Regional Development European Fund Cofinanced Projects

"Instituto de Sistemas Fotovoltaicos de Concentración"

Integrated operative programme for Castilla-La Mancha (2000-2006)

Scientific & Technological Equipment Acquisition

Scientific & technological equipment acquisition is cofinanced by Regional Development European Fund and Board of Communities of Castilla-La Mancha, in 70% and 30% respectively. Thanks to the European Union contribution, the under-below related equipments could be acquired, amounting to a final cost of € 682,092.04. This acquisition meant the turning point for the Institute development, allowing plenty of new projects to be undertaken that otherwise rarely could have been carried out.
Acquired equipment is composed by:

- A Solar Simulator
- Three Climatic Chambers
- A Spectroradiometer
- A Hail Launcher
- A Thermographic Camera
- A Ratiometer
- A Power Quality Analyzer
- An UV radiometer
- A Visibilimeter
- A portable Spectroradiometer
- An Earth & Isolation Resistance Meter
- A Solar-Tracking System
- An I-V Curve Tracer
- A Power Supply
- An Electric Metering Equipment
- A Delta Electrónika Power Supply

Regional Development European Fund operative Programme for Castilla-La Mancha (2007-2013)

A)Main building, warehouse, transformer station, perimeter fencing and car park zone construction at the Instituto de Sistemas Fotovoltaicos de Concentración, S.A.U. corporative headquarters:

These facilities construction is cofinanced by Regional Development European Fund in 80%. Building and warehouse form the ISFOC corporative headquarters. Works execution took 15 months approximately, the initial contract amounting to € 4,007,892.69 (VAT excluded). This building, built by Aldesa Construcciones, houses our head offices, formation rooms, a library and a conference hall. On the other hand, the warehouse will house maintenance, electric and painting workshops apart from the majority of the scientific acquired equipments that will be installed there in order to render the main services that ISFOC offers.

B) CPV Solar Plants acquisition:
Cofinanced by Regional Development European Fund in 65%, this acquisition together with the plant installation amount to approximately € 7,800,000 (VAT excluded).

Through an international call for tenders and supported by its International Scientific Committee, ISFOC selected between several suppliers and manufacturers a total of 4 companies. Specifically, these 4 awardees were: an USA company- **EMCORE Corporation;** a Taiwanese one- **ARIMA;** and 2 Spanish companies as well- **Sol3G and Renovalia CPV** (formerly known as Concentración Solar La Mancha). These companies, now ISFOC technological partners, daily working hand by hand, were awarded with the supply and installation of 13 plants of 100kW nom each one: a total of 1.3 MW to be distributed in groups of 3 plants for each awardee, except for Sol3g, awarded with 4 CPV plants. All CPV plants definitive installation, to be located at Puertollano, will be carried out throughout 2010.

Even if ISFOC will profit from the CPV plants electric generation once they are grid-connected, the main ISFOC aim to be achieved while installing these plants is to be supporter of this CPV technology development that actually has aroused a special interest worldwide because of its quickly spreading by leaps and bounds. CPV systems efficiency to be increased, main components to be improved (especially optic cells and sun trackers) and the consequent cost reduction constitute the main ISFOC goals to be investigated jointly with the private sector and the University Institutes.

Furthermore, the ISFOC pioneering role on the installation and development of this CPV technology as well as the fact that nowadays ISFOC is the centre that counts with the greater number of grid-connected CPV plants (a total of 3MW), have launched ISFOC as the international reference Institute for CPV technology, benefiting of all the associated advantages and attracting companies from all over the world that are interested in our support, collaboration and experienced advising. Being at the vanguard of this technology development may cause a profitable “pull effect” to companies that may be interested in establishing factories or R+D centres in Castilla-La Mancha, or especially in Puertollano , generating economic and social benefits as well as wealth and job creation in an Autonomous Community that is doing a big effort in order to move forward and progress in every sphere and specifically in the renewable energies field, where we are a world referent.