

# Innovation and Respect for the Environment

Abengoa counts on its **own solar thermal** 

**technology** and is a world leader in this sector, where it has developed, designed, built and/or operated solar thermal plants in four continents, with a total capacity of 1.9 GW, representing approximately 30% of capacity worldwide. In addition, the company is currently participating in 52% of solar thermal capacity under construction.

Solar thermal tower technology (STET) allows the production of electricity by concentrating solar power, captured by a field of heliostats, onto a receiver point located at the top of a tower. Abengoa is a pioneer in the construction of commercial power tower plants, with more than **130 MW under operation and 110 MW under** construction. Abengoa counts on a worldwide reference testing platform that allows to validate and consolidate its technological developments prior to their commercial implementation, which provides differentiation and reliability in all its solutions.

To guarantee production during long periods without solar radiation or after sunset, Abengoa incorporates a **molten salt energy storage system** into its plants.

Through the hybridization of technologies, Abengoa is a specialist in 'Smart Solutions' for dispatchability and stability in the generation of energy from renewable sources. 130 MW operation a 10 MW ur construction



www.abengoa.com/energy

Solar Thermal Energy Tower Technology Abengoa is an international company that applies innovative technology solutions for sustainability in the infrastructures, energy and water sectors. It has over 75 years of experience in engineering and construction, being specialists in the execution of complex "turnkey" projects or engineering, supply and construction projects (Engineering, Procurement and Construction) for third parties in four fundamental areas: energy, water, services and transmission and infrastructure.

n Ind Ider Ion Abengoa has extensive experience in the **power generation** sector thanks to the development of **open and combined cycle and cogeneration technologies, wind farms, and solar thermal, photovoltaic, waste to energy and biomass power plants.** 

This experience provides the company with a **high capacity of design and hybridization** among power generation technologies, that allows it to offer the optimal solution to its clients.

# ABENGOA

### PS10

- 11 MW + 40 minutes of storage
- 16,000 t of CO<sub>2</sub> avoided per year
- Solucar Platform, Seville (Spain)
- Property of Atlantica Yield

#### PS20 -

- 20 MW + 1 hour of storage
- 12,000 t of CO<sub>2</sub> avoided per year
- Solucar Platform, Sevilla (Spain)
- Property of Atlantica Yield

#### Khi Solar One

- 50 MW + 2 hours of storage
- 183,000 t of CO<sub>2</sub> avoided per year
- Upington (South Africa)

## Cerro Dominador

- 110 MW + 18 hours of storage
- 640,000 t of CO<sub>2</sub> avoided per year
- Antofagasta (Chile).
- Property of EIG Global Energy Partners

## Luneng Haixi State

- 50 MW
- Qinghai (China)



Solar Thermal Energy Tower Technology

# ABENGOA Energy

Innovative technology solutions for sustainability