

# Mérida biomass plant



SENER XENERGY / XRENEWABLE AND LOW-CARBON SOLUTIONS GENERATION / XBIOMASS / SPAIN

*MÉRIDA BIOMASS  
PLANT*

**Cliente: ENCE, ENERGIA Y  
CELULOSA, SA**

**País: Spain**

Sener has developed the turnkey project for a biomass power generation plant in Mérida (Badajoz). The contract included the design, procurement, construction and commissioning of the plant, as well as its operation and maintenance for the first two years of exploitation. The annual production of this plant, which generates renewable energy from biomass (forest and energy crops), will be around 160 GWh, with a nominal power of 20 MW. The plant, which will mainly operate with poplar and eucalyptus, will be operational as of the third quarter of 2014. Sener has designed a high efficiency thermodynamic cycle with reheating and regeneration for these types of plants.

- biomass power generation plant of 22,5 MWe, with a nominal power of 20 MW
- Annual production of renewable energy from biomass, will be around 160 GWh
- Mérida Biomass Plant includes Sener high efficiency developments

Mérida Biomass Plant includes Sener high efficiency developments. These improvements have made possible that the reheating steam turbine could be competitive for this power sizes. The Project will include

one firing boiler equipped with an air cooled grate and one reheating steam turbine. Circulating water circuit is cooled by Mechanical draft cooling towers.

- PROjECT data:
  - Biomass Firing Power Plant 22,5 MWe.
  - One firing boiler equipped with an air cooled grate and one reheating steam turbine.
  - Circulating water circuit is cooled by mechanical draft cooling towers.
  - Contract type: EPC.
  - Scope: Basic and detailed engineering, procurement, supply, construction, start up and first two years of operation and maintenance.
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