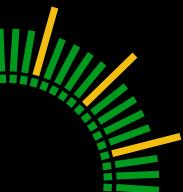


First Parking, 11 Argyle Street, Newcastle Car Park Lighting Upgrade - CASE STUDY









A brighter future



First Parking, 11 Argyle Street, Newcastle Car Park Lighting Upgrade - CASE STUDY

OES used a design led approach to install 278 LED fittings. OES reduced the number of required fittings by 5% whilst simultaneously improving uniformity and reducing glare to parkers. The approach increased the overall lux levels from 38 to 74 lux in the main car park

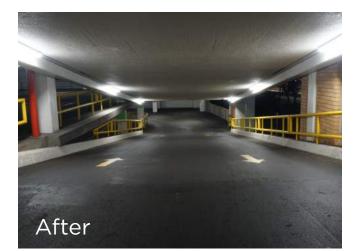


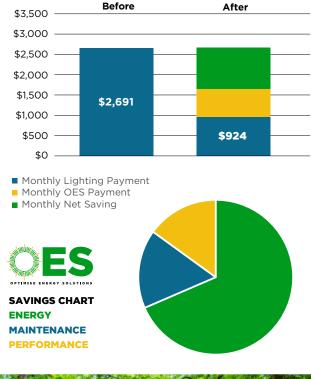
Monthly Net Saving	\$0	\$989
Monthly OES Payment	N/A	\$778
Monthly Lighting Payment	\$2,691 ¹	\$924
ACTUAL MONTHLY COST	Before	After

ENERGY & MAINTENANCE BENEFITS	Savings
Total Energy Savings Over 10 Years ²	\$293,482
Total Maintenance Savings Over 10 Years ³	\$70,491
Total Performance Savings Over 10 Years ⁴	\$64,312
Total Gross Savings Over 10 Years	\$428,285
OES Fee	\$56,078
Total Net Savings Over 10 Years	\$372,207

CARBON EMISSIONS REDUCTION	Better By
Annual CO2 emission reduction	158 Tonnes
Annual SO2 emission reduction	0.44 Tonnes
Annual NOx emission reduction	0.22 Tonnes
Acres of forest added	31
Cars removed from the road	22

space as well as utilising a unique car park transition lighting system to ensure compliance with the latest AS1680 standards. The overall effect of the project was to reduce energy consumption by 80% whilst providing an improved experience for First Parking customers.







1: Calculated by wattage of the total fixtures count multiplied by operating hours of 24 hours a day, 365 days a year & Client Indexed Energy Price of \$0.16/kWh. 2: Calculated with old and new energy costs inflating YoY by 7% • 3: Calculated with an average maintenance cost of \$13 p.a. for old fixture with costs inflating 2.14% YoY 4: Calculated with fixtures over Car Parking Bays dimming up to 10% due to lack of movement in area