

Case | Hotel, London, United Kingdom

Outstanding energy savings in 5-star hotel

A Grundfos Energy Check led to an HVAC retrofit and £50,000 annual energy savings at a luxury London hotel



GRUNDFOS 

Possibility in every drop

Outstanding energy savings at a luxury London hotel

In 2023, Grundfos collaborated with its partners to transform the energy efficiency of a prestigious 5-star hotel in the Holborn area of London.

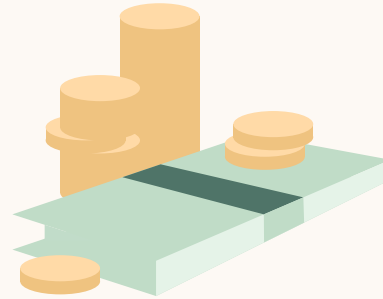
By replacing 19 outdated pumps across the property, the project not only modernised the hotel's heating and chilled water systems, but also significantly reduced its carbon footprint and operational costs, all with a payback time of only six years.

Starting with an Energy Check

A team of energy optimisation experts undertook a Grundfos Energy Check at the hotel, which identified opportunities to reduce operating costs and increase pump efficiency. Using data collected from the equipment and information provided by the hotel's engineers, the Grundfos team created a precise overview of the system that presented striking savings opportunities.

Significant savings, reduced emissions

A total of 19 pumps onsite were assessed, all of which were identified as having potential energy saving opportunities, as shown here.



Yearly savings (GBP)

£49,654

Payback time (years)

6.15



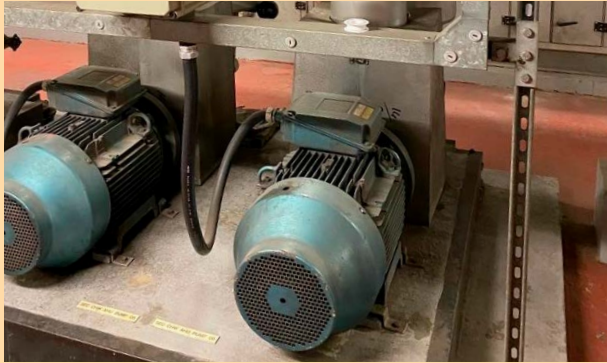
Energy savings (kWh/year)

447,337,58

Emission reduction (CO₂ t/year)

109.6

Before and after: Secondary CHW AHU pumps 5 & 6



Before and after: Secondary CHW AHU pumps 5 & 6



Before and after: Secondary CHW AHU pumps 5 & 6



Modernisation, reliability and comfort

The retrofit was completed in 2023 with the replacement of all 19 pumps. Beyond the energy and cost savings introduced, the project ensured the hotel's plant room was updated with clean, modern technology designed for reliable operation in the years ahead.

By replacing the outdated pumps in the heating and chilled water systems, Grundfos helped the hotel make a significant step towards achieving its overall emission reduction targets, all the while maintaining the exacting standards of system performance and guest comfort expected at the property.

Improve efficiency and comfort in your hotel with Grundfos Energy Optimisation

Did you know the cost of purchasing a pump makes up only 5% of the total lifetime cost? The other 95% comes from energy use and maintenance costs.

Assessing your pumps and systems can reveal a hidden potential for both energy savings and improved comfort.

Changing a pumping system affects the energy consumption

Based on Grundfos' extensive history within optimising pump operations globally, the largest energy savings potential for pump operation is found in the control system and system design.

We deliver the optimal combination of pumps, drives and auxiliary components for a specific application, incorporating intelligent control features and functions and building on

application knowledge and experience. Grundfos application control allows easy integration of pumps, drives, measurement, controls, protections, and communication, saving valuable engineering, installation and commissioning time.

Energy optimisation ensures peace of mind

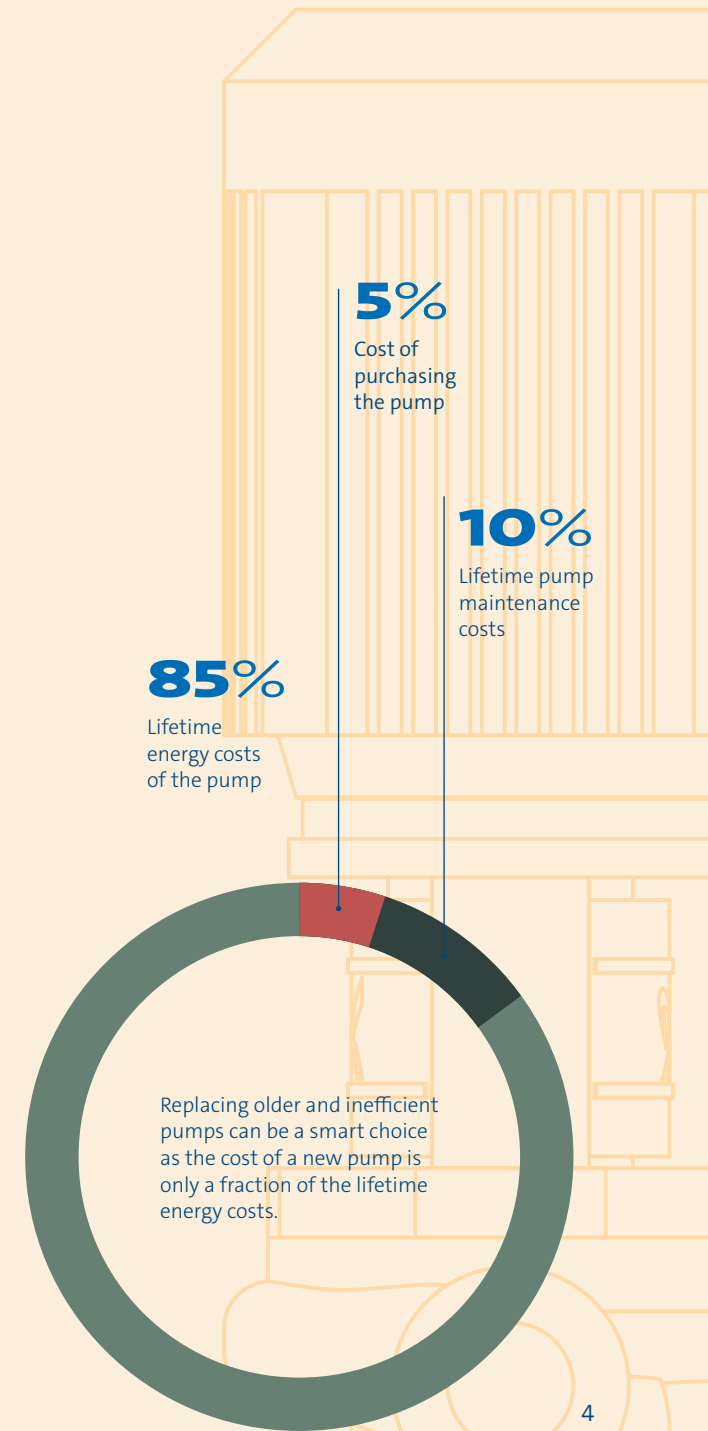
The optimisation process is all about finding ways to reduce your energy consumption, lower your carbon footprint and ultimately reach your sustainability targets. Let Grundfos free up your resources and ensure total peace of mind.

Discover your energy savings potential

If you want to read more about how you can optimise energy consumption in your hotel, please visit:

grundfos.com/energy-optimisation 

Besides bringing energy savings, energy optimisation will also improve reliability, lower operating costs and extend the lifetime of both pump and system.



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