

Guinness brewery

Food/drink

Main CHP project indicators

Heat capacity (total)	MW _{th}	
Electrical capacity (total)	MW _{el}	15
Technology	Gas turbine	
No. of units	3 x Gas Turbine (Solar Taurus 60S: 5MW) 3 x Boilers (Wellman Robey, 27 tonnes/hr) 1 x Standby Boiler (27 tonnes/hr)	
Manufacturer		
Type of Fuel	Natural gas	
Heat: yearly generation	MWh	
Electricity: yearly generation	MWh	
Year of construction	1997	
Total investment costs	EUR	
Financing		
State support		
Return of investment (payback period)	Years	
Location	Dublin, Ireland	

General description of the case

- Designed for unmanned operation with pager callout system.
- Gatepower supplies all site steam and electrical requirements.
- Surplus electricity exported to grid.
- Commissioned Nov 1997 – now over 300,000 operating hours.

Success factors

Main success factors and policy issues for the CHP project implementation (state support, legislation, company policy, EU framework, conditions that allow best practice to happen etc.).

Main barriers

Main barriers encountered by this project or current successful CHP project operation.

Comparison: before and after

What has changed with CHP implementation e.g. in terms of different technology and fuel use, costs and other operating benefits.

- Generating at a delivered efficiency of 80 % versus < 50 % for grid electricity delivered.
- Annual cost saving of 15 % to site with no capital expenditure.
- Reduced Carbon emissions versus heat only boilers and grid imported electricity.

Conclusions

Conclusions and recommendations for new similar projects application in the country (region).

Picture

