

Evangelisches Krankenhaus Hubertus, Berlin

Hospitals

Main CHP project indicators

Heat capacity (total)	kW _{th}	470
Electrical capacity (total)	kW _{el}	330
Technology	Motor engine	
No. of units	1	
Manufacturer	MENAG	
Type of Fuel	Natural gas	
Heat: yearly generation	MWh	3.077
Electricity: yearly generation	MWh	2.143
Year of construction	2004	
Total investment costs	EUR	280.000
Financing	Contracting	
State support	no	
Location	Berlin, Germany	
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General description of the case

The CHP plant was installed replacing an unneeded second emergency generator. It is operated by an energy service company who also has installed and financed the device. The CHP feeds the heat into the return of a jointly supplied auxiliary building. A heat network, to which, additionally to the buildings of the hospital, two retirement homes are connected, is used in summer as a buffer for the daytime heat generated from the CHP. An additional emergency cooler enables the generation of electricity even with reduced heat loss. The CHP is also involved in the current peak demand management.

Success factors

The CHP plant produces an annual average of 60 % of electricity and 50 % of the heat demand of the hospital. It contributes significantly to the reduction of energy costs and CO₂ emissions by totally 50 %.

Picture



Main barriers

Initial doubts about the CHP technology in terms of economy and sound insulation were removed by an independent expertise of the Berlin Energy Agency.

Conclusions

The CHP option should be proactively communicated to the hospitals. Particular emphasis should be drawn to the possibility of reducing energy costs.