

# Reducing Lighting Electricity Consumption and Costs For:



**Reference:** 070914-1754  
**Client:** ASDA  
**Type Of Building:** Distribution Centres

## A Case Study

### Introduction

Tate Consulting Engineers who act as energy consultants for ASDA surveyed the lighting in all of their UK distribution centres, (DCs). A large proportion of these DCs were identified as being ideal for the implementation of ECO-MAX optimisers.

Tate found that almost all of the lighting throughout these DCs remained lit 24hrs/7days, 52 weeks/year, and other than replacing every single light fitting for an energy efficient alternative, (an expensive and disruptive option), there was little that could be done to reduce energy consumption.

Mid 2006 Tate invited GWE to install the ECO-MAX system at ASDA's Lutterworth Chilled DC for evaluation. Over the following 12 months our ECO-MAX system proved that it could constantly deliver a 25% energy reduction without replacing or switching off any of the existing light fittings.

### Existing Lighting

Various types of discharge light fittings, i.e. SON's, Metal Halide and Fluorescents. All of which remain constantly lit, because of occupancy patterns and the lack or absence of natural daylight.

### The Solution

In order to reduce the electricity consumption of the existing lighting by 25%. GWE supplied ECO-MAX-FDIM centralised lighting control systems. The control systems were installed by ASDA's own facilities Management Company, Halsall Electrical. The roll out covered twelve DCs and was completed in three months.

### Enhanced Capital Allowance (ECA), Scheme

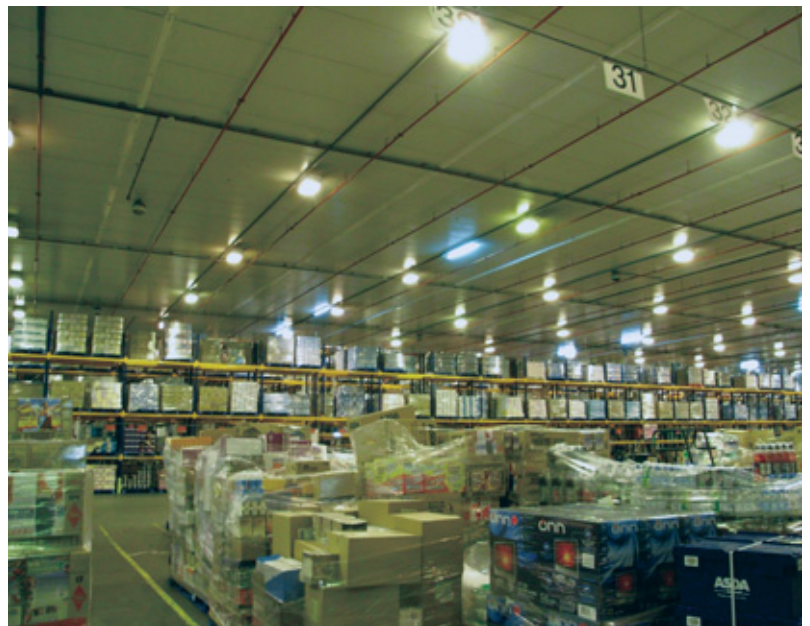
Because of GW Energy's inclusion on the Carbon Trust's Energy Technology List, (ETL), ECO-MAX optimisers can be configured to qualify for Enhanced Capital Allowance, (ECA).

The ECA scheme provides companies with a welcome cash flow boost in the financial year that the investment is made, visit [www.eca.gov.uk](http://www.eca.gov.uk) for more information.

### Carbon Trust Interest Free Loans

SME's that implement ECO-MAX optimisers may also qualify for a Carbon Trust Energy-Efficiency Loan.

The repayments for these loans, which are Interest Free and without arrangement fees, are structured to be less than the energy saving made, allowing companies to benefit immediately from an improved cash flow. Visit [www.carbontrust.co.uk](http://www.carbontrust.co.uk) for further information.



### Energy & Financial Summary of Project

<b>Current Annual Lighting Energy Cost</b> Exclusive of VAT	£1,098,854.00	
<b>Reduction in Energy Consumption</b>	27%	
<b>KWhrs Saved per Annum</b>	4,238,438	
<b>Reduction in Energy Cost, per Annum</b> Exclusive of VAT	£296,690.00	
<b>Total Cost of Equipment</b>	£278,116.00	
<b>Payback Period in Months, without ECA</b>	Supply Only 10.5	Installed 16.3
<b>Reduction in Carbon Emissions</b>	1,823 tonnes p.a	

### Lease Purchase

For larger companies that fail to meet the criteria of the Energy-Efficiency loan scheme, but would also prefer to see the financial benefits of the ECO-MAX transferred almost immediately into an improved cash flow, then lease purchase may be a better option, as the cash flow for many companies can be positive in just a few months, (contact GWE for further information).

References, written testimonials, or site visits can be provided / arranged by contacting GW Energy directly.



Authorised User No. 00388