

## The Building Display Centre Eco Lighting Case Study

### A Shining Example of a Building Display Centre

#### Case Study Key Findings

- A **26%** reduction in electricity for lighting.
- Savings of over **\$1,657** a year on electricity.
- A reduction of **13.5 tonnes** of CO<sup>2</sup> emissions per year.
- On top of that, there are savings of **\$1,007** a year in maintenance costs.
- A return on investment in one year and 5 months!
- Total cost for the retrofit: **\$3,766**.

#### About the Building Display Centre

The Building Display Centre was originally based in Albert Street East Melbourne, where building products and services were on display to both the public and the building industry, 7 days a week.

In early 2009, the Building Display Centre was re-established at the ex Collingwood Football Club house in Victoria Park. Prior to the retrofit, the building was awash with footy atmosphere and energy intensive Halogen downlights.

The Building Display Centre, which is highly regarded for its role in showcasing water and energy saving products, combined with developments in renewable energy technology, was keen to retrofit the lighting in the Victoria Park building with state of the art efficient lighting technology.

#### Before the Eco Lighting Retrofit

Prior to the retrofit, the board room and general areas at the Building Display Centre featured 50 watt Halogen down lights and 40 watt Linear Fluoro lights. The annual electricity bill for lighting was **\$6,340**. The old lights were dull and aged through poor maintenance.



### After the Eco Lighting Retrofit

After conducting a systematic lighting audit, the eco lighting experts at the Environment Shop reduced the energy consumption of the lighting by **26%**. The table below shows in detail the lights that were replaced during the retrofit at the ex Collingwood Football Club:

Location	Original Item	No.	Consumption Power (W)	Total	Efficient Lighting Replacement Item	No.	Consumption Power (W)	Total
Main Room	Halogen 50W	37	55	2035	IRC Lamps 35w	37	35	1295
Reception	Halogen 50W	8	55	440	IRC Lamps 35w	8	35	280
Entry Lobby	Halogen 50W	7	55	385	IRC Lamps 35w	7	35	245
Lift	Halogen 20W	4	20	80	IRC Lamps 20w	4	20	80
Room 1	Halogen 50W	28	55	1540	IRC Lamps 35w	28	35	980
Coffer – display	Linear Fluoro	16	50	800	T5 Fluorescent Kit	16	50	448
Window seating	Linear Fluoro	4	50	200	T5 Fluorescent Kit	4	28	112
Between Rooms	Halogen 50W	6	55	330	IRC Lamps 35w	6	35	210
Room 2	Halogen 50W	23	55	1265	IRC Lamps 35w	23	35	805
Coffer	Linear Fluoro	13	50	650	T5 Fluorescent Kit	13	28	364
Kitchen	Linear Fluoro	14	50	700	T5 Fluorescent Kit	14	28	392
Servery	Linear Fluoro	2	50	100	T5 Fluorescent Kit	2	28	56
	Halogen 50W	8	55	440	IRC Lamps 35w	8	35	280
		170		8965		170		5547

The Building Display Centre is now very well lit with substantially less impact on the environment saving over **13 tonnes** of CO<sup>2</sup> emissions per annum. The Building Display Centre will save **\$1,657 each year** in electricity plus **\$1,007** per annum in traditional lighting maintenance for many years to come.

### About the Eco Lighting for Victorian Business Project

The Eco Lighting for Victorian Business Project aims to demonstrate the latest energy saving lighting technologies to business and organisations. The Project is supported by the Victorian Government Sustainability Fund, managed by Sustainability Victoria.

The Project is funded by the Sustainability Fund with the management being conducted from the Environment Shop. Other partners include the Alternative Technology Association, the Cities of Darebin, Banyule and Hume, the Moreland Energy Foundation (MEFL), the Northern Area Greenhouse Alliance (NAGA), VECCI Grow Me the Money, Megaman Australia, CLA and Low Energy Developments.

