



## MINUTES OF THE WORKSHOP:

### **Double Green: Minimizing PV Environmental Footprint**

17 May 2016, 16:30 – 18:00  
Thon Hotel EU, rue de la Loi 75, Brussels

The SET Plan Declaration on Strategic Targets for PV identifies the life-cycle environmental impact of photovoltaics as an area where progress still need to be made. This workshop organized by the ETIP PV was aimed at facilitating an exchange of views about current and forthcoming EU-wide initiatives for the assessment, improvement and communication of PV sustainability and in particular the PEFCR pilot project on “Photovoltaic Electricity Generation”, the proposal to develop an EU ecolabel for PV modules and the potential new eco-design requirements for PV systems.

James Watson, CEO of SolarPower Europe, introduced the discussion and the panelists:

- Andreas Wade, Director Technical Relations and Public Affairs Europe at First Solar, presented the state of play with regard to the development of Product Environmental Footprint Categories rules (PEFCR) via a pilot project. This process aims at establishing a unified method to measure the environmental performance of a product throughout the lifecycle. In the case of PV, it covers the production of DC electricity with PV modules and includes the manufacturing, the operation and the dismantling of modules as well as the use of equipment and facilities and the supply chain of the materials used. Inverters are therefore excluded from the scope of this exercise. The final draft of the PEFCR and its approval is expected by October 2016.
- Françoise Burgun, Program Manager at CEA INES presented a proposal submitted to the European Commission (DG ENV) to develop an EU Ecolabel for PV panels. An EU Ecolabel aims at providing end-consumers – on a voluntary basis - with reliable, eco-relevant information. Given the expected role of solar electricity in the energy transition, Mrs Burgun insisted on the need to ensure that PV will develop in an optimal way with respect to energy efficiency, carbon footprint and resource efficiency. It should also provide an incentive to the PV industry to continuously improve product quality. The EU Ecolabel could also be used to identify best performing products (from an environmental perspective) in tenders: the ADEME in France considers for instance that the Ecolabel could replace the simplified carbon footprint assessment currently conducted in the tendering selection process. Since compliance with REACH and RoHS legislation is a pre-requisite for obtaining an EU Ecolabel, Mrs Burgun referred to the scoping study supported by the consortium partners (CEA-INES, Fraunhofer ISE, ENEA) which considers that a general REACH and RoHS compliance is possible.





Finally, Mrs Burgun insisted on the need to ensure synergies with parallel on-going initiatives (eco-design, NSF standardization process) and in particular with the PEFCR process.

- Pedro Dias, Secretary General of the European Solar Thermal Federation (ESTIF) presented the experience of his sector which went through an eco-design process as this could bring interesting lessons learnt for the solar PV industry. Solar thermal products were covered under two products groups within the eco-design framework: the space heaters and combi-heaters and the water heaters and hot-water tanks. Mr Dias indicated that both products and package of products were able to be labelled (in the latter case, the installer is playing a crucial role as he makes the calculation of the overall performance of the package of products). 4 main lessons can be drawn from the eco-design process from the perspective of the solar thermal industry:
  - Standardization is crucial
  - Testing and simulation should also be considered carefully: there is a need to ensure trust in the testing infrastructure and address questions such as self-declaration vs. third-party certification
  - Some issues have emerged during the implementation phase since Member States may have different understanding of the regulations. To add to the complexity, sometimes two different entities are in charge of eco-design and energy labelling in the public administration.
  - Market surveillance is weak and leave room for unfair competition.

Wim Sinke, Manager Program Development – Solar Energy at ECN and Luc de Marliave, Head of Institutional Relations at Total, were invited to comment on the presentations during the panel discussion.

Mr. Sinke considered that quality and sustainability should be major drivers for further PV deployment. He insisted on the need to avoid having different labels and warned against the risk that only few companies could use officially recognized labels while others may still use self-declared labels. He also estimated that a balance should be strike between accuracy for the data communicated and the need to be able to compare PV with other sources of electricity.

Mr. de Marliave considered that the Ecolabel could ensure an alignment of interests between the industry and the consumers. In his view the eco-design framework could ensure that the 10-15% of worst products do not get access to the EU market anymore while the Ecolabel would help rewarding the 10-15% best products.

During the exchanges with the audience, some considered that the need to ensure further cost reduction was a strong driver for using less materials and therefore enough to guarantee resource efficiency. Others underlined the added value of the PEFCR process as it was a useful tool to identify in which part of the value chain further efforts are needed.





Gaëtan Masson, Founder & Director, Becquerel Institute concluded the workshop by saying that two goals are pursued via these different initiatives: minimizing the environmental impact of solar while promoting the European-based industry.

ETIP PV Secretariat



**Presentations of the workshop** are available [here](#).



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