## CASE STUDY 5

Solar Resource Campaign, **Spain** 







The SAMCA Group is a company located in Aragón, Spain. Some of its main activities are in mining, agriculture and energy. Overall, it gives employment to approximately 3,500 people, with an annual turnover of nearly 850 million euros with installations distributed throughout Spain as well as other countries such as France and Italy.

In 2006 the SAMCA business group, undertakes an ambitious concentrating solar power project in Spain. Their mission, to study the conditions of direct radiation at different latitudes of the spanish geography (Aragón, Castilla la Mancha, Castilla León, Extremadura and Andalucía).

Kintech Engineering was involved in this project from the very beginning completing the installation of 13 stations for solar resource assessment. All stations were equipped with automatic sun tracker for obtaining direct solar radiation data, diffuse and global radiation as well as sensors for measuring both relative humidity, wind speed, wind direction and temperature.

The complete design of the autonomous solar power system as well as integration of the data logger and other rela-ted engineering services was performed by Kintech Engineering. The operation and maintenance was also performed by us. The complete commissioning of the systems was carried out by Kintech Engineering.

The solar assessment period lasted between 3 and 6 years depending on the stations. The final result was a data availability above 90% across the complete network of measuring stations.

After the completion of the measurement period, SAMCA carried out the construction of two 50MW concentrated solar power plants called La Florida and La Dehesa, located in southern Spain, in the region of Extremadura.

Kintech Engineering is still involved in the operation and maintenance of the remaining control stations.

