## **INDUSTRIAL CASE STUDY**

#### The Business Case

An international industrial end user comprising manufacturing and warehouse/despatch buildings. A heavy energy user with an existing lighting system that is on 24hrs/day. A wide variety of fittings, technologies and power/lighting outputs throughout. Generally old and ineffective fluorescents and 400W metal halide high bays.

Lighting across multiple areas has been considered poor and uneven, posing H&S risks to colleagues. A combination of high energy usage/costs through ageing fittings, along with long operational hours and areas of infrequent use makes for an excellent commercial business case that far surpasses the customer's requirements.

£6,966.53



£732,719.18 5 Year Savings



£12,211.99



£271,324.18

**TOTAL PROJECT COSTS** 

#### ENERGY SAVINGS CALCULATIONS

Quantity	Units	Existing	Proposed	<b>Annual Saving</b>	5 Year Saving
Total Wattage	W	110,000	23,447	86,553	432,766
Annual Usage	kWh	960,960	204,832	756,128	3,780,640
Annual CO <sub>2</sub>	$kgCO_2$	428,088	91,249	336,840	1,684,200

LED SAVINGS FACTOR

TOTAL SAVINGS FACTOR

CONTROL SAVINGS FACTOR

48%

**79%**\*

**59%** 

#### **PAYBACK PERIOD**

PROJECT COSTS & MAINTENANCE

**MONTHS** 

**PROJECT** COSTS ONLY

**MONTHS** 

ECA PROJECT COSTS & MAINTENANCE

**MONTHS** 



# Smart Energy Saving | Improved Working Environment



### The Solution - £300,000 Smart Lighting Project

Aurora's AOne™ smart lighting spaces is a wireless lighting control system offering simple installation and commissioning.

Achieve an aggressive project Rol <2 years</li>

Reduce operational maintenance costs

over the warranty period

Mesh networking of connected luminaires and sensors enables easy grouping and configuration, with immediate and significant energy savings through daylight harvesting and occupancy-based control. This ensures the most efficient use of energy to provide the correct amount of autonomous light when and where it is needed.

a smart lighting solution with improved light

quality, consistency and coverage across

agreed areas

Almost 900 smart luminaires optimising energy savings based on how the building and colleagues operate. Making your buildings a key part of your business.









64



VAYDOR™

80

KAYON™

84

<sup>\*</sup>Energy calculations based on operating hours of 24 hours, 7 days per week and 52 weeks per year with a declared price of £0.17p per kWh and Carbon kgCO<sub>2</sub>/kWh at 0.44548. Controls Savings Factor is the savings % for new lighting with smart controls after the initial LED savings % have been achieved.