



OH4 ENERGY SAVING
CASE STUDY:
THE HEADLAND HOTEL,
NEWQUAY
2026.04.27 V6

The client is an iconic Cornwall hotel renowned for its luxurious accommodation, food and spa facilities. The hotel operators are known for their forward-thinking approach to environmental sustainability and social governance supporting youth in the Cornwall area.



Total Savings: 19%

The Challenge:

The Client's current annual spend on heating and hot water was £380,883, presenting a significant operational expense. They were eager to identify ways to decrease energy consumption while maintaining the high standards and luxury service their guest expect. In line with their sustainability and cost reduction targets, they were keen to explore OH4 as a potential solution.

The Solution:

After a short site visit, it was agreed that OH4 be installed at the premises with a guarantee that the installation cost would not exceed the year one saving. With no need for any downtime on the heating and hot water system and access only required in the plant rooms, it was shown that there would be no disruption to hotel and Spa operations. It was agreed that OH4 would work around lettings for the smaller installations to the 40 separate holiday cottages, with 20 installations fitted in April 2024 and the remainder to be fitted in November 2024.

Monitoring System:

Under the terms and conditions, the Client provides their monthly energy usage data, which is adjusted for degree days to remove ambient weather

effects and occupancy numbers to adjust for usage levels from guests. The data for each month is compared to the same month of the previous year to provide a kWh per degree day per guest figure, which is then compared to see the effect.

Financial Benefits:

After a complete 12 months, the Headland Hotel in Newquay has shown an energy saving of **19%** when adjusted for weather and occupancy variables.

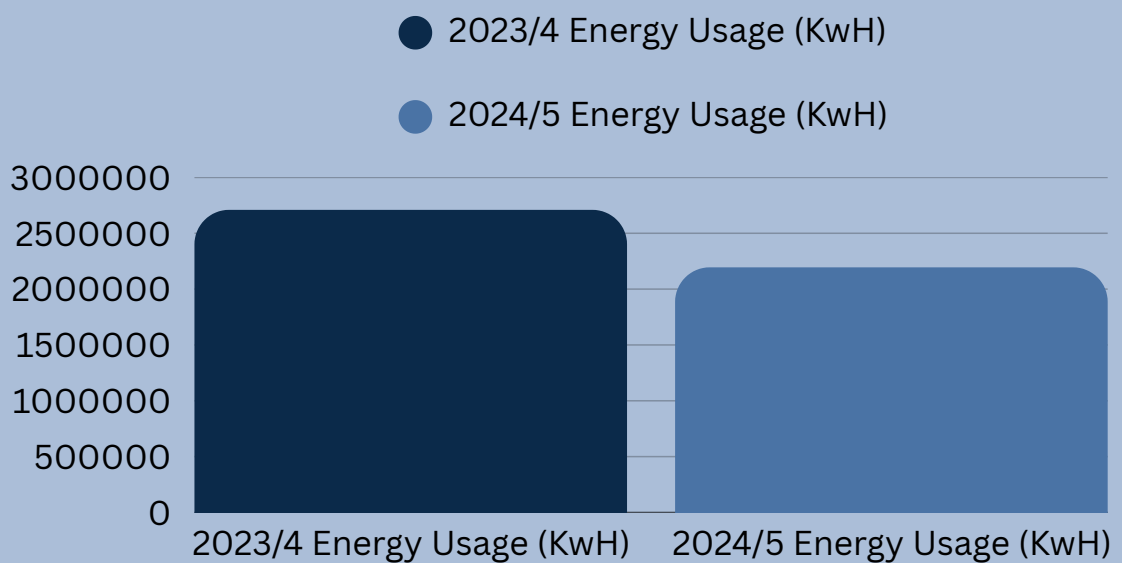
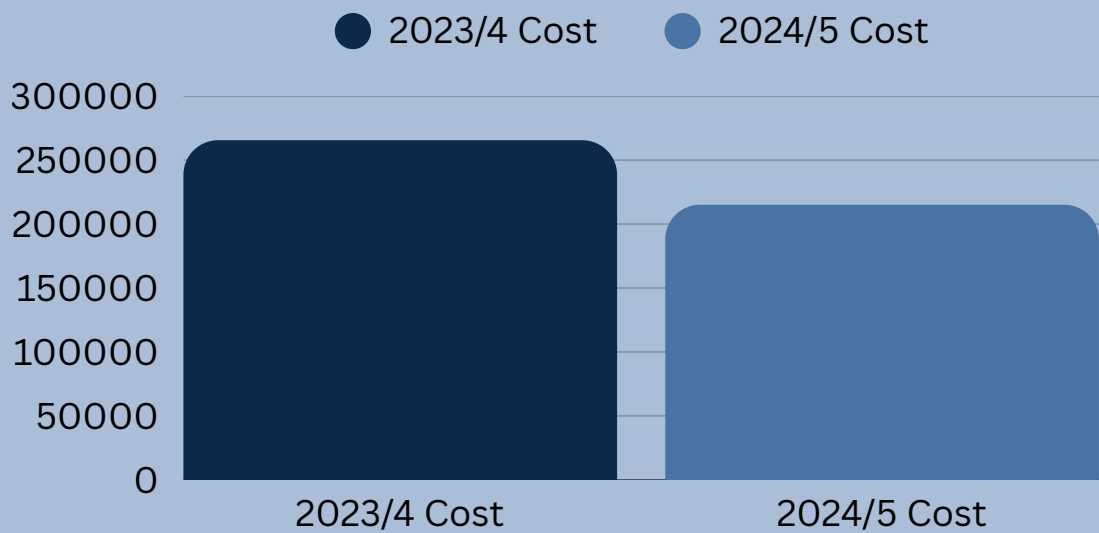
The saving is **£50,453** at the rate of £0.098 per kWh at the time of installation in April 2024. If that price per kWh is maintained, **OH4 will save the Headland an excess of £500,000 over the next 10 years** with an ROI in excess of 900%.

Carbon Saving:

In addition to monetary savings, The Headland Hotel has reduced its CO2 emissions from its heating system. The hotel has seen a reduction of **94 tonnes per annum**.

Collected Data:

	2023/4	2024/5	% Saving
KwH of Energy Consumed (adjusted for degree days and occupancy)	2709597	2194773	19%
Cost	£265,540	£215,087	19%



From Richard Palmer, Director of the Headland Hotel, Newquay:

"OH4 carried out work for us at the Headland recently, installing the OH4 on our heating and hot water systems, for the main hotel, our Spa, Aqua Centre and most of the cottages on our site. We were delighted with how non-invasive the installation was, with no disruption experienced to the hotel's operation, working around holiday bookings in the cottages, and scheduled to complete the work in the autumn.

The installation was carried out on the main hotel building in April of 2024, and since then we have seen savings of energy usage in excess of 20% measured in kWh per degree, per day, per guest, compared against the previous year, to give truly comparable figures.

Steve's work has been highly professional and efficient, and we are delighted with the savings we have seen already, and those we anticipate are to come. We would highly recommend both Steve and his OH4 system to other hotels and guest accommodation, as the results speak for themselves in terms of energy savings, and the system will be a benefit to the hotel for decades to come."