

Pets at Home Retrofit Reduces Energy Use by 34%

FOREWORD



pets
at home

Pets at Home had an estate that was running far from optimal efficiency. With out-dated high bay and fluorescent lighting and minimal control of in-store equipment, there was a clear opportunity to modernise and make the HVACR infrastructure more sustainable.

Pets at Home have strict temperature regulation guidelines to keep the animals in their stores save and comfortable. One key aspect of this project was the

increase of visibility and control of in-store temperatures, a critical element of their “pets before profit” ethos.

The solution was comprised of two elements: installing LED lighting and a new BMS solution that enabled automated control and monitoring of their infrastructure. As a result, Pets at Home achieved 34% energy savings across 420 retrofitted stores.

THE PROJECT

Working with Pets at Home, Energy Management Consultants, Ignite Energy developed a demand reduction solution, made up of two core

elements: LED lighting upgrades and control systems that manage in-store assets and optimise savings. Despite being logistically challenging, the two

aspects were rolled-out in tandem to reduce disruption to normal store operations.

THE SOLUTION

LED lighting with sensors and controls built-in, allow for daylight harvesting, zone control and reduction in lighting levels based on zone occupancy during stocking. The LED lighting conversion spanned the entire Pets at Home estate, replacing on and off sales floor lighting with energy-efficient equivalents. This included high bay fittings across the majority of sales floor lighting which feature built-in sensors that switch lighting off when a suitable level of natural light is detected in the store. This change helped decrease energy consumption, costs, and environmental impact.

BMS systems now control all HVACR and store systems, integrated with the store security system to facilitate optimisation based on occupancy. Temperature sensors installed

throughout the store mean that strict animal welfare guidelines can be monitored, recorded and adhered to at all times, including outwith working hours.

Control systems were installed across the Pets at Home estate to manage lighting, air conditioning and other systems, including signage, for optimal efficiency. RDM products were central to the control strategy. Ignite identified that by making simple adjustments significant cost savings could be delivered. For example, when the intruder alarm is set to on, all non-essential equipment is switched off.

Intuitive controllers were used to control all of the HVACR and LED lighting systems, supported by RS485 Modbus interfaces and energy meters.

The controllers are compact and feature a built-in display which meant they were easily fitted into a consumer unit ahead of installation. This process requires less equipment and engineer time on-site, reducing installation times and disruption to store operations which in turn minimises overall costs.

The accessible price point of the Intuitive range, compared to similar solutions, combined with the cost savings, allowed for the system upgrade to be implemented across the estate at a high-frequency rate. Approximately 15-20 stores were retrofitted each week. As a result, energy and operating cost savings were achieved quickly, delivering a short payback and boost to profits.

BENEFITS

This project has resulted in the swift implementation of a solution with several components across an estate of over 420 stores. One of the

unique aspects of this project is the combination of wholesale lighting replacement, along with security system integration, BMS for HVAC and

other store systems, combining to produce an energy reduction of over 34% across the estate in less than a year.

IGNITE ENERGY

As energy management consultants, Ignite Energy deliver a full range of management services that give businesses a clear picture of their energy usage and what they can do to cut consumption in the future. Specialising in the reduction of energy costs for large companies, their energy management solutions have been proven by a vast variety of businesses, delivering an excellent return on investment.

Covering the energy value chain from

wholesale procurement, through to billing management, finance support & reporting, and metering to reduce energy consumption their service delivery is consistently professional and accountable.

"Project Aether has been a huge success, it's been a game changer for us. We've seen savings between 30-34% across the stores.

Through our partnership with Ignite Energy, we were able to pair expertise in the implementation of energy

efficiency measures with clear communication across our business to develop and roll out the project successfully and swiftly.

The benefits achieved by the project have had a dramatic effect on our business, not only through the financial savings made but also that we now have an estate of modernised, efficient and easily controllable stores."

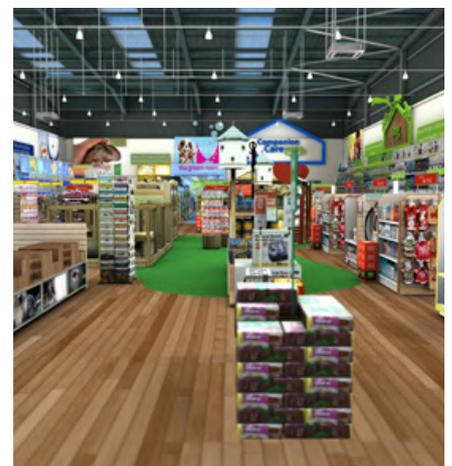
James Kokiet, Energy Manager, Pets at Home



Pets at Home retrofitted 420 stores - up to 20 each week - with new lighting and BMS solutions.



RDM's Intuitive - HVACR and lighting controllers - saved installation time and cost.



Pets at Home's new HVACR and BMS solution achieved 34% energy savings across the estate.