



Company profile

Company/Institution legal name: Sistemes avançats d'energia solar tèrmica, SCCL

Company/Institution Short Name: AIGUASOL

Country Headquarters: SPAIN

Company/Institution Description:

Founded in 1999, the SME AIGUASOL (www.aiguasol.coop/en) team is made up of more than 20 professionals with a high level of technical and scientific experience. They include engineers, PhDs, architects and physicists who have notable experience both in private companies and research centres. AIGUASOL is a locally based, globally active company; we have offices in Barcelona and the Basque Country as well as a presence in Santiago de Chile, Lisbon and Bogota. The central offices cover projects throughout Europe, Asia and Africa.

Our aim is to create indoor and outdoor spaces and to devise exceptional, comfortable and efficient systems and processes that have a positive impact on the environment. We think that with optimum creation procedures, we can improve human experience while reducing the resources used. On the basis of our extensive knowledge, experience, neutrality and rigor, we see sustainability as a crucial component in getting people to give their all and feel comfortable in their surrounding environment.

AIGUASOL works from a variety of perspectives according to its customers' needs so as to offer appropriate solutions and optimum designs.

Consulting services. Proposing solutions and allowing for conclusive and quantifiable decision-making to achieve the desired objectives.

Engineering services. Developing detailed solutions from the early stages through to the full project design, implementation and subsequent monitoring.

R&D services. Designing and marketing new technologies, methodologies and processes rooted in energy efficiency and renewable energy sources.

Software services. Distributing, providing training in and maintaining simulation software and developing custom-made tools.



AIGUASOL Solutions

Over the past sixteen years AIGUASOL accumulated a significant experience in the fields of energy efficiency (EE) and renewable energy systems (RES), both in commercial projects implementation, energy planning, policy analysis and in R&D&I projects, as a fundamental part of a common mission: to reduce greenhouse emissions under a circular economy framework.

The different solutions are client-oriented, considering their specific requirements, needs and objectives;



Energy in buildings.

Studies and projects in both new and existing residential buildings and all manner of large consumer tertiary buildings.



District networks and large-scale generation.

Feasibility, design, implementation and monitoring of district heating and cooling (DHC) systems and other large-scale energy production systems.



Energy policy.

Development of energy plans, investment strategies and subsidies as well as local, regional and national regulations.



Energy rehabilitation.

Approaches, definition and dimensioning of energy rehabilitation activities in residential and tertiary buildings, whether a client's own investment or a third-party ESCO investment.



Energy management systems.

Design and implementation of smart energy management systems; optimized management, preventive maintenance, results-oriented rehabilitation and benchmarking.



Net zero-energy buildings (nZEBs) and environmental certification.

Concept, design, implementation and monitoring of net zero-energy buildings (nZEBs), private environmental certification and public energy certificates.



Energy intensity in industry.

Analysis and projects to reduce energy intensity and emissions in industrial processes and facilities.



Other customer-oriented solutions.

Other customer-oriented solutions that require the calculation and optimization of consumption and energy costs.



R&D&I solutions.

Services for applied research in energy-related issues such as the development of specific elements, global solutions or product lines, the search for better constructive solutions, programming subroutines for devices, and so on.

AIGUASOL works for real state developers, stakeholders, construction companies, ESCO and Investment funds companies, designers (architects and engineering companies), professional associations, public entities, industries and manufactures, primary sector, utilities, and research centres.



Relevant successful stories

More than 700,000 m² of projects in buildings of varied uses, over 30 district network and large-scale energy production projects in different latitudes, several targeted master plans, energy plans and national regulations and European sectorial policies, more than 20 million euros emerged in energy rehabilitation investments, over 90 success stories related to nZEB and private certified buildings, from wineries to asphalts, from the dairy sector to the mining industry, and any other energy design and calculation services user oriented.

A representative sampling of our relevant successful stories,



Title: Energy design optimization in the headquarters of Costanera Center
Customer: Costanera Center
Year: 2013
Location: Santiago de Chile



Title: Energy optimization and full installation plan in the rehabilitation of the Sant Pau central pavilion
Customer: ONL Arquitectura
Year: 2010
Location: Barcelona



Title: Optimization of a centralized cogeneration system for a social housing building on Boulevard de Salburua
Customers: Construcciones Sukia
Year: 2011
Location: Vitoria-Gasteiz
AWARD: Best building in new housing 2014 from the Spanish Association of Public-Sector Housing and Land Developers (AVS)



Title: Design and implementation of a Fresnel heat collector for industrial processes at the Mafrica meat processing facility
Customer: AIRA Robòtica
Year: 2011
Location: Sant Joan de Vilatorrada



Title: Design, full project design and site management for a new district heating network in Olot
Customer: Gas Natural
Year: 2016
Location: Olot
AWARD: 2015 Heat Pump City of the Year Award from the European Heat Pump Association



Title: PITAGORAS - European project to develop low-temperature district heating networks and generate power from residual and renewable sources

Customer: European Commission

Year: 2013-2017

Location: Various locations in Europe



Title: Barcelona Energy Improvement Plan (PMEB) and Barcelona Energy, Climate Change and Air Quality Plan (PECQ)

Customer: Barcelona Regional / Barcelona Local Energy Agency

Year: 2000 - 2010

Location: Barcelona



Title: Analysis of the potential for implementation of renewable energies for the Island of Saint Helena

Customer: Government of Saint Helena

Year: 2014

Location: Saint Helena



Title: Energy guidelines for designing cost-effective, nearly zero-energy buildings (NZEBS) in Madrid

Customers: City Council of Madrid, Activos Renta, Association of Real Estate Developers of Madrid (Asprima), Desarrollo Urbanístico de Chamartín (DUCH), Gas Natural, Institute for Energy Diversification and Saving (IDAE), Jones Lang LaSalle, LKS, Remica, Tyspa, Uponor and Yesos Ibéricos

Year: 2013

Location: Madrid



Title: Design and implementation of the rehabilitation of the Palace (headquarters) of the Regional Government of Gipuzkoa

Customer: Regional Government of Gipuzkoa

Year: 2013

Location: San Sebastián-Donostia



Title: GrowSmarter - European project for the development of solutions for tomorrow's smart cities

Customer: Gas Natural

Year: 2015 - 2019

Location: Various locations in Europe



Title: Design and implementation of renewable energy production for Montjuïc Castle

Customer: BIMSA

Year: 2016

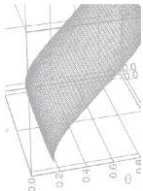
Location: Barcelona



Title: eeBox energy management system for monitoring, operating optimization and rehabilitation investments in tertiary buildings
Customer: Regional Government of Gipuzkoa
Year: 2016
Location: Gipuzkoa



Title: Software for the design, optimization and energy management of solar thermal systems, TRANSOL
Customer: AIGUASOL and French Scientific and Technical Center for Building
Year: 2011
Location: International



Title: Cheq4 solar thermal system control and optimization methodology
Customer: AIGUASOL and Solar Association of the Thermal Industry
Year: 2012
Location: Spain



Title: Building energy optimization and HVAC system design for the Benasque Pedro Pascual Science Center
Customer: CSIC
Year: 2008
Location: Benasque
AWARD: 2011 Isover Europe Energy Efficiency Award for the Most Efficient Tertiary Building in Europe



Title: Building energy optimization and HVAC system design for a building containing assisted living homes, a nursery school and medical center
Customer: European Commission - Municipal Housing Board
Year: 2010
Location: Barcelona
AWARD: Endesa 2011 Award for the Most Sustainable Non-Residential Development



Title: HVAC system design, optimization and implementation and advice and calculations for LEED Gold certification for a new Charmex company building
Customer: Charmex Internacional
Year: 2015
Location: Getafe



Title: Energy diagnosis and improvement strategies in the asphalt production process
Customer: Sorigué
Year: 2016
Location: Lleida



Title: INDUS3ES – European project on using residual heat to optimize industrial processes
Customer: European Commission
Year: 2016 - 2020
Location: Various locations in Europe



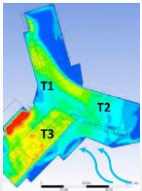
Title: Energy optimization in production processes at Faustino winery
Customer: Faustino
Year: 2011
Location: Álava



Title: Validation of the impact of internal dome conditions on error deviation in measurements for a telescope design
Customer: Schwartz Hautmont
Year: 2012
Location: Javalambre



Title: Validation of contour conditions for the design of inflatable hangar models
Customer: Buildair
Year: 2015
Location: Multiple locations



Title: Optimization in the design of underground parking lots to meet health-based ventilation requirements based on natural renewals
Customer: Arias-Serna-Saravia Arquitectos
Year: 2015
Location: Cartagena de Indias





Some of our customers

AIGUASOL is guided by customer needs and its scope of activity. Some of our customers include:

Developers, construction companies and properties.



ESCOs, investment funds and financial firms.



Architecture firms, engineering firms and associations.



Administration and public institutions.



Industry and manufacturers.



Primary sector and utilities.



Research centres.

