



COGENERATION



1. SENERCO ENERGY SERVICES PRESENTATION

2. SENERCO REFERENCES COGENERATION ENERGY

EXECUTED COGENERATION PROJECTS

FEASIBILITY STUDIES

3. SENERCO COGENERATION SERVICES

PRECONSTRUCTION

CONSTRUCTION

POSTCONSTRUCTION

1. SENERCO ENERGY SERVICES PRESENTATION



SENERCO is an engineering and consulting company specializing in project management in the energy sector, which makes available to its customers a full team of people with extensive experience in the renewable energy sector, able to solve any technical aspect of the facilities.

SENERCO is a company with extensive experience in the development of cogeneration plants and energy service solutions based on this technology.

SENERCO has an experience of more than 60 MW of cogeneration developed in the industrial and tertiary sectors.

SENERCO collaborates with several first level engine manufacturers cogeneration , thus ensuring the success of projects.

2. SENERCO REFERENCES COGENERATION ENERGY



EXECUTED COGENERATION PROJECTS

EXECUTED COGENERATION PROJECTS



- ✓ **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 €



EXECUTED COGENERATION PROJECTS



- ✓ **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 €



EXECUTED COGENERATION PROJECTS



✓ **Project Management of Cogeneration Plant of 9.7 MW with recovery boiler and absorption chiller in La Roda de Andalucía (Sevilla-Spain)**

Starting February 2001

Investment: 6.1 MM €



2. SENERCO REFERENCES COGENERATION ENERGY

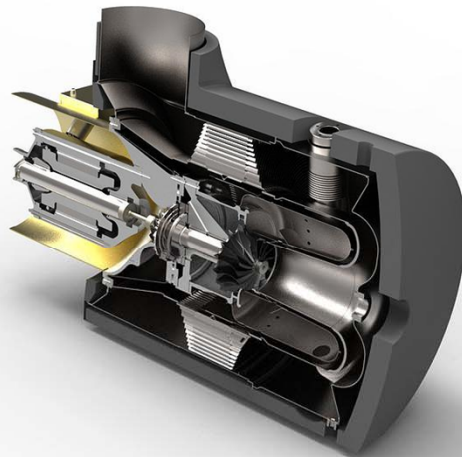


COGENERATION PROJECTS TRANSACTED

✓ 16 MW Electric Generation Plan Project in Oriente Medio (Irán)

Customer: INGELEC

Year: 2012



- ✓ **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

COGENERATION PROJECTS TRANSACTED



- ✓ **Project 500 kW cogeneration in sports and leisure center in Villaviciosa de Odon (Madrid)**
Year: 2009



2. SENERCO REFERENCES COGENERATION ENERGY



FEASIBILITY STUDIES

- ✓ **Technical and economic assessment of biogas cogeneration project in Ingenio Magdalena in Guatemala. Power: 14 MW. Year 2014**
- ✓ **Technical and economic assessment of 40 cogeneration projects 0.2 MW to 3 MW in Guatemala. Year 2014**
- ✓ **Technical and economic evaluation of 12 cogeneration projects of 0.4 MW to 3 MW in El Salvador. Year 2014**
- ✓ **Technical and economic evaluation of three 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.**

Customer: APPLUS NORCONTROL

Year: 2013



- ✓ **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

- ✓ **Feasibility study of a cogeneration plant to manufacture 5.4 MW olive seasoning, “Aceitunera el Guadalquivir”, Morón de la Frontera (Sevilla).**
Year: 2004
- ✓ **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
- ✓ **Feasibility study of cogeneration plant of 11 MW plant drying alperujo in “Oleícola Jaén” facilities in Baeza (Jaén).**
Year: 2000

3. SENERCO COGENERATION SERVICES



PRECONSTRUCTION

ENGINEERING

ENERGY PRODUCTION STUDIO

FINANCIAL MODEL

3. SENERCO COGENERATION SERVICES



CONSTRUCTION

TURNKEY CONTRACT

CONSTRUCTION SUPERVISION

COUNSELLING AND PURCHASE OF MATERIALS

PROJECT MANAGEMENT

QUALITY CONTROL

3. SENERCO COGENERATION SERVICES



POSTCONSTRUCTION

AS-BUILT DOCUMENTATION

O & M (OPERATION AND MAINTENANCE)

PRODUCTION MONITORING

REPORTING

COLLATERAL MANAGEMENT



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