

Case Study

NSW Premier's Department



Governor Macquarie Tower

Project Description:

The NSW State Government has taken a proactive approach to energy saving and Greenhouse gas reduction and the Premier's own department is leading the way in light energy conservation.

The Premier's Department occupies 10 floors of the Governor Macquarie Tower (GMT) in Sydney. The Department of Public Works conducted extensive measurements of the fluorescent lighting in the GMT and determined that much of the lighting could be more energy efficient with the installation of voltage reduction units.

Public tenders were called for to modify circuits where required and install the energy saving units on about 80 Fluorescent Lighting circuits. Ilum-a-Lite through its distributor, Electrical Power Conservation Systems and Koala Wholesale submitted the winning tender

Site Description:

Governor Macquarie Tower is one of Sydney's landmark buildings towering some 40 stories over Chifley Square. The Premier's Department occupies the top 12 floors. Each floor has varying levels of security and a range of lighting.

To maximize the energy savings circuits were optimised to ensure they had more than 14 amps on them, or in some cases split to isolate incandescent or other lighting types from fluorescent lights. Each floor took about the same number of LE 4.8 units, most of the work taking place after hours to allow for security requirements and avoid disrupting the function of governing NSW.

DPWS took detailed current, power and power factor readings before and after installation and the impressive results achieved are summarized below

Summary of Results:

Annual savings	\$29,000
Investment	\$60,000 (Fully installed)
Internal Rate of Return	54% (simple pay-back = 22 months)
Greenhouse gas savings per year	398 tonnes CO ₂ equivalent

Project Bonus: Ilum-a-Lite presents to all clients one tree seedling for every tonne of CO₂ saved, thus significantly improving the environmental effect. The Premier's Department contributed 400 of 20,000 trees planted at Bicentennial Park Camden in a major parkland rehabilitation, funded by Ilum-a-Lite as part of its ongoing commitment to NSW and the environment.