



SUN TO MARKET SOLUTIONS:

PV REFERENCES January 2014

Year	Description	Client / Project	Installed Capacity
2013	Preliminary technical Due Diligence of a 94MW PV project in the Atacama desert in Chile.	Financial institution	94MW
2013	Structural design of a flow battery with finite element analysis for distributed solar power generation systems	Engineering firm	-
2013	Delivery , operation and maintenance of weather stations as well as data service for several PV projects in South, North and Central America	Project developer	-
2013	Feasibility study, plant layout and conceptual design of photovoltaic power plants for banana plantations in Honduras	Engineering firm	10 MW
2013	Solar resource studies and delivery of weather station and monitoring& data validation software for PV projects in China	Project developer	40 MW
2012	Regulatory and market study as well as the development of a new business model for promoting PV plants for self-consumption in the commercial and industrial sector in Spain.	Financial Investor	20 MW
2012	Implementation of our Nowcasting system for short term and very short term prediction of Global Irradiation and other weather data in a 2 MW PV plant in Spain	PV Plant operator	2 MW
2012	Preparation of guidelines and manuals for the site identification and design of large scale PV plants	Project developer	-
2012	Market Study – Market potential of rural electrification in remote areas of India based on PV-minigrids	Silicon wafer producer	-
2012	Appointment as technical expert in an international arbitration process regarding PV and CPV plants in Italy	Promoter	50 MW
2012	Solar resource analysis and Feasibility Study for 10 MW PV power plant in Karnataka, India	Investment fund	10 MW
2012	Layout and energy yield production studies for a combined solar power system (PV and CSP – Central receiver) for various locations in North America, Middle East and Africa	EPC contractor	> 100MW
2012	Conceptual design and energy yield production studies for 3 x 20 MW PV projects in the Dominican Republic.	Promoter	60 MW
2012	Solar Resource Country study, detailed site assessment for 6 PV project sites in the Dominican Republic.	Promoter	-
2012	Pre-Feasibility, Layout and yield production study for a 2 MW PV installation In Atlanta, Georgia, USA	Promoter	2 MW
2011	Expert opinion and Solar Resource Analysis for Peru, Chile, Brazil, Greece, Morocco, India and USA,	Several project developers	-



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2014	Delivery of our production and performance model ESEMflex® for a solar tower project using molten salts	EPC contractor	100 MW
2013	Proposal Engineering for the solar field of an ISCC power plant in the MENA region.	German Engineering firm	280MW
2013	Delivery of our production and performance model ESEMflex® and user training for a Chinese utility	Chinese utility	100 MW
2013	Design, project management and budgeting for the development of a proprietary Fresnel system for combined heat and power production	Steel Structure Manufacturer	-
2013	Review of issues and options for concentrating solar power in the Middle East and Northern Africa	World Bank	-
2012	Performance comparison of vacuum receiver tubes simulating the energy production of large scale parabolic trough plants for different geographic areas	Receiver tube manufacturer	-
2012	Implementation of our Nowcasting system for short term and very short term prediction of DNI and other weather data in a 50 MW parabolic trough plant in Spain	CSP Plant operator	50 MW
2012	Calibrated Solar resource analysis using satellite data, numerical weather models and ground measured data for parabolic trough project in Morocco.	EPC contractor	-
2012	Detailed Bidding and Guarantee production model for a 50 MW parabolic trough plant with thermal storage in South Africa	EPC consortium	50 MW
2012	Solar resource degradation in India and its long-term impact on solar power plant energy output	Indian Engineering firm	-
2012	Energy yield production study for a 100 MW CSP parabolic trough project with thermal storage in the South Africa	EPC contractor	100 MW
2012	Layout and energy yield production studies for a combined solar power system (PV and CSP – Central receiver) for various locations in North America, Middle East and Africa	EPC contractor	> 100MW
2012	Implementation of our high quality plant performance model ESEM pro® in a 50MW parabolic trough plant in Spain	Plant operator	50 MW
2011	Review of production study of direct steam solar tower project in South Africa	EPC contractor	-
2011	Production studies for three solar tower projects using molten salts as HTF in Spain and USA	EPC Contractor	3x 100 MW



2011	Production study and sale of our production and performance model ESEMflex® in Spain and USA	Engineering firms	50 MW
Year	Description	Client / Project	Installed Capacity
2011	Design of a financial model with detailed manual for the refinancing of a 50 MW parabolic trough plant with 7 hours of storage.	Plant owner	50 MW
2011	Implementation of our ESOM® tool for the optimization of the operation of a 50 MW CSP plant in Spain.	Plant Owner and operator	50 MW
2011	In-house training for Indian financial entities regarding project finance of CSP plants	Indian bank	-
2011	Solar resource Analysis, Feasibility study and preparation of bid documents for EPC contract for Fresnel cogeneration project in Mexico	Project developer	10 MW
2011	Expert opinion and Solar Resource Analysis for Peru, Chile, Brazil, Greece, Morocco, India and USA,	Several project developers	-
2011	Calibrated Solar resource analysis using satellite data, numerical weather models and ground measured data for a solar thermal power plant in Rajasthan, India	Project developer	-
2011	Calibrated Solar resource analysis using satellite data, numerical weather models and ground measured data as well as plant production studies for the finance of two parabolic trough power plants with storage in Spain	EPC Contractor	2 x 50 MW
2011	Review of solar resource report and delivery of a production study for a parabolic trough solar power projects in South Africa	EPC Contractor	110 MW
2011	Calibrated Solar resource analysis using satellite data, numerical weather models and ground measured data for a solar thermal power plant in Greece	EPC Contractor	-
2011	Solar Resource Analysis and Production study and modeling for performance tests of four parabolic trough power plant in Spain	EPC Contractor	2 x 50 MW
2011	Calibrated Solar resource analysis using satellite data, numerical weather models and ground measured data for a CSP project in USA	Project Sponsor	-
2011	Pre-feasibility studies for a ISCC power plant using parabolic trough technology in India	Project Sponsor	100 MW
2011	Pre-feasibility studies for an integrated MED-CSP desalination power plant using parabolic trough technology in India	Project Sponsor	1 MW
2011	Member of Solarpaces Technical Committee to evaluate and select scientific contributions for Solarpaces congress in Granada in September 2011	Solarpaces	-
2010	Design and implementation of a dynamic model of a solar tower using molten salts as HTF in USA	EPC Contractor	100 MW
2010	Calibrated Solar resource analysis using satellite data, numerical weather models and ground measured data	Project developer	-



	for two solar thermal power plants in Rajasthan, India		
2010	Solar resource assessment and analysis using satellite data for a CSP project in Tunisia	Utility	-
Year	Description	Client / Project	Installed Capacity
2010	Calibrated Solar resource analysis using satellite data, numerical weather models and ground measured data for two solar thermal power plants in Gujarat, India	Project developer	-
2010	In-house training for solar sector engineering firm on regulatory issues, market analysis, permits and project finance	Saudi Arabian Engineering firm	-
2010	Support regulator in the preparation of RFP documents for CSP projects in Tunisia	Utility	100 MW
2010	Solar resource assessment using satellite data and numerical weather data for a CSP project in Italy	EPC Contractor	-
2010	Design of a tailor-made model for solar thermal power plants using parabolic trough technology and molten salt thermal storage	EPC Contractor	50 MW
2010	Member of Solarpaces Technical Committee to evaluate and select scientific contributions for Solarpaces congress in Perpignan in September 2010	Solarpaces	-
2010	Technical consulting on EPC and LTSA negotiations for construction and operation of combined-cycle project in Germany	EPC contractor	400 MW
2010	In-house training for solar sector engineering firm on regulatory issues, market analysis, permits and project finance	Engineering firm	-
2010	Member of AENOR's AEN/CTN 206/SC Subcommittee for Standardization of Solar Thermal Energy Systems	AENOR	-
2010	International expert to provide technical assistance in 10 solar thermal projects for the Higher Council of Science & Technology as part of the Egyptian government's Science and Technology Development Fund (STDF)	Government of Egypt	-
2010	Independent technical assistance for large Asian bank on administrative framework and economic regime of solar thermal plants in Spain	Confidential	-
2010	Numeric model for meteorological variable prediction on a 24-48-72 hour time frame	S2m	-
2010	Solar resource analysis and feasibility studies for 2 x 50 MW and 1x 25MW CSP power plant in India	Project developer	125 MW
2009	Basic engineering, operating processes, metrological calculation methods, and control and simulation software for mobile loop testing equipment for	Opex Energy	-



	parabolic trough solar field		
2009	Member of Solarpaces Technical Committee to evaluate and select scientific contributions for Solarpaces congress in Berlin in September 2009	Solarpaces	
Year	Description	Client / Project	Installed Capacity
2009	Analysis of values guaranteed by solar field contractor to be integrated into EPC framework	Confidential	-
2009	Production study for 50 MW Parabolic Trough plant including financial sensitivity analysis. Includes financial baseline case	EPC contractor	50 MW
2009	Algorithm development based on MRM to estimate solar radiation	S2m	-
2009	Solar resource analysis based on satellite data for 50 MW project at request of one of the contractors in the consortium	EPC contractor	50 MW
2009	Review of EPC and O&M contracts prior to financing a 50 MW project, at contractor's request	Engineering Firm	50 MW



Member of CSP standardization committees

