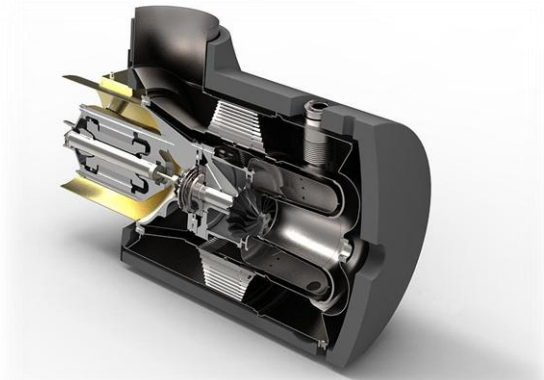


SENERCO REFERENCES



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SENERCO PRESENTATION

SENERCO ENERGY SERVICES is an engineering and consulting company specializing in project management in the energy sector, which makes available to its customers a full team with extensive experience in the field of renewable energies, energy efficiency and cogeneration.

Additionally, this company is as energy services company capable of performing the integral development projects or participate in those phases of the development in which their services are required, including the financing of energy-saving solutions.

SENERCO can offer:

- ✓ Energy audits.
- ✓ Technical and economic feasibility studies.
- ✓ Integrated Projects Directorate.
- ✓ Development of detail engineering.
- ✓ Purchasing Management.
- ✓ Technology selection, comparison.
- ✓ Supplier selection, comparative.
- ✓ Installation supervision on site.
- ✓ Construction management and property support.
- ✓ Plant optimization.
- ✓ Plant Maintenance Management.
- ✓ Commissioning Instalations.
- ✓ Processing and legalization of projects and instalations.
- ✓ Project Financing.

SENERCO has a highly specialized team to address energy projects, especially concerning the development of cogeneration projects, biomass, wind and photovoltaic.

BOARD OF SENERCO



José Manuel Rodríguez, Founder and Managing Partner of SENERCO.

Industrial Engineering, University of Seville, Spain.

Master in Economics and Business Administration (Executive – MBA). IESE, San Telmo in Seville International Institute.

Master in Renewable Energy and Electricity Market. EOI School of Industrial Organization, Seville.

Technical Director and Business Promotion in the field of renewable energies since 2000. Technical Advisor on international projects.

I. PHOTOVOLTAIC REFERENCES

- ✓ Technical, economic and legal assessment of 5 photovoltaic projects of 43.75 MW total power, called, Photovoltaic Southern PSF, PSF Generations Energy, Photovoltaic Los Prados PSF, PSF and PSF Photo Sol Solar Energy, all located in Honduras. Year 2014
- ✓ Project PV-diesel hybrid installation 1 MW in Buenos Aires, Argentina. Year 2014
- ✓ Projects Photovoltaic-Diesel hybrid installation 1 MW Atacama, Constitution and Santiago, Chile. year 2014
- ✓ Project PV-diesel hybrid installation 1 MW in Santo Domingo, Dominican Republic. year 2014
- ✓ Project PV-diesel hybrid installation 1 MW in Choluteca and Olancho, Honduras. Year 2014
- ✓ Project PV-diesel hybrid installation 1 MW in Bogotá, Santa Marta, Boyaca and Guajira, Colombia. Year 2014
- ✓ Project PV-diesel hybrid installation 1 MW in Uruguay. Year 2014



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- ✓ Project PV-diesel hybrid installation 1 MW in Tijuana and Mexico City, Mexico. Year 2014
- ✓ Project PV-diesel hybrid installation 1 MW in Islamabad, Pakistan. Year 2014
- ✓ Photovoltaic Solar Plant Project 5 MW grid-connected photovoltaic generation called "BLOUPUTS PV" in South Africa. Year 2014
- ✓ Photovoltaic Solar Plant Project 5 MW grid-connected photovoltaic generation called "HOOGEEGEN PV" in South Africa. Year 2014
- ✓ Photovoltaic Solar Plant Project 5 MW grid-connected photovoltaic generation called "ONTSEEPKANS PV" in South Africa. Year 2014
- ✓ Photovoltaic Solar Plant Project 5 MW grid-connected photovoltaic generation known as "Boegoeberg PV" in South Africa. Year 2014
- ✓ Photovoltaic Solar Plant Project 5 MW grid-connected photovoltaic generation known as "Pofadder PV" in South Africa. Year 2014
- ✓ Photovoltaic Solar Plant Project 5 MW grid-connected photovoltaic generation known as "Bokpoort PV 2" in South Africa. Year 2014

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- ✓ Study of technical and economic feasibility for PV system at the Plaza Mall World, Soyapango, San Salvador, El Salvador. ACRISAL estate property in El Salvador. Year 2013
- ✓ Study of technical and economic feasibility for PV system PETTENATI, El Salvador. Year 2013
- ✓ Study of technical and economic feasibility for the company Jordan Industrial Estate Company (JIEC) in Abdullahz - Jordan. Year 2013
- ✓ Study of technical and economic feasibility for the company Jordan Industrial Estate Company (JIEC) in Muwaqar - Jordan. Year 2013
- ✓ Feasibility Study. Assessment solution power supply by 0.25 MW PV plant. Ownership: DEMASA, Costa Rica. Year 2013.
- ✓ Study of technical and economic feasibility of 0.60 MW photovoltaic plant located in the Liberia Airport in Costa Rica. Year: 2013



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- ✓ Analysis and Technical review of photovoltaic plants in Albacete, Spain. Año 2013
- ✓ Analysis and Technical review of two photovoltaic plants in Amman, Jordan. Year 2013
- ✓ Analysis and technical evaluation of the 1.8 MW photovoltaic plant on the covers of Mercalaspalmas in Las Palmas. Year 2013
- ✓ Project design, definition and technical-economic proposal photovoltaic system on the roof of 3.68 MW mall called Cascades. Property: SPECTRUM and located in Honduras. Year: 2012
- ✓ Technical Proposal for Photovoltaic Installation in Miraflores Mall, 2.47 MW, Guatemala City (Guatemala). Client: Spectrum. Year: 2012
- ✓ Technical Proposal for Photovoltaic Installation in Oakland Mall, 0.94 MW, Guatemala City (Guatemala). Client: Spectrum. Year: 2012

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- ✓ Technical Proposal for Photovoltaic Installation in Management Center DAISIES, 0.14 MW, Guatemala City (Guatemala). Client: Spectrum. Year: 2012
- ✓ Technical Proposal for Photovoltaic Installation in PORTALS Mall, 1.70 MW, Guatemala City (Guatemala). Client: Spectrum. Year: 2012
- ✓ Technical Proposal for Photovoltaic Installation in CASCADAS MALL Mall, 3.68 MW, Tegucigalpa (Honduras). Client: Spectrum. Year: 2012
- ✓ Technical Inspection Report and constructive aspects of 1.26 MW photovoltaic plant in Ribaforada (Navarra-Spain). Year 2012
- ✓ Technical Inspection Report and constructive aspects of 1.26 MW photovoltaic plant in Cintruénigo (Navarra-Spain). Year 2012
- ✓ Photovoltaic Installation of 10 MW in Alcalá del Río (Sevilla-Spain). Year: 2011
- ✓ Photovoltaic Installation of 10 MW in Mairena del Alcor (Sevilla-Spain) . Year: 2011
- ✓ Photovoltaic Installation of 8 MW in Bollullos de la Mitación (Sevilla-Spain). Year: 2010



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- ✓ Project and Performing procedures for photovoltaic Installation of 20kW in Dos Hermanas, La Luisiana y La Roda de Andalucía (Sevilla-Spain). Year: 2011
- ✓ Photovoltaic Installation of 40 kW in San José de la Rinconada (Sevilla-Spain). Client: Rondón Energías. Year: 2010
- ✓ Photovoltaic Installation of 60 kW in Cantillana (Sevilla-Spain). Client: Rondón Energías. Year: 2010
- ✓ Photovoltaic Installation of 118 kW in Puerto Real (Cádiz-Spain). Client: Almacenes Marítimos del Sur. Year: 2009
- ✓ Photovoltaic Installation of 112 kW in Puerto Real (Cádiz-Spain). Client: Grupo Portillo. Year: 2008
- ✓ Project Implementation and Project Management Photovoltaic Installation of 3,0 MW in Paradas (Sevilla-Spain). Start-up: March 2008. Investment: 24 million \$



I. PHOTOVOLTAIC REFERENCES

- ✓ Project Implementation and Project Management Photovoltaic Installation of 1,65 MW in Fuentes de Andalucía (Sevilla-Spain). Start-up: July 2008. Investment: 12 million \$
- ✓ Project Implementation and Project Management Photovoltaic Installation of 1 MW in Osuna (Sevilla-Spain). Start-up: August 2008. Investment 7.3 million \$
- ✓ Photovoltaic Installation of 346 kW in Sevilla(Spain). Client: UTE Metro de Sevilla. Year: 2007
- ✓ Project Photovoltaic Installation of 1 MW in Osuna (Sevilla) Year: 2007
- ✓ Project Photovoltaic Installation of 1,8 MW in Sanlúcar de Barrameda (Cádiz). Year: 2007
- ✓ Solar Plant of 1.89 MW in Estepa (Sevilla-Spain). Year: 2007
- ✓ Solar Plant of 1.89 MW in Alcalá de Guadaira (Sevilla-Spain). Year: 2007
- ✓ Solar Plant of 3.78 MW in Farcinas Tarifa (Cádiz-Spain). Year: 2007



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- ✓ Solar Plant of 100 kW in La Roda de Andalucía (Sevilla–Spain). Year: 2006
- ✓ Project and construction management of photovoltaic installation on deck Chilean Pavilion 5 kW in Seville. Year: 2005
- ✓ Development and processing three 1.89 MW solar farms in the province of Seville. Year 2005
- ✓ Feasibility study for solar photovoltaic plants of 1,8 MW. May 2005
- ✓ Processing of connection points, grants and Administrative authorization for 46 photovoltaic installations of 100 kW. Year 2005
- ✓ Feasibility study for solar photovoltaic plants of 100 kW. June 2004
- ✓ Strategic Plan for the development of photovoltaic solar energy in Alcalá de Guadaira (Sevilla). Year 2004
- ✓ Feasibility study of photovoltaic systems in parking canopies of shopping centers in Andalusia. In March 2003
- ✓ Solar Photovoltaic Installation of 5 kW in the Chilean Pavilion in Seville. 2003
- ✓ Photovoltaic Installation Las Cañas, of 4 MW in Jerez de la Frontera (Cádiz–Spain). Start-up: Year 2008. Investment: 38.48 million \$
- ✓ Photovoltaic Installation Santa Amalia, of 2 MW in Santa Amalia (Badajoz). Start-up: Year 2008. Investment: 19.24 million \$

II. COGENERATION REFERENCES

- ✓ Technical and economic assessment of biogas cogeneration project in Ingenio Magdalena in Guatemala. Power: 14 MW. Year 2014
- ✓ Technical and economic assessment of 60 cogeneration projects 0.2 MW to 3 MW in Guatemala. Year 2014
- ✓ Technical and economic evaluation of 25 cogeneration projects of 0.4 MW to 3 MW in El Salvador. Year 2014
- ✓ Technical and economic evaluation of 8 cogeneration projects of 1.2 MW to 3 MW in Costa Rica. Year 2013
- ✓ Technical and economic assessment of biomass cogeneration project of 3 MW and steam supply process in TicoFrut facilities located in Costa Rica. Year: 2013
- ✓ Technical and economic assessment of cogeneration project for drying corn mill in GRUMA facilities, located in Costa Rica. Year: 2013
- ✓ Technical and economic assessment of cogeneration project to supply steam and cold water to process in NUMAR Refinery facilities located in Costa Rica. Year: 2013
- ✓ Technical and economic assessment of bunker cogeneration project to supply process steam and hot water in DEMASA facilities located in Costa Rica. Year: 2013
- ✓ Technical and economic assessment of cogeneration project to climate supply in Liberia Airport facilities in Costa Rica. Year: 2013
- ✓ 16 MW Electric Generation Plan Project in Oriente Medio (Irán) Year: 2012



II. COGENERATION REFERENCES

- ✓ Cogeneration Project 400 kW in sports facilities in Alcalá de Guadaira (Sevilla). Customer: SATO Group Fitness Sport. Year: 2011-2012
- ✓ Cogeneration Project 400 kW in sports facilities in Sevilla. Customer: Persavi Sport. Year: 2011-2012
- ✓ Project 500 kW cogeneration in sports and leisure center in Villaviciosa de Odon (Madrid). Year: 2009
- ✓ Project Management of Cogeneration Plant for drying alperujo of 16.4 MW in Fuente de Piedra (Málaga-Spain). Starting June 2003. Investment: 9.6 MM €
- ✓ Project Management of Cogeneration Plant for drying alperujo of 11 MW in Morón de la Frontera (Sevilla – Spain). Starting January 2002 – 2004. Investment: 5.8 MM €
- ✓ Project Management of Cogeneration Plant of 9.7 MW whit recovery boiler and absorption chiller in La Roda de Andalucía (Sevilla-Spain). Starting February 2001. Investment: 6.1 MM €
- ✓ Feasibility study of cogeneration plant efficiency PERSAN facilities, Sevilla. Year: 2008
- ✓ Feasibility study of cogeneration plant of 5 MW “CEBASA” cement factory in Dos Hermanas (Sevilla). Year: 2008
- ✓ Feasibility study of cogeneration plant in indoor municipal pool in Alcala de Guadaira (Sevilla). Year: 2004



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- ✓ Feasibility study of cogeneration plant of 4.3 MW at the "Cooperativa Olivarera Inmaculada Concepción" in Archidona (Málaga). Year: 2004
- ✓ Feasibility study cogeneration plant of 1.8 MW absorption chillers for air conditioning "INFRICO" installations, Lucena (Córdoba). Year: 2003
- ✓ Feasibility study of cogeneration plant of 16.4 MW drying alperujo in "Orujera Interprovincial S.C.A" facilities, Fuente de Piedra (Málaga). Year: 2001
- ✓ Feasibility study of cogeneration plant of 11.0 MW in drying facilities "Espuny alperujo – Morón", Morón de la Frontera (Sevilla). Year: 2000
- ✓ Feasibility study of cogeneration plant of 16.4 MW with vacuum evaporator for waste treatment in Porcuna (Jaén). Year: 2000
- ✓ Feasibility study of cogeneration plant of 11 MW plant drying alperujo in "Oleícola Jaén" facilities in Baeza (Jaén). Year: 2000
- ✓ Feasibility study of cogeneration plant with absorption chiller of 9.7 MW of "MIGASA", La Roda de Andalucía (Sevilla). Year: 2000



III. BIOMASS REFERENCES

- ✓ Technical and economic assessment of biomass cogeneration project of 5 MW and process steam supply. Analysis of costs and supply of biomass processing in TICOFRUT facilities in Costa Rica. Year 2013
- ✓ Feasibility study by steam supply biomass boiler installations GRUMA Corn Plant located in Costa Rica. Year 2013
- ✓ Feasibility study for steam supply by biomass pellets NUMAR refinery facilities located in Costa Rica. Year 2013
- ✓ Elaboration of project Power Plant of 10 MW from biomass for CORENER. Durango, Mexico. Year 2012
- ✓ Technical assistance and project evaluation for acquisition and transfer of a biomass plant of 8.7 MW of electrical power in Constitution, Chile. May 2012
- ✓ Development, preparation and drafting of the Conceptual engineering to determine parameters of basic designs, the requirements of main equipment and resource needs for three plants of 20 MW with technology of biomass in Chile, March 2012



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- ✓ Biomass Gasification Plant Project 2 MW in Sevilla to CORENER. Year 2011
- ✓ Project evaluation and biomass technology for projects of 10 MW for ASSIGNIA Infrastructure in India. April 2009
- ✓ Feasibility studies for plant biomass energy crops of 2 MW, 5 MW and 10 MW, within the framework of RD 661/2007. October 2009
- ✓ Feasibility study of generation plant from forest biomass through boiler and steam turbine at Fuente de Piedra (Málaga). July 2006
- ✓ Proyecto y Dirección de Obras Planta de generación de 8,0 MW a partir de orujillo de aceituna, con caldera de vapor de 35.000 kg/h, 63 bar y 400°C, turbina de vapor y aerocondensador. Fuente Piedra, Málaga. Puesta en marcha Febrero 2005. Inversión: 11,0 MM€
- ✓ Generation plant of 8.0 MW from olive cake with steam boiler of 35,000 kg / h, 63 bar and 400 ° C, steam turbine and air condenser. Starting in February 2005. Investment: € 11.0MM
- ✓ Feasibility study of generation plant from rice straw by boiler and steam turbine at San Juan de Aznalfarache (Sevilla). March 2004.
- ✓ Feasibility study of biomass boiler for process steam production facilities “Espuny” in Morón. June 2003
- ✓ Feasibility study of plant power generation from landfill biogas “Commonwealth de la Vega”, Guillena (Sevilla). May 2002
- ✓ Feasibility study of generation plant from olive orujillo by boiler and steam turbine at Fuente de Piedra (Málaga). March 2001



IV. WIND POWER REFERENCES

- ✓ Wind Farm Project “San Agustín”, 32 MW in Osuna (Sevilla). Year 2011
- ✓ Wind Farm Project “Aparicio”, 22 MW in Osuna (Sevilla). Year 2011
- ✓ Wind Farm Project “Navaterrines”, 36 MW in Osuna (Sevilla). Year 2011.
- ✓ Perform work for development of documentation for submission to Competition Order Prioritization Wind Andalusia (Order 1000 MW). Year 2011
- ✓ Wind Farm project of 30 MW and evacuation at 132 kV in Martos (Jaen). Year 2009
- ✓ Conducting resource assessment study and evaluation of the implementation costs of offshore wind farms and profitability analysis of several areas of the Spanish coast (Gulf of Cadiz, Andalusia Mediterranean coast, Gulf of Valencia and Costa de Asturias), using the procedure characterization for the implementation of wind farms at sea. Client: Confidential. Year 2008
- ✓ Project and Works “Alijar”, of 24.5 MW Wind Farm in Jerez de la Frontera (Cádiz). Getting Started April 2.005. Investment € 24.0 MM.



IV. WIND POWER REFERENCES



- ✓ Study and Processing Wind Park Project "Olivillo" of 25 MW in Jerez de la Frontera (Cádiz). Year 2005
- ✓ Study and Processing Project "Roalabota" Wind Farm 28 MW in Jerez de la Frontera (Cádiz). Year 2005
- ✓ Study and Processing Project Wind Farm "La Zorrilla" of 27 MW in Arcos de la Frontera (Cádiz). Year 2004
- ✓ Study and Processing Project Wind Farm "La Valdivia" of 28 MW in Osuna (Sevilla). Year 2004
- ✓ Study and Processing Project Wind Farm "La Silla", 24 MW. Gilena, Cadiz. Year 2007
- ✓ Study and Processing Project Wind Farm "Los Garzos", Utrera, Sevilla. 15 MW. Year 2006
- ✓ Study and Processing Project Wind Farm "Cerro Serón" 15 MW. Serón, Seville. Year 2006
- ✓ Study and Processing Project Wind Farm "Huerto San Luis", 12 MW. Moron de la Frontera, Seville. Year 2005
- ✓ Study and Processing Project Wind Farm "Las Balas", 12 MW. Ecija, Sevilla. Year 2004

V. CONSULTING AND ADVICE TO GOVERNMENT

- ✓ Energy Studio Extraordinary Lighting in City of Conil de la Frontera. Year 2014
- ✓ Technical assistance for advising and implementing the necessary technical documents for the mixed procurement of supply and energy services and comprehensive maintenance with full guarantee of public lighting facilities of the City of Conil de la Frontera. Year 2013
- ✓ Energy study of The Jetty Building, Cáceres. Year 2013
- ✓ Technical Assistance for Improved efficiency and energy consumption savings in street lighting for the City of Conil de la Frontera. Year 2012
- ✓ Advice and project direction of Pilot Experience in Public System of Illumination with the modality of Company of Energetic Service in ten municipalities of Andalusia, for the Headquarter of Climate change and Urban Environment. Consultancy for Secretariat of Innovation of the Government of Andalusia. Year 2012
- ✓ Advising and coordinating the implementation of the Bidding Contracting Energy Services in Municipalities. Assistance to Municipalities and the Ministry of Environment of the Government of Andalusia. Year 2011 -2012
- ✓ Coordination and accomplishment of Report Lighting engineers for evaluation of Sheets of Energetic Services of Public System of illumination. Year 2012
- ✓ Preparation of Expressions of Interest and other documentation for various international tenders (Nicaragua, Hydro Building, Chile, wind assessment for wind farm construction; Trinidad and Tobago, consulting services, Bahamas, consulting services). Year 2012



V. CONSULTING AND ADVICE TO GOVERNMENT

- ✓ Advice for the Ministry of Environment, Government of Andalusia, for the Financing of the Action plans of Sustainable Energy with the European Bank of Investments and the funds JEREMIE and JESSICA. Year 2011
- ✓ Advice to the Ministry of Environment of the Junta de Andalucía, Project management Covenant of Mayors on Climate Change. Implementation and coordination of Action Plans for Sustainable Energy in the Community of Andalusia. Year 2010
- ✓ Making Sustainable Campus Project at the University Pablo de Olavide University of Seville and Almeria to the Andalusian. Year 2010





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