organisations?

Programme Outline

19:30	**Welcome and Introduction** Th. Nordmann, Meeting Coordinator, Member of Task 2
	During the dinner meeting the following experts and speakers of the PV community will give short oral speeches (5 – 10 min) to stimulate the discussion: Dr. Stefan Nowak, Chairman of IEA PVPS Programme *Concept and Opinion of the PVPS-Exco* Ulrike Jahn, Operating Agent IEA PVPS Task 2 *Quality and Reliability for PV Systems* G. Stryi-Hipp, Managing Director BSW *Expectation of the Solar Industry for this subject*
22:00	**Table discussion between all delegates** Moderated by Th. Nordmann
22:20	**Concluding remarks and future work of Task 2**
22:30	**Formal end of dinner meeting**

Questionnaire
A questionnaire will be distributed. We request your response before the end of the PV conference in Milan to allow a direct input for the future activity.

Registration
Attendance to this dinner meeting is by invitation only. The number of dinner participants is limited. You are kindly asked to register by email to the meeting organizer mehlfeld@tnc.ch.

Pricing
The fee for participants is 55€ including a PVPS Task 2 CD-ROM & the dinner. The fee is collected in EUR cash onsite. Receipt will be supplied.

How to get to the Dinner Meeting after the "Conference Welcome Reception"?
The Doria Grand Hotel is located 12,7 km from the Fiera Milano RHO - PERO, directly reached by underground M1, no changes necessary, getting off at the M1 "Loreto Square", only 50 m to the Hotel.

Workshop organizers:
TNC Consulting AG, Switzerland
Contact: Stephanie Mehlfeld

Under the umbrella of the International Energy Agency's PV Power Systems Programme, Task 2 has the overall objective to analyse and improve the performance, reliability and economy of photovoltaic power systems. This is achieved by collecting, analysing and disseminating technical information on performance and long-term reliability. IEA PVPS Task 2 includes: Commission, European Photo France, Germany, Italy, Japan Kingdom, United States of Ame

www.iea-pvps.org

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Task 13 preparatory meeting, on 3rd September Milan 2007

Nr.	Datum	Name	Vorname	Firma
1	20.8.2007	Hoffmann	Winfried	Amat
2	20.8.2007	Andersson	Mats	Energiebanken (Task 2)
3	20.8.2007	Martinsson	Carina	AF-Consult AG
4	23.8.2007	Burkhardt	Roland	Sunways
5	27.8.2007	Knaupp	Werner	PV-Plan
6	27.8.2007	Fraile	Daniel	EPIA (Task 2)
7	28.8.2007	Perezagua	Emiliano	Isofoton
8	28.8.2007	Grunow	Paul	PI Photovoltaik-Institut Berlin AG
9	28.8.2007	Protogreopoulos	Christos	RENI SA
10	28.8.2007	Dimmler	Berhard	Würth Solar Gmbh & Co KG
11	28.8.2007	Ebert	Günther	ISE Freiburg
12	28.8.2007	Reise	Christian	ISE Freiburg
13	29.8.2007	von Schmeling	Philip	Conergy
14	28.8.2007	Richter	André	Conergy
15	29.8.2007	Scholz	Harald	Task 2
16	28.8.2007	Thiessen	Klaus	AR SolarTec
17	28.8.2007	Schwartz	Bernd	Sharp
18	28.8.2007	Müller	Frank	IBC
19	29.8.2007	Mau	Stefan	Task 2
20	29.8.2007	Pearsall	Nicola	Performance
21	29.8.2007	Krupke	Herr	solon ag
22	29.8.2007	Lenck	Norbert	Schott Solar
23	29.8.2007	Schwarz	Thomas	Phoenix Solar AG
24	29.8.2007	Wecker	Reinhard	Asola
25	30.8.2007	Gutzeit	Dirk	Steca
26	30.8.2007	Schork	Rainer	Rehau
27	30.8.2007	Späte	Herr	Rehau
28	30.8.2007	Klammer	Jörgen	Firstsolar
29	31.8.2007	Kohler	Markus	Multi-Contact
30	31.8.2007	Schäfer	Michael	Energiebau
31	1.9.2007	Hunjan	Amolak	Westec House
32	3.9.2007	Denz	Martin	Alfasolar
33		Gabler	Hans Jürg	ZSW
34		Sparber	Wolfram	EURAC
35		Nowak	Stefan	Task 2
36		Nordmann	Thomas	Task 2
37		Jahn	Ulrike	OA Task 2
38		Stryi-Hipp	Gerhard	Task 2
39		Mehlfeld	Stephanie	TNC (Organisator)

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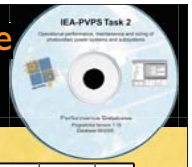
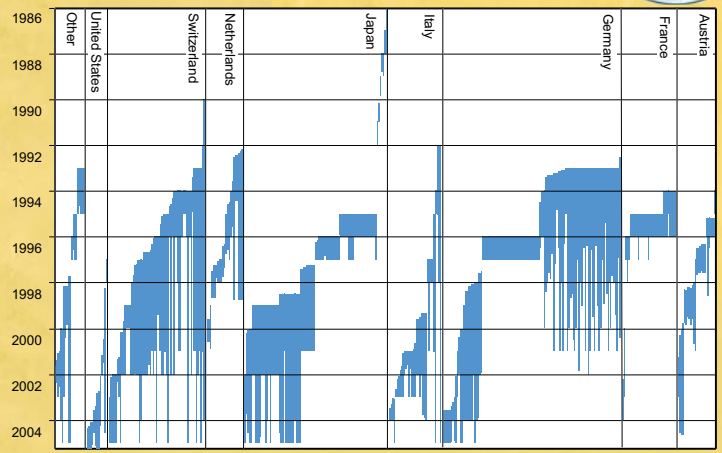
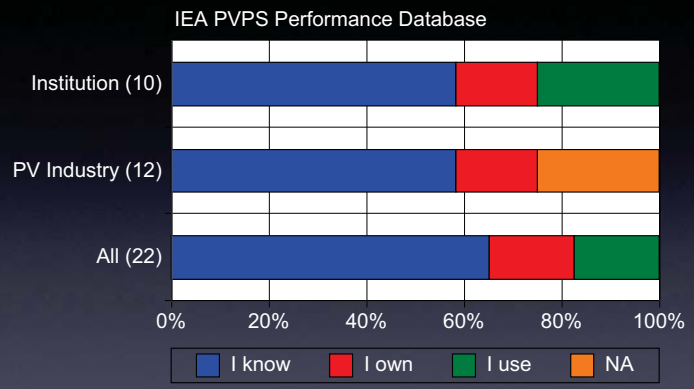
Task 13 preparatory meeting, 3rd September Milan 2007

The Footprint of Performance Database Benchmarking the PV World





Do you know the Task 2 performance database?



Outlook 9-2007 /N = 22

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Focused Performance Analyses

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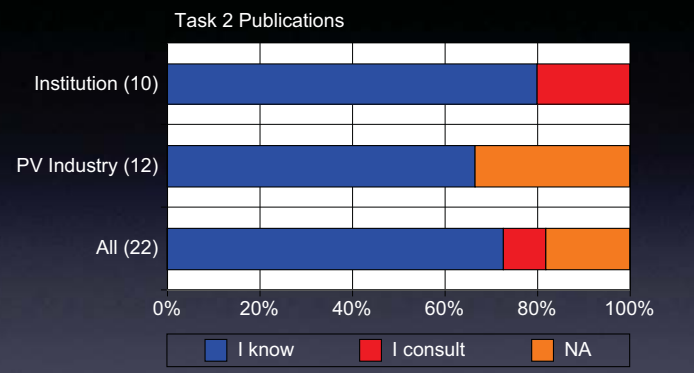
Do you know Task 2 publicationes?



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2 IEA PVPS TASK 2 MEETINGS/YEAR

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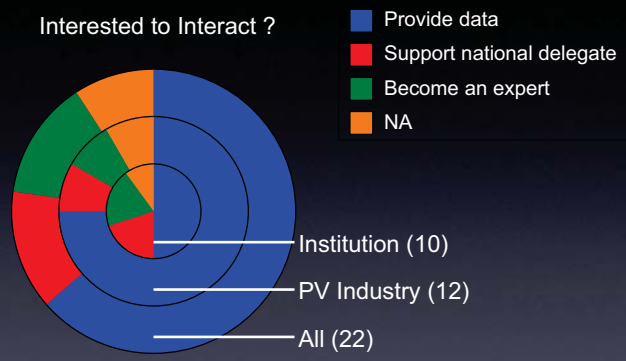
Are you interested to interact with Task 13 activities?



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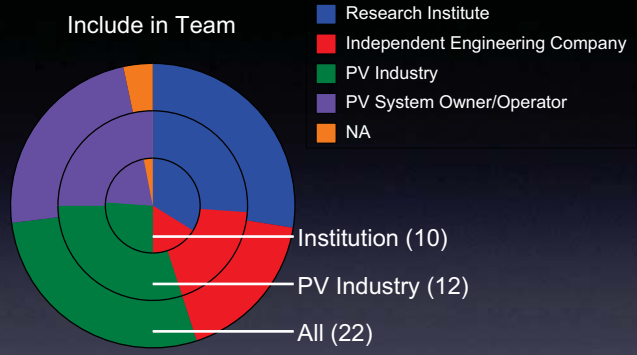
The team of task 13 should include …



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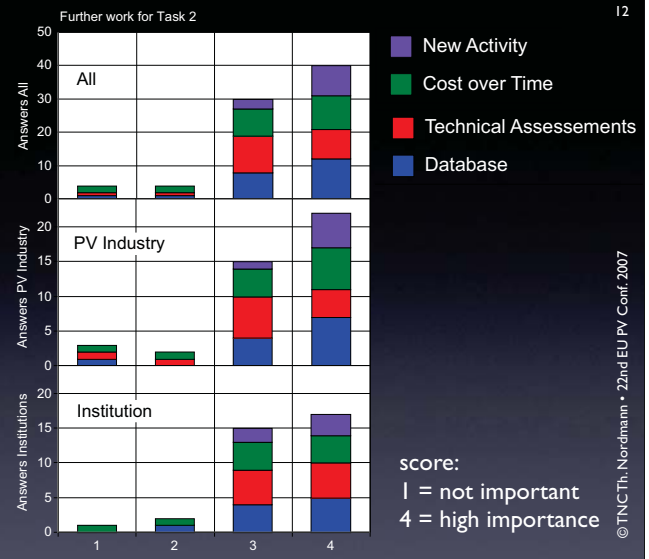
What is your opinion for further work of PVPS in this area?



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score:
1 = not important
4 = high importance

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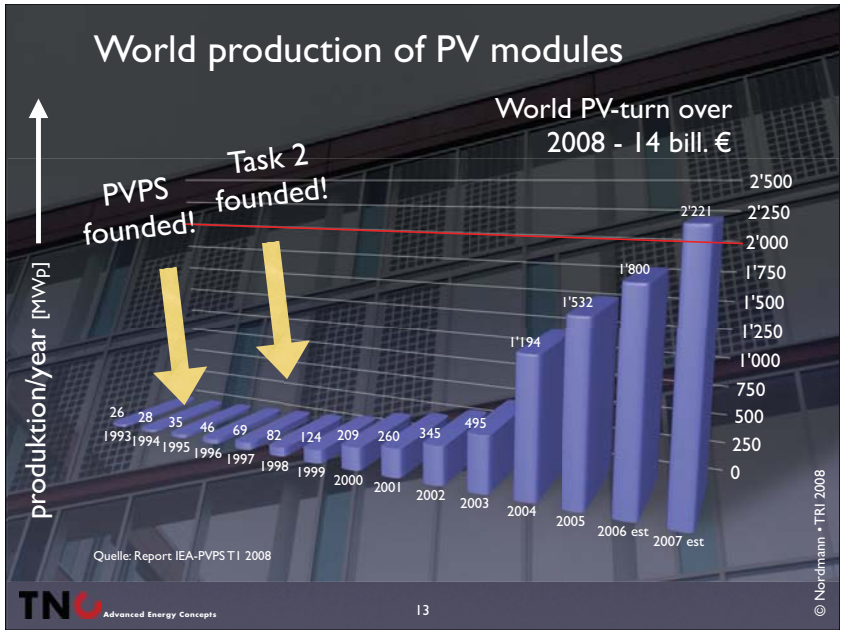
World production of PV modules
World PV-turn over
2008 - 14 bill. €
PVPS founded!
Task 2 founded!
produktion/year [MWp]
26 28 35 46 69 82 124 209 260 345 495 1'194 1'532 1'800 2'221
1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 est 2007 est
2'500 2'250 2'000 1'750 1'500 1'250 1'000 750 500 250 0
Quelle: Report IEA-PVPS T1 2008
TNO Advanced Energy Concepts
13
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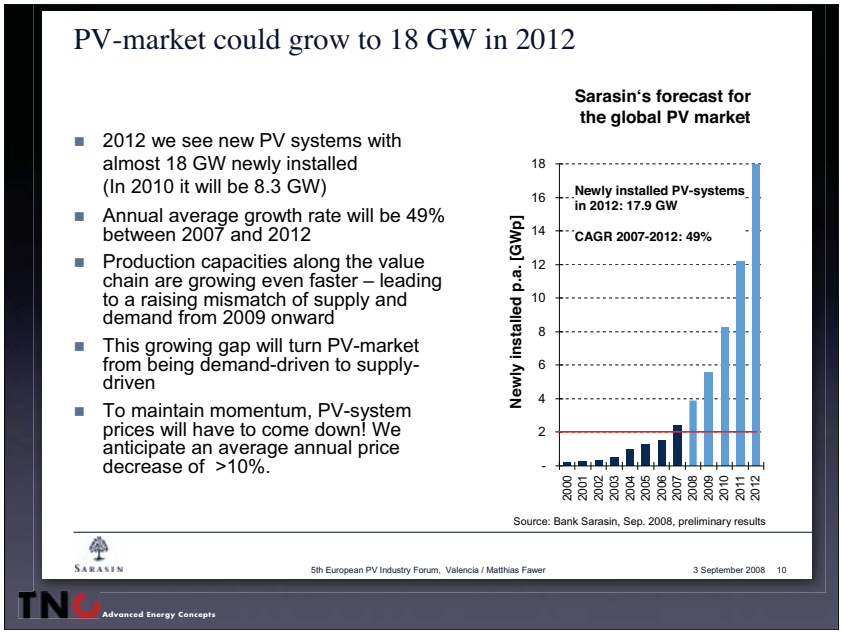
PV-market could grow to 18 GW in 2012
2012 we see new PV systems with almost 18 GW newly installed (In 2010 it will be 8.3 GW)
Annual average growth rate will be 49% between 2007 and 2012
Production capacities along the value chain are growing even faster – leading to a raising mismatch of supply and demand from 2009 onward
This growing gap will turn PV-market from being demand-driven to supply-driven
To maintain momentum, PV-system prices will have to come down! We anticipate an average annual price decrease of >10%.
Sarasin's forecast for the global PV market
Newly installed PV-systems in 2012: 17.9 GW
CAGR 2007-2012: 49%
Newly installed p.a. [GWp]
18 16 14 12 10 8 6 4 2 -
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012
Source: Bank Sarasin, Sep. 2008, preliminary results
SARASIN
5th European PV Industry Forum, Valencia / Matthias Fawer
3 September 2008 10
TNO Advanced Energy Concepts

Outlook
15
We continue working on the future in Task 13?
• bigger bigger bigger bigger
• Performance Performance Performance
• Price Price Price
• Quality Quality Quality...