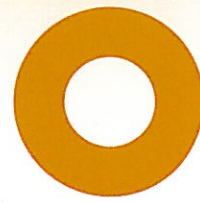


GEMASOLAR, the world's first solar thermal plant consisting of central tower technology and salts receiver



Torresol Energy
re inventing solar power

GEMASOLAR, with a nameplate power of 17 MW, will be the first commercial plant in the world with heliostats, central tower and molten salts receiver technology

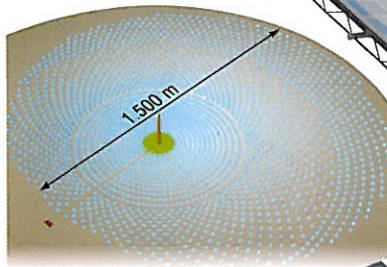
Key technological solutions have been developed

- Bigger and more numerous heliostats
- Receiver thermal power increased by three
- Molten salts storage thermal system with up to 15 hours capacity without sunlight

SOLAR FIELD

2,650 heliostats

The heliostats location has been established by the SENSOL software, so as to reach the optimum plant dimensions



BENEFITS

- **Safe and clean energy** that preserves the environment thinking of future generations
- **25,000 households energy** supply capacity
- **Energy efficiency** that guaranties electrical production for around 6,600 hours per year
- More than **30,000 CO₂ emissions tons** saved every year

OPERATION PROCESS

Sunlight

Sunlight comes into contact with the heliostats, reflecting it towards the receiver

Sunlight

Reflected light

The heliostats have a mechanism that positions accurately the surface of the mirrors

Sunlight receiver made up of panels placed at the top of the tower

Tower

Cold salts tank

Hot salts tank

Cold salts tank

Hot salts tank

Salts are pumped to the top of the tower

From the hot salts tank, salts are transferred to heat exchangers through pipes

In the sunlight receiver, the salts heat up and descend to the hot salts tank where they are stored at more than 500° C

The steam moves the turbine and the generator that produces the electrical energy

When the salts lose their heat, they release the steam

LOCATION

At **GEMASOLAR** location, high direct sun radiation annual values have been registered, besides gathering excellent weather conditions for the plant operation



Heliostats

Electrical network

Electrical transformer

Turbine

Generator

Steam

Water

Heat exchangers