

Polán and Consuegra plants for efficient treatment of pig slurry



SENER XENERGY / XSUSTAINABLE FUELS / XBIOGAS / SPAIN

*POLÁN AND CONSUE-
GRA PLANTS FOR EFFI-
CIENT TREATMENT OF
PIG SLURRY*

**Cliente: Valpuren Comatur Fecha inicio: enero del
& Valpuren Bañuelo 2007**

País: Spain

Sener has developed technology for anaerobic co-digestion of slurries that avoids greenhouse gas emissions when applying the slurry as manure, suppresses the bad odours given off in that process and recovers the renewable energy from the slurries in the form of combustible gas (biogas) or as electrical energy.

Plant design is based on optimising the efficient use of energy and providing maximum operating flexibility and service modes. All condensed water, after being treated, is incorporated into the cooling tower's water circuit, thanks to which the plant is classified as "zero waste".

The plant includes two gas motors that each have an alternator for generating the electricity (electric and thermal) needed by the plant and for selling the excess. The plant has also got a dual fuel supply system (biogas and natural gas), the sub-systems related to water supply, cooling towers, water pump groups, a compressed air network, fire protection installations, an electricity sub-station, a bridge crane, a lorry weighbridge, electrical equipment and the instrumentation and control equipment.

MAIN CHARACTERISTICS:

- Slurry treatment capacity: 300 t/day (equiv. 100,000 t/year)
 - Service factor: 8,000 hours/year (333 days/year)
 - Utilisation: 100%
 - Operating period: 8,000 hours/year
 - Production rate: Continuous
 - Electricity generation: 16.546 MWe
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