



CASE STUDY : RETAIL



WILSON
POWER SOLUTIONS

Responsible Power Engineering



TRANSFORMER DRIVEN ENERGY EFFICIENCY PROJECT

THE CHALLENGE

With a significant built estate, Tesco's commitment to achieve zero-carbon status by 2050 sets a tough challenge. That's why the engineering team are focused on all areas of energy consumption to see where the organisation can introduce savings and streamline operations to reduce carbon.

Considering Tesco's significant annual electrical consumption, transformer losses represent a lot of electricity. Improving this, even by a small margin, would therefore provide a significant saving.

In 2008 the Tesco engineering team drew up tougher new engineering specifications and started looking for super-low-loss units. Wilson Power Solutions was one of the few companies to meet the spec and also offered a unique transformer with an amorphous core that could offer significant additional loss savings- the Wilson e2.



9,000,000+
ANNUAL KWH SAVINGS



PAYBACK
£810,000
ANNUALLY

Based on electricity costs
of £0.09 /kWh



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We're happy to recommend the Wilson e2 transformer as a part of an integrated approach to energy savings.

TESCO TECHNICAL STANDARDS MANAGER



INSTALLATION BENEFITS AT A GLANCE

- 1 ANNUAL SAVINGS IN EXCESS OF 9 MILLION KWH (£810,000) PA
- 2 GUARANTEED SAVINGS THROUGH REDUCED TRANSFORMER LOSSES
- 3 EXTREMELY COST EFFECTIVE VOLTAGE MANAGEMENT SOLUTION
- 4 MINIMISING PLANT FOOTPRINT
- 5 ROBUST & RELIABLE: NO FAILURES IN OVER 90 INSTALLS
- 6 CAN BE SPECIFIED BEFORE STORE OPENING AND PREVENTS EXPENSIVE
- 7 STORE SHUT-DOWN LATER ON

THE SOLUTION

Working alongside Tesco, WPS adapted product specification to better serve Tesco's requirements and modified the product to include an extended tapping range as standard. Following these product development activities, Tesco specified the Wilson e2 transformer for new stores in 2009.

In addition to the savings Tesco achieves through reduced transformer losses, the Wilson e2 comes with an extended tapping range that allows the reduction of voltage to site at source. This eliminates the need for dedicated voltage management equipment offering an extremely cost effective 2in1 solution with further added benefits of reduced plant footprint, less cabling and maintenance requirements. What's more the units can be easily specified before store opening thus preventing expensive store shut-down later on.

With over 90 installations across its estate to date, the Wilson e2 is saving Tesco over 9 million kWh per annum – based on electricity costs of £0.09 /kWh that's a whopping £810,000.00 each year.



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