OH4 ENERGY SAVING CASE STUDY:

ST MICHAEL'S RESORT, FALMOUTH

2025.12.15 V2

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 wellness.

Total Savings: 26.1%

The Challenge:

The Client's annual spend on gas was around £70,000, presenting a significant operational expense. They were eager to identify ways to decrease energy consumption, while maintaining the high standards and luxury service that their guests 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 should be installed at the premises, with a guarentee that OH4 would save them at least 15% on their heating and hot water costs. 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..

Monitoring Sytem:

Under the terms and conditions, the Client provides their monthly energy usage data, which is adjusted for degree days and occupancy numbers. 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:

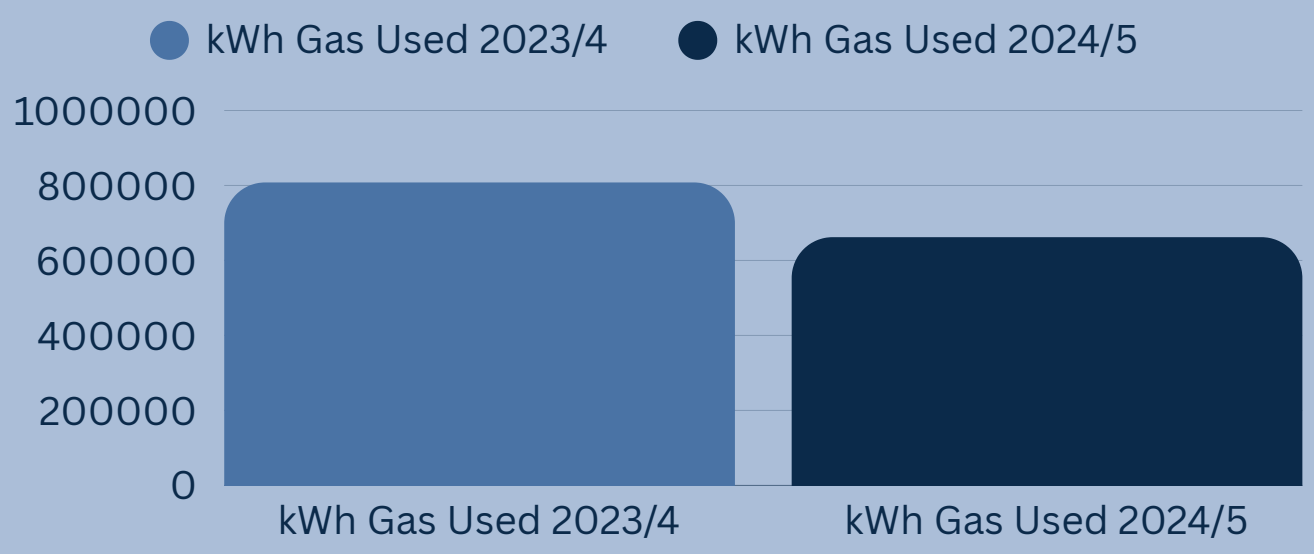
OH4 has shown a reduction in fuel usage on a kWh per degree day per guest of **26.1%** across the site. The savings in eight months have been **£8917.35** at the current rate being paid. The estimated saving for the whole year is in excess of **£20,000.** Please note 27000 kWh of gas each month are used for cooking. .

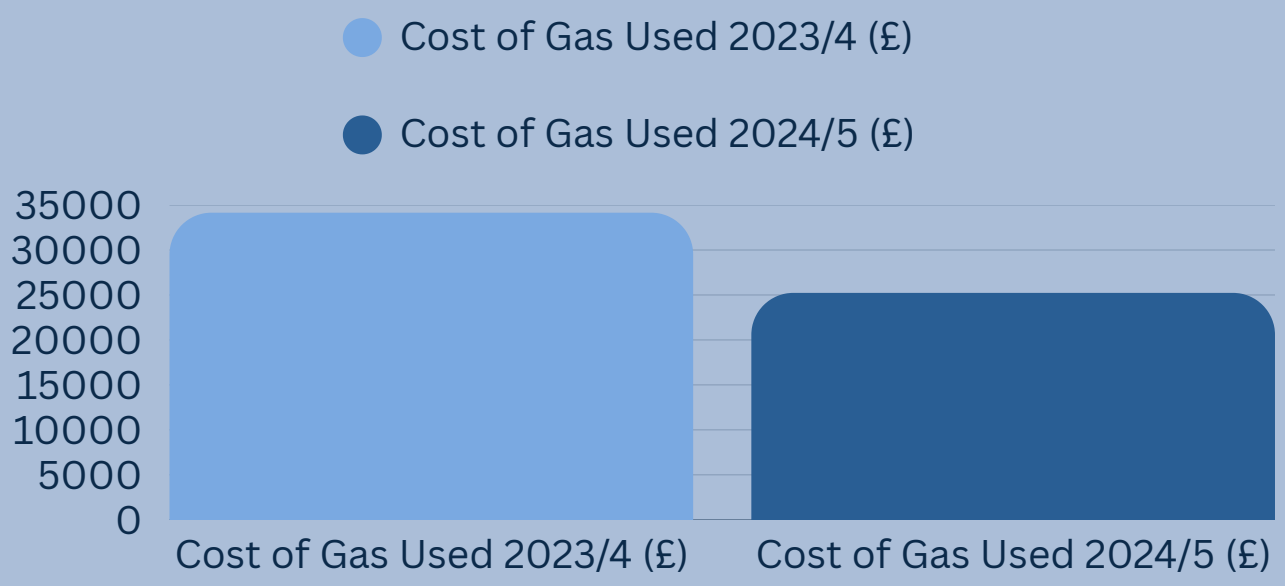
Carbon Saving:

In addition to monetary saving, St Michael's has reduced its CO2 emissions from their heating system. The hotel has seen a reduction of **145,947 kWh,** which is equivilant to **26.7 tonnes** of carbon.

Collected Data:

Date Range	01/12/23 - 31/08/24	01/12/24 - 31/08/25
KWh Gas Used	808021	662075
Degree Days	1367.8	1404.6
Adjusted KWh Gas Used	808021	662075
Cost of Gas Used	£34,149.33	£25,231.98




Cost of Gas Used 2023/4 (£)
Cost of Gas Used 2024/5 (£)
35000
30000
25000
20000
15000
10000
5000
0
Cost of Gas Used 2023/4 (£)
Cost of Gas Used 2024/5 (£)