

Reducing HVAC Energy Costs & Improving Pool Efficiency



Benefits

62% and 41% heating savings

Marked reduction in CO₂ emissions

Reduced pool heating time following twice weekly backwash & top up

Reduced evaporation & heat loss

12%-15% reduction in humidity

Resolved spectator complaints

Overview

Client

Freedom Leisure is one of the UK's leading not-for-profit charitable leisure and cultural trusts, operating over 100 leisure, cultural and entertainment venues across the UK.

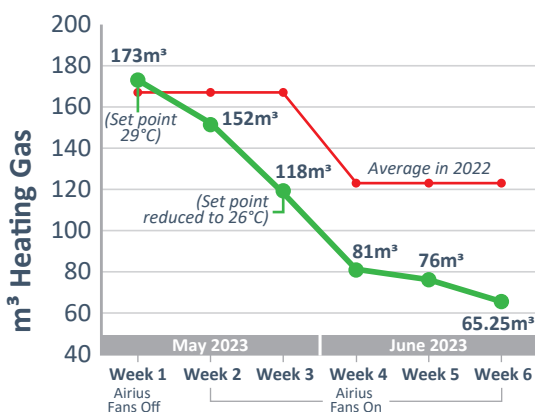
Challenge

Maintaining comfortable environments in leisure centres can be notoriously difficult and expensive, especially in swimming pool spaces. To address these challenges Environmental and Sustainability Manager Angela Brown from Freedom Leisure sought a solution that would help reduce swimming pool space heating costs at their **Hailsham Leisure Centre** and **Malvern Splash Leisure Centres** without compromising poolside temperatures and comfort, while also cutting carbon emissions in line with their strategy to become net zero by 2030.

Solution

Following a free site survey the Airius Standard and Onyx Series was installed to recirculate high level heat accumulated at the ceiling back to the floor. This **immediately improved heating efficiency**, with some areas even overheating at existing set points, leading to a reduction on the thermostat. Poolside **comfort complaints from spectators also ceased**. Heating costs were then monitored following installation, recording a **62% saving at the Hailsham Centre** and a **41% saving at the Malvern Splash Centre**.

Hailsham Leisure Centre
Swimming Pool Heating Gas Consumption





Testimonials

“The success at these initial sites have now allowed Freedom Leisure to apply for funding and grants across England and Wales with the acceptance of multiple councils, including being invited to Stage 2 Application by Sport Wales.”

Angela Brown - Environmental and Sustainability Manager

“Following install Initially poolside at Malvern Splash became too hot, with the poolside temperature increasing by 7°C. The setpoint was adjusted from 29.5°C to 26°C immediately.

This resulted in a 41% reduction in gas consumption for space heating the pool area in the first week of measuring results”

Chris Wedgbury - Area Technical Manager

“Comfort levels around Hailsham poolside remain good – no customer comments which is always a good sign!

Usually around this time of year when it starts to get warmer on poolside we would receive comments from spectators that the temperature is unbearable.”

Kevin Symonds - Area Facilities Manager