

Hotel “zur Brücke”

Gastronomy

Main CHP plant indicators

Heat capacity (total)	kW _{th}	17 to 30
Electrical capacity (total)	kW _{el}	6 to 15,2
Technology	Motor engine	
No. of units	1	
Manufacturer	EC-Power	
Type of Fuel	Natural gas	
Heat: yearly generation	MWh	216
Electricity: yearly generation	MWh	109
Year of construction	2009	
Total investment costs	EUR	37.352
Financing	Own funds	
State support	Investment subsidy Other: bonus per kWh	
Return of investment (payback period)	Years	n. a.
Location	D-33428 Greffen, Germany	
Information	http://www.hotel-zur-bruecke.de/	

Picture



General description of the case

In March 2009, in the small hotel additionally to a gas boiler a CHP plant with 15 kW of electric power was taken

in operation after one week of installation time. Thanks to government support and 7.270 full operation hours per year, the system pays for itself in 3.5 years. The annual saving of CO₂-Emissions is 76 tons and of primary energy 142 MWh (39 %).

- Dimension: 1250 x 750 x 1110 mm
- Weight: 700 kg
- Service Interval: 8.500 hours of operation
- SPL : <49 dB (A)

Success factors

By a proactive installation company the hotel was approached and informed about the opportunities arising from the operation of a cogeneration plant. Significant influence over the investment decision was due to the investment subsidy from the mini-CHP funding 2009 of the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) and the bonus payment for each kWh electricity produced (5,11 Cent/kWh), according to the revised CHP law 2009.

Main barriers

The first barrier was to convince the hotel owner from the CHP investment, as this technical solution was not yet known before. Although State support was an important proof of the seriousness, the bureaucratic fussiness of the support system turned out to be a problem. It was solved by undertaking the complete grant application by the installation company.

Conclusions

Success factors were: proactively customer approaching; independent information brochures are helpful; State support acts like a seal of approval; relieving the customer of bureaucratic tasks with permission and funding applications is helpful.