

## **Session 5- Future Vision of PV industries**

Dr. Lisa Dignard-Bailey, Canadian Executive committee member to the IEA PVPS

In the session Future Vision of PV Industries, three presentations from the Industry Roadmaps from the European PV Industry Association, the US Solar Energy Industry Association and the Japanese PV industry Association. Commentators from seven PV industry followed, including Sharp, Kyocera, Sanyo, Mitsubishi, Isophoton, Sunpower, Pacific Solar.

This summary focuses on the points raised by the speakers and commentators concerning the role of international collaboration and potential role that the IEA could provide to bring our combined efforts more visible to world leaders and to address common issues facing the industry. We understand from Ms. Marianne Haug from the IEA that this combined efforts from the PV community is getting to be much more important since very large players in the clean energy “game” will be and already are very well organized as a Industry advocacy group. This is a good point to consider as part of our future IEA strategy and activities planning process. The IEA PVPS is currently drafting its five year plan – so this is a good time to reflect on the high priority areas and consider the recommendations of industry. By working to address the issues that the industry feels is most pressing, then, I believe that the IEA PVPS will greatly increase its overall relevance and impact.

First - we have seen this morning that there is a willingness of participants to understand the views and targets from the various industry leaders from various regions of the world– and more importantly a willingness to work together towards a strong Industry Leader Vision. This is a good opportunity for the IEA to facilitate a process that I will refer to as a “World PV Roadmap” (ie. as a “Banner” as Prof Kurokawa has suggested in this session). This may seem like a very large task, however we have seen this morning that there is strong leadership within the industry association to realize this.

Second – there is the nagging issues of market-place barriers and we really need to focus on a few where the obstacles are really widely seen all around the world. As an example many industry participants mentioned certification and standards. The issue goes broader to the mutual recognition or inter-laboratory agreements between various country lead safety testing and certification organizations such as UL, TUV, JET, CSA, KEMA, to name but a few. I am quite familiar with this issue as I deal with the same thing in my country. I have to say however that manufacturer participation is rather low because the experts tend to come from the research-base. But let me assure you that there is a political will to adopt international IEC standards with no local (or few) national deviations in most regions of the world – but then we tend to leave a lot of the rest of the planning to the various safety or test laboratories. We may need to re-consider this issue and the next meeting of the International Electrotechnical Commission, IEC TC 82, is in Germany in November – so a special topic could be requested for that meeting agenda. There is a scheme within the IEC called the CB-scheme that is currently trying to address

the issue of mutual recognition and interlaboratory agreements, therefore there is an opportunity for the industry to participate more actively within the IEC.

Third – a common theme was the need for ensuring quality of products, quality of sales and marketing material, and quality of installations. We also realize that our sales channels will differ (ie. on-grid vs off-grid). For example, if the sales channels are through the residential home building industry – they do have their own installation-training programs for their staff, but if it is a retro-fit segment of the market this sale may be done by an independent PV-installer. Also, if the installation is smaller like a rural solar home system (SHS) then another approach is required and we really need to make it a package that is as simple and therefore minimize user needs to change it (ie. plug and play type systems). In all cases, the industry has many successful sales approaches and some of these need to be reported so that others can build for these successes. A question from the audience was asked about the potential for developing a qualified workforce – addressing training infrastructure and the role of industry.

Fourth – we spoke about public education and potential activities that would increase the number of potential buyer base in the future. Some events such as the SOLAR DECATHLON presented by the US-DOE in the morning session is a good example of this and there are many others – so we could consider this issue of pro-active public education and outreach activities within the IEA.

Fifth - we were asked about recycling and start considering what could be done for this issue.

Let me conclude by stating that we have taken this opportunity to consider the vision of the PV industry as they plan for the future, and this has been a unique opportunity for the IEA PVPS. It is my hope that this PV industry advisory role can be built-into our IEA planning process as we look ahead to the future.