T@W Good Practice Form

Setting

Title: 50 MW Parabolic Collector Solar Project in Sanlucar
Country: Spain
Location: Sanlúcar la Mayor (Sevilla)
Start date: April 2006
End date: 2007
Technology keyword(s): Solar energy, thermosolar.
Host sector: Energy

General description

Summary: Solúcar will build during the next seven years the biggest solar platform in Europe in the surroundings of Sanlúcar la Mayor (Seville). Nine plants will be installed using different technologies like the thermoelectrical tower and heliostat field, parabolic cylinder, Stirling disc and photovoltaic with high and low concentration. Total power capacity will be 302 MWe. Among these technologies, specially relevant is the parabolic cylinder collector plants described in this sheet.

Aims: To install five 50 MW parabolic cylinder collector plants

Summary of Results:

Technical details

Technical details: Each 50 MW plant will have 360 collectors 150 m long. This reflecting surface consists of a series of high reflectivity mirrors built with a parabolic shape. These mirrors are mounted on a structure moved by a mechanism following the sun path. The mirrors concentrate the sun radiation on a thermal fluid, electricity is generated by a steam turbine.

Energy data

Energy data: Each plant will have an installed electrical capacity of 50 MW, using only the energy from the sun. The estimated electricity production is 114,6 GWh/year.

Environmental data

Environmental data: The surface occupied is 1.500.000 m2/plant
Project GHG-emissions: There will be no CO2 emissions
GHG-emission reductions: 90.000 tonnes CO_2equivalent/year/plant
“EAU, CER, ERU, AAU”: Not applicable

Contribution to Sustainable Development:
The Solar Platform generates electricity reducing the greenhouse gas emissions. The Solar Thermoelectric Technology has a great potential for generating renewable electricity: the wide availability of the sun resource, the maturity of the available technology while there is a great potential for improvement.

Economic data:

Economic data: Investment**:** 200 M€/plant
Financing: The plant is financed through bank credits and the commercial selling of the electrictiy at a subsidised price in the Spanish electricty market.

Additional Information

Printed or electronic reports or other literature available:
Title: Dossier de prensa Cost: free
Address for download of electronic document: www.solucar.es

Project Web site: www.solucar.es

Photo Library

Pictures:

Cylindrical parabolic collectors (with the permission of Abengoa-Solucar)

Contact information:

Type of Organisation:	Engineering and project promotion

Technology keyword(s) specific to this organisation: Solar energy

Organisation / Agency:	Solúcar
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Description of the Organisation for inclusion in the database of Technology and Service Providers:

The Solar Energy branch of Abengoa, Solucar, is specialised in the design, promotion, construction and exploitation of solar energy plants. It also carries out R&D activities to improve the technology and reduce costs.

Other contacts: