Peel L&P
REALISING POSSIBILITY

Driving data centre efficiency at dock10 studios

Following three years of trials, implementation and investment in more effective cooling activity, dock10 studios now finds itself at the leading edge of efficient data centre energy management.

The role of the data centre is pivotal in supporting activities that take place within the dock10 studios business. dock10 studios is at the leading edge of creating, managing and delivering high quality video content, providing digital storage for one of the finest studio spaces in Europe and acting as the central point for every media transaction that takes place within the studios and post production facility.

Key to the efficient operation of a data centre is the cooling process that ensures the data storage environment stays at a set temperature which is suitable for IT equipment functionality on a 24/7 basis. Due to their highly energy intensive role, cooling in data centres is recognised globally as an area with great potential for improved energy management and energy reduction.

Derek Elliott, Head of Technical Services for Peel Media, initiated the data centre trial at dock10 studios "As part of a degree course in Sustainable Building Services, I used my dissertation subject to look into principles that support efficient cooling of data centres and had used one of the data halls at dock10 studios as my working example. It just seemed sensible to see if we could put theory into practice, so working with our technical services partner, we used this analysis to implement potential ways to improve the efficiency of the cooling process in the data centre."

As a result of the trials, five computer room air conditioning (CRAC) units, which previously worked in isolation, were fitted with technology to allow them to recognise temperatures and talk to each other more effectively.

Work was also undertaken to better understand the routes of airflow and address inefficiencies through improved air management. This resulted in the realisation that, rather than running five CRAC units constantly, the data centre could be run on two units with the remaining three units operating as back up provision if required. The impact of this has been significant, with weekly energy usage dropping from over 12,500 kWh to approximately 3,000 kWh.
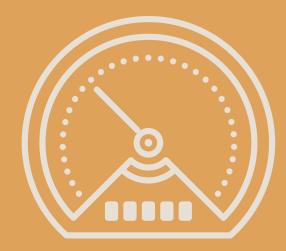
The financial impact has been equally impressive, with over 480,000 kWh of energy consumption being saved since trials began in 2014, which is a cost saving to the business of approximately £50,000 per annum.

Derek Elliott, Head of Technical Services, Peel Media
"The results speak for themselves and yet further opportunities for improvement may still exist. We would certainly be delighted to share our learning with other businesses that are keen to address their energy challenges".

480,000 kWh
energy reduction

£50,000
cost saving

dock10 studios operates an ISO 50001 certified energy management system.

CERTIFIED
ISO 50001
MANAGEMENT SYSTEM
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