

# Hawthorn Library

## COMMUNITY SECTOR

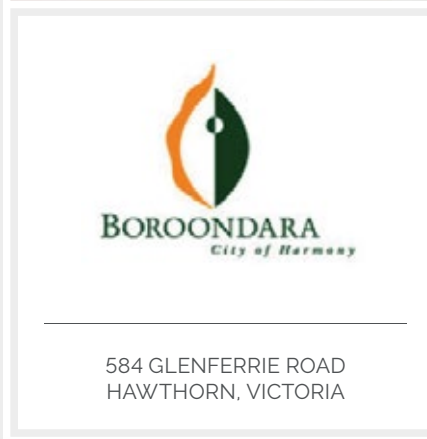
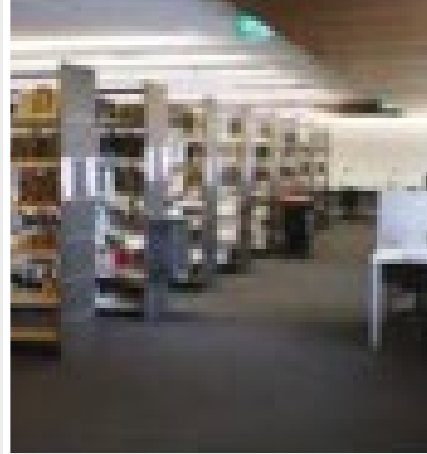
PROJECT COMMENCED JANUARY 2013

City of Boroondara came to tender for the lighting upgrade to the 2 level Hawthorn Library and support offices. The original library had recently been expanded with a new library and council sought to improve both the energy efficiency of the existing library and improve the quality of lighting, layout, Lux levels and uniformity.

The existing Library lighting design consisted of T8 fluorescents, large recessed mercury vapour fittings, PLC down lights and Metal Halide Shop Lighters.

Due to the large number of book stacks and changes to layout since the original installation lighting was poor and inefficient.

NuGreen Solutions was awarded the project and developed a new lighting design and specification which included high efficiency T5 suspended fittings for book stacks and LED panel lights for Office areas and LED down lights and feature lights. Scope works also included all make good plastering, painting and an RCD upgrade.



## THE PROJECT

347	Fittings to be replaced
65%	Saving on current lighting spend
\$891,900	Saving over 10 years
340	Tonnes of CO <sub>2</sub> saved over 10 years
5 YEAR	Maintenance free period

## THE BENEFITS

- Reduced electricity bills
- Reduced CO<sub>2</sub> emissions
- Zero maintenance costs for the next 5 years
- Improved lighting environment
- Use of the latest technology
- Future proof around rising energy cost

LIGHTING COMPARISON	EXISTING	PROJECT
FITTING TYPES	T8, Mercury Vapour, Metal Halide & down lights	LED Panels, down lights, suspended T5 liner
KW	762,210kWh	266,670kWh
ENERGY COST (PA)	\$137,190	\$48,000
MAINTENANCE COST (PA)	\$15 per fitting	\$0