



Campus Palmas Altas

Seville, Spain

Abengoa staff now enjoy a modern and social environment that complies with the company's aspirations for sustainable development.

Arup Journal, Jan 2011



Location
Seville, Spain

Date
2005-2009

Client
Abengoa

Cost
€132 million

Area (including parking)
96,000 m²

Co-Architect
Vidal y Asociados
arquitectos (VAa)

Structural Engineer
Arup

Services Engineer
Arup

Awards

2015
LEED Platinum

2010
RIBA European Award
AIA Excellence in Design Award
Prime Property Awards - Best Sustainable Real Estate
Project, Europe

Campus Palmas Altas is a new model for an energy efficient business park in Abengoa in the South of Spain. Abengoa's objectives for their new headquarters complex were to bring the company together from three different buildings in Seville onto a single site and to use the move to unify and radically change working practices: to maximise communication and encourage cross fertilisation between its various divisions. Abengoa is an international technology company whose primary activity focuses on sustainable development in the infrastructure, environment and energy sectors. The scheme comprises seven buildings, five of which are occupied by Abengoa and the remaining two by tenants who have synergies with the client.

The design creates a more compact and urban in character development than conventional business parks, but is also particularly suited to the extreme summertime conditions prevalent in the south of Spain. In total, the buildings provide approximately 47,000m² of office space across highly compact floorplates in self-contained structures between 3-4 storeys in height. The buildings are arranged on either side of a central space which is made up of a sequence of interconnected plazas. The central space unifies all seven buildings and, because of the stepped arrangement, creates a sequence of discrete spaces each of which has slightly different characteristics. In this way, a variety of outdoor spaces ranging

from patios to sunken courtyards and terraces, are created which, depending on the prevalent weather conditions, can be comfortably occupied by the buildings' tenants virtually all year round. The organisation of these spaces aims to reduce the heat load on the building fabric and avoid the creation of 'heat islands'. The visual mass is broken down by the landscape treatment of the spaces in between buildings.

Colours have been chosen that reflect those found in traditional glazed Andalusian tiles. The structure of each building is formed from in situ concrete with pre-cast elements used for exposed edge cantilevers. The façades are of glass with a 'floating' horizontal transom of corrugated aluminium creating a small glazed panel at floor level. Fixed glass louvres of varying densities (depending on orientation) shade the glazing.

Energy-saving criteria are applied across the whole design – from the site layout and the orientation of the campus to the geometry of the buildings themselves, the design of the building envelope and the selection of materials. The design of individual buildings and the linear arrangement of all the buildings maximises self shading, thereby reducing the amount of secondary shading required. Additional measures include photovoltaic panels, a tri-generation plant, hydrogen batteries and chilled beams. It is hoped that the development will become a model for more sustainable office complexes in the future.