



**CERRO  
DOMINADOR**  
CONCENTRATED SOLAR POWER

# Cerro Dominador Solar Project

**110 MW**

## Concentrated Solar Plant

The Cerro Dominador Concentrated Solar Plant is located in the Atacama Desert in the town of María Elena. The plant will have an installed capacity of 110 MW and 17.5 hours of thermal storage in molten salts.

**The plant will be capable of providing clean electricity 24 hours a day** providing a clean energy solution for a region in which electricity consumption is strongly tied to the mining sector. It will prevent the emission of 643,000 tons of CO<sub>2</sub> every year.

Construction started in the second half of 2014 and the plant is expected to commence operations in 2019.

### Main components

- The solar field has a circular shape of 1,730 acres, with over 10,000 heliostats that concentrates the sunlight into a receiver located at the top of the tower.
- The reflective surface area per heliostat is approximately 1,506 square feet. The heliostat automatically tracks the sun in two axes.
- The tower is 820 feet tall.
- The storage system consists of tanks for cold and hot salts. Thermal storage of molten salts enables electricity to be generated at night.



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## How the plant works

- 1 Light from the sun is concentrated into a small surface at the top of the tower, by using 10,600 heliostats (mirrors).
- 2 The receiver transfer the heat from the sunlight into molten salts, increasing their temperature to 545 degrees Celsius.
- 3 Hot salts are stored in tanks.
- 4 Hot salts are then run through heat exchangers that transfer the heat into water, generating steam.
- 5 Steam is used to move a turbine and generate electricity.

Cerro Dominador Solar Project is part of Chile's national renewable energy program, intended to promote the future of clean energy in the country while also boosting economic development and reducing its dependency on coal and natural gas. Chile has set a target to produce 20% of its electricity from clean energy sources by 2025.

The Concentrated Solar Plant will generate electricity 24 hours a day, becoming the first nonconventional renewable energy serving as base load for the grid. The CSP plant will prevent the emission of approximately **643,000 tons of CO2 a year and will provide electricity to supply approximately 382,000 homes.**

The construction of this plant will create 1,500 jobs approximately in peak period of construction.

The project is owned by funds managed by EIG Global Energy Partners, a leading global institutional investor.



## Tender

**Cerro Dominador was awarded in 2014 contracts with distribution companies for 950 GWh/year for 15 years in a tender process by the National Energy Commission (CNE). The price was competitive bidding and considers blocks with higher demand schedules, not only daytime schedules where better prices are generated.**