

Case Study

Sydney Opera House Car Park



Project Description:

The Sydney Opera House Car Park is an energy intensive facility covering a very large, underground area of 11 floors. 1100 cars can be parked daily. The major energy installations are the 3 individual air-handling units and the fluorescent lamps on each of the 11 floors. Because the car park is underground each lamp is sealed and waterproofed. The Client insisted that the efficacy of the lighting system must remain and any changes must not increase the temperature of the lamps or fittings. Annual electrical energy consumption on lighting is in the order of 700 MWhr with a cost of \$60,000 out of a total annual electricity cost of about \$180,000.

A recognition that lighting energy represents a significant portion of the operating costs highlighted lighting as a major contributor to energy consumption (>33% of the site) which can be effectively controlled with the Light Eco 2.4 Economiser. This resulted in one floor being installed in January '98 and the reduction of energy consumption monitored. A commitment to complete the installation on all floors was made in March and completed in April.

This project has been funded entirely by Enacon and The Sydney Opera House Car Park. Energy savings are regularly monitored.

Summary of Results:

Annual savings	\$17,900
Cost of investment	\$15,000
Internal Rate of Return	150% (simple pay-back = 9 months)
Greenhouse gas savings per year	200 tonnes CO2 equivalent

Further Information: Contact Ilum-a-Lite 1800 133 666 www.ilumalite.com or www.saveiteasy.com.au