

Hotel will recoup the cost of its CHP unit within three years

Van der Valk Houten CHP unit saves CO₂ equivalent to a vehicle travelling one million kilometres

Van der Valk Houten

Van der Valk Houten is rapidly growing into a premium hotel chain. This requires a careful choice of partners. Linthorst Installatietechnik has been the preferred supplier to the family business for years, developing a ground-breaking concept for climate and energy systems. The Centrica Business Solutions (then ENER-G Nedalo) CHP units play a pivotal role.

The four-star hotel offers every conceivable luxury for business travellers and tourists. Hotel Manager Coen Poelmans is proud of the hotel, whose 60m tower attracts attention from far and wide. In addition to the striking architecture, many new ideas have also been incorporated inside the hotel to support the high-quality appearance. "All 163 unique hotel rooms and suites are equipped with a flat-screen TV, air conditioning, modern heating system, refrigerator, internet connection and bathroom with a whirlpool bath. In short, all the comforts that our guests enjoy at home – and maybe even more. All this requires a good energy policy, especially as we also want to be at the forefront of sustainability," says Poelmans. "Of course, a hotel cannot be compared to an office or an ordinary leisure company. Here, everything runs throughout the day and night, placing much higher technical demands on the installations and every saving counts twice."

Simulation software

"We use simulation software to analyse the energy needs of a customer; this determines the attractiveness of a CHP unit," explains Gijs Linthorst from the technical installation company, Linthorst Installatietechnik. Over its long history, the company has specialised in energy-intensive, non-residential construction, with an emphasis on sustainable technologies.

Linthorst has developed a special concept for the hotel market based on heat and cold storage in the ground, advanced control technology that enables the check-in system to provide a well-ventilated heated or cooled room for the guest, Combined Heat and Power (CHP) and emergency power, and the reuse of waste heat.

"In this case, the computer model indicated a return on investment of less than three years for a CHP unit. That's extremely good, especially when you consider that a unit will easily last 10 to 15 years, or even longer," says Linthorst.

Major savings

The CHP unit is mainly used for base loads of heat and electricity. It is also an ideal backup system: even if the mains power fails, the server room, POS systems, lighting and other vital components remain fully operational thanks to the CHP unit. Poelmans deliberately sets the bar high. "As a hotelier, I want certainty about my business processes. This installation provides us with a major financial advantage that translates directly into the operating result. In addition, the chosen solution makes big savings on CO₂ emissions, comparable to a vehicle travelling one million kilometres, or the average annual emissions from 40 households. We are very proud of that."

Why Centrica Business Solutions?

Centrica Business Solutions is the oldest supplier of CHP units in the Netherlands. The company has the largest fleet of CHP units in Europe and is the authorised service dealer of MTU, Mercedes and Travis Perkins. With the ENER 90 for Van der Valk Houten, Centrica Business Solutions is proving to be a true efficiency specialist. Customers that make intelligent choices in terms of energy will see a return on investment that outpaces growth in revenue.