14.11.2008: Project APOLLON cooperates with SolarTec AG

SolarTec AG assumes responsible position in technical project coordination

German photovoltaics company SolarTec AG was elected as industrial partner of the European Photovoltaics Project APOLLON (Multi-**APr****O**ach for high Efficiency integrated and inte**LL**igent c**ON-**centrating PV modules/systems). APOLLON, a cooperation of European photovoltaic research institutions, aims at the development of high efficiency concentrator technology, focussing on innovative photovoltaic systems in the field of "PF -Point Focus" and "High Density-Mirror Based Spectra Splitting".

SolarTec AG won recognition against strong competition of more than 400 project applicants, including worldwide renowned research institutes and universities. The total budget of the project amounts to approx. 11.7 Mio. €, of which 8.2 Mio. € will be funded by the EU.

Together with subsidiary company ***ENE,*** SolarTec AG is in funds of a 2.1 Mio. € budget (1.6 Mio. € funded by the EU) until 2012. Under the lead of CESI RICERCA (I), and in cooperation with 13 further renowned companies and institutes from 10 countries, SolarTec AG will develop an innovative, concentrator system for competitive, high-efficient photovoltaic electricity generation.

Solar Tec's most important project partners are:

- CESI RICERCA, Milan, Italy
- AIXTRON, Aachen, Germany
- JRC, Ispra, Italy
- ECN, Petten, Netherlands
- ROBOTIKER ENERGÍA, Zamudia-Bizkaia, Spain
- ENEL, Italy

At the Kick-Off on July 10, 2008 in Milan, Italy, work contents and responsibilities of the project partners were fixed. Amongst others, project focus on in the development of a new, non-imaging lens (Fresnel and Prismatic lens), combining high concentration and optical performance with wide acceptance angles.

Another aspect in the research project is the enhancement of micro-solar-cells (multi-junction solar-cells) on the basis of III-V semiconductor materials deriving from space technology.
Thus the APOLLON project credits with a somehow historic role, aiming at photovoltaic efficiencies beyond 40%. In order to reach that, new materials for MJ (Multi Junction) solar cells will be tested and produced in Solar Tec's laboratory. During extensive "indoor" and "outdoor" tests, the concentrator-modules are checked on performance, quality and long life durability by reference measurements.

The tracking system is crucial for the efficient use of concentrator technology. SolarTec AG will develop a novel, intelligent and cost effective system that enables optimal performance of the complete system.

SolarTec AG commits itself to a responsible position in the technical coordination of the project, as well as, in implementing operational results into industrial production and commercialization of concentrator PV-Technology.

Main tasks of SolarTec AG are:

Optimisation of primary lenses
Optimisation of the complete module production process
Long term stability of the modules (with JRC)
Optimisation of cost-effective, highly-precise tracking systems of SolarTec (jointly with ROBOTIKER ENERGÍA)
Development of secondary lenses
IEC-Certification (with JRC)
Construction of a test installation in Sicily (with ENEL)

ENE`s main tasks will be the development of “multi-layer-cells” with a concentration factor of 1000 and an effectiveness of more than 35%, as well as the production of Ge-Wafers for the whole consortium.

Further information on the internet relating to the ***project*** can be found under http://www.apollon-eu.org/project.htm. A complete ***list of all partner companies*** can be found under http://www.apollon-eu.org/partners.htm

Solar*Tec AG is a photovoltaics industry company which develops and markets highly efficient solar energy systems. The Solar*Tec Group is active in all three generations of Photovoltaics: crystalline silicon, thin film technology and concentrator PV (CPV).

One of the core-competences is the Sol*Con™-concentrator technology, which provides efficiency rates over 35 percent and generates solar energy up to 50 percent cheaper than conventional solar modules.

The services of the Solar*Tec Group include important steps of the value-creation-chain, amongst others wafer manufacturing for pv concentrator cells and pv concentrator modules, TCO-Glass (under construction), production of crystalline modules as well as turnkey construction of solar parks.

*Sol*Con™ is a registered trademark of Solar*Tec AG.*

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