

Aqua

The Temperature
Control People.

Case Study | Facilities Management



**Free Cooling Chiller
Upgrade for
Bristol Aquarium**

Client

Bristol Aquarium

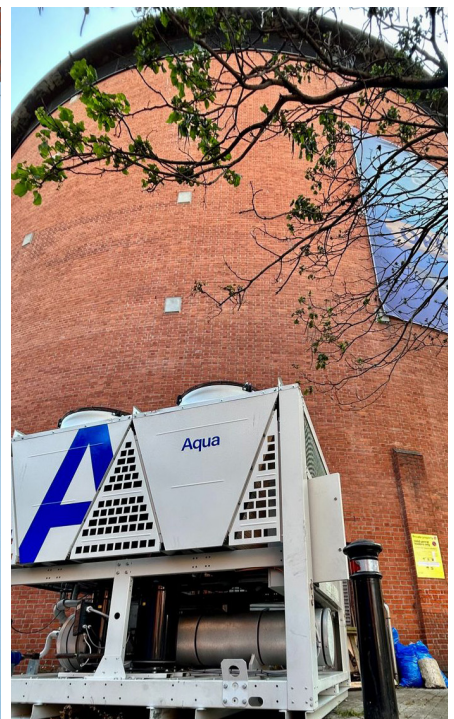
Challenge

Unreliable chiller on site, jeopardising the safety of the Aquarium's aquatic creatures

Solution

Temporary chiller hire + an Aqua EcoPro free cooling chiller

Bristol Aquarium is home to thousands of aquatic creatures, with over 40 displays and 250 different species. The animals come from across the world, and the aquarium is committed to conservation, sustainability, and education. Regional Sales Manager, Will Coles, outlines how Aqua have been supporting the facility with their temperature control.



Situation

"Bristol Aquarium reached out to us because they needed a sustainable, energy efficient solution to control the temperature of their tanks and keep their air handling system cool" explains Will.

"The Aquarium had been hiring a chiller on a long-term rental agreement from another supplier. However, the unit often malfunction and struggled to cope in the warmer weather. Each time this happened, tank temperatures rose, putting the animals in danger.

"A number of the species housed at the Aquarium are extremely sensitive to temperature changes so reliable, precise temperature control is absolutely essential.

They decided to purchase a new unit in the hope of resolving the legacy issues. However, when further challenges were encountered, Bristol Aquarium decided to source an alternative supplier and approached Aqua."



Solution

Aqua supplied a 340kW rental chiller which was quickly delivered to site and installed so that the facility was operational, and the inhabitants of the Aquarium were safe and secure in the interim.

As a longer-term solution, they ordered an Aqua EcoPro free cooling chiller. Aqua's EcoPro units have fully integrated, optimised free cooling. Free cooling can cut process energy costs by over 80%+ by using the lower ambient air temperature to cool, rather than mechanical compressor cooling.

Aqua's EcoPro units also operate on sustainable refrigerant R454B, which has a Global Warming Potential (GWP)



lower than commonly used refrigerants like R410A.

Additionally, with an Aqua free cooling chiller, it's possible to achieve free cooling at higher ambient temperatures than with other chiller brands.

Results

"Understandably, the Aquarium's primary concern was the safety of their aquatic inhabitants" explains Will.

"Once their rental solution was installed, we could turn our attention to what would be best for them for the future. Sustainability was key, so the combination of free cooling and low GWP refrigerant was ideal. Also, as well as significantly improving their carbon impact, they'll reduce their energy costs substantially and protect the lifespan of their chiller."

For Bristol Aquarium's General Manager, Sunny, it's not just the chiller that's important but the whole offering, including customer service and technical support.

"It's such an essential piece of kit for us, so we need to make sure that we're working with people who understand how important it is, who are on the phone for help and we really get that with Aqua Cooling, so we're really grateful to work with them."



To discover how free cooling could help your business, chat with the team on 0333 004 4433.