

CASE STUDY

REDUCING ENERGY CONSUMPTION

AT PENYFFORDD PRIMARY

OVERVIEW

Penyffordd School is situated in the charming town of Chester in the northwest of England. This primary school serves as an educational hub for the community, accommodating 315 full-time pupils.

Recognizing the importance of futureproofing and sustainability, Flintshire County Council embarked on a mission to modernize Penyffordd School. The renovation focused on creating a learning environment that not only meets current educational needs but is also adaptable to future demands.

TECHNICAL OVERVIEW

Their kitchen consists of a single wall canopy with a standard EC 0-10V 3kW Extract and 2.2kW Supply fan. The fans are running 6 hours a day 5 days a week resulting in 11,632 kWh of energy used to power these fans each year “pre Cheetah”.

Cheetah has integrated into the schools existing BMS system with the extract fan speed set to minimum 20hz and maximum 46hz.

Cheetah



KEY STATS & FIGURES

Since Cheetah was installed in 2019, we have saved Penyffordd Primary School;

10,163 kWh saved per year

2.29 Tonnes of CO2 saved per year

£2,540.75 Pounds saved per year

22 MONTHS Return on investment

87% Fan energy reduction

As part of Flintshire County Council's commitment to sustainability and reducing energy consumption, Cheetah was integrated into the kitchen refurbishment design at Penyffordd School. The primary goal was to address the rising concerns of global warming and contribute to the council's broader objective of achieving Net Zero.

With experience in working with schools and colleges, Cheetah was chosen for its proven ability to optimize energy efficiency. By implementing demand control kitchen ventilation, Cheetah significantly reduces the energy usage and carbon output of the kitchen's ventilation fans. This not only lowers the school's overall carbon footprint but also ensures the building is future proofed against evolving environmental standards.

“ Since installation, Cheetah has saved Penyffordd 52,172kWh, £13,043 and 11.7 Tonnes of CO2 in 5 years! ”

We are continuing to install Cheetah to schools of all sizes across the country. Please see the attached report for additional real time data from other schools we've installed Cheetah in.

