

OZtrail Cuts Energy Use in Half, Saves Over \$600k in TCO with Dialight LED High Bay Lighting

As Australia's premiere camping and outdoor products supplier, OZtrail has become world famous for its high quality, innovative products with outback-caliber durability. Thanks to a recent retrofit of its flagship facility in Brisbane with Dialight LED industrial lighting, OZtrail is now also leading the Aussie revolution in deploying high-efficiency, sustainable industrial lighting, while saving over \$100,000 a year in energy costs and \$200,000 in lifetime maintenance for a \$628,000 overall reduction in TCO.



OZtrail replaced all (400) 400W metal halides with Dialight LED High Bays

The Challenge: The Shock of High Cost Lighting

In 2013, OZtrail opened its brand new 20,000 square metre, state-of-the-art warehouse in Brisbane's TradeCoast Central, a high-profile, fully master-planned corporate office park and industrial center focusing on sustainable development and first-class utility services. But, despite having just moved in, the company was immediately shocked by its outrageous electric bill, driven through the roof by the previously installed (400) 400-watt metal halide fittings.

"We quickly noticed the Building Management System was reporting power consumption much higher than we had anticipated," said Andrew Whittaker, Managing Director with OZtrail. "When our first electricity bill came in, it was off the charts and way beyond our expectations."

In total, the company was looking at 600,000 kWh of consumption at a cost of more than \$150,000 per year, just for lighting alone. Whittaker said the company tried to save power by turning lights off when not needed, but this was interfering with day to day operations waiting for the lights to warm back up. OZtrail knew a better long-term solution was needed in order to maintain sufficient, yet affordable, lighting at its high-profile location.

Installation snapshot

- Replaced (400) 400W Metal Halide fittings with:
 - (254) 146W DuroSite Aisle Optic LED High Bays
 - (32) 146W DuroSite LED High Bays
 - (114) 172W DuroSite LED High Bays
- 60% energy reduction
- \$106,318 annual energy savings
- \$627,975 Total Cost of Ownership savings
- <2 Year Payback
- 138% ROI

The Solution: The Dialight Difference

Searching for a practical solution, OZtrail took the opportunity to run a trial of LED High Bay fittings by Dialight Corporation, the world leader in industrial and hazardous LED lighting. In the trial, OZtrail replaced all (68) 400W metal halides on a single circuit with 146W Dialight LED High Bays. The results were immediate and convincing.

"The test ultimately confirmed what Dialight had told us," Whittaker said. "Power consumption had dropped from 28.5 kWh down to 10 kWh. The Dialight fittings produced a crisp, clearer natural type of light than the previous fittings, and they came on instantly, so we don't have to wait for them to warm up."

With the successful trial complete, OZtrail continued replacing the remaining 332 metal halides with a mix of 146W and 172W Dialight LED High Bays. In addition to the instant reduction in electricity consumption, the Dialight fittings also delivered an immediate drop in ongoing maintenance costs. With each LED fitting rated for at least 60,000 hours – compared to just 20,000 for the metal halide bulbs – and covered entirely by Dialight's 5-year full-performance warranty, making the switch to Dialight LEDs virtually eliminated lighting maintenance at the OZtrail facility for at least half a decade.

The Results: Maximum Savings & Sustainability

With the new Dialight LED fittings in place, OZtrail saw an immediate 60% reduction in annual energy consumption, saving over \$106,000 a year in electricity costs alone. Not only did the more efficient fittings cut usage, but the drop was so dramatic that it actually reduced OZtrail's peak demand enough to lower its electricity tariff rate, creating an additional \$2,000 in annual savings.

In addition to cutting energy consumption and costs in half, OZtrail saw nearly \$628,000 in total cost of ownership savings, including annual operating costs, relamping and maintenance. The high-efficiency lighting also contributed toward OZtrail's sustainability objectives, reducing CO2 emissions by 351 tons—the equivalent of taking 61 cars off the road per year—and kept 30400 mg of Mercury out of landfills by eliminating the disposal of metal halide bulbs.

"The lights Dialight supplied have exceeded all our expectations. We are getting a major reduction in power whilst visibility throughout the warehouse has been maintained," Whittaker said. "Our overall experience with Dialight has been nothing but first class. From the initial meeting right through to the execution of the installation, Dialight has been a real pleasure to deal with."

For more information about Dialight LED High Bay fittings for industrial applications, visit www.dialight.com



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