

Tho Tho Restaurant Eco Lighting Case Study

Deep-fried spring rolls served... with lower CO² emissions!

Case Study Key Findings

- A **67%** reduction in electricity for lighting.
- A saving of over **\$6,196** each year on electricity.
- A reduction of **50.3** tonnes of CO² emissions per year.
- On top of that, there are savings of **\$2,387** each year in maintenance costs.
- A return on investment in one year and six months.
- Total cost for the retrofit: **\$12,674**.

About Tho Tho Restaurant

Home to the best pork spring rolls on the Victoria Street strip, 20 years on, modern NeoMetro-designed, Tho Tho is still serving up fresh Vietnamese fare.

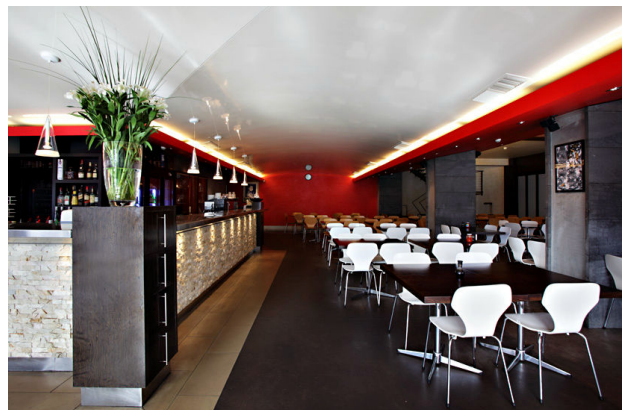
Located at 66 Victoria Street Richmond, Tho Tho stands out a mile from the dozens of restaurants in Melbourne's "Little Saigon" district. Unlike its small and homely neighbours, it seats 450 people in style.

The open-plan restaurant has large windows looking out onto the street, colourful chairs and a bustling feel as the famously prompt waiters whizz backwards and forwards.



Before the Eco Lighting Retrofit

Prior to the eco lighting retrofit, Tho Tho Restaurant was filled mainly with energy intensive Halogen down lights. Before the retrofit, Tho Tho Restaurant's annual electricity bill for lighting was **\$9,276**.



After the Eco Lighting Retrofit

After conducting a systematic lighting audit, the energy consumption for lighting at Tho Tho Restaurant was reduced by **67%**. Table One below shows the lights that were replaced during the retrofit, including the details about the globes replaced and the wattage per globe.

Location	Original Item	No.	Consumption Power (W)	Total	Efficient Lighting Replacement Item	No.	Consumption Power (W)	Total
Bar Overhead	50w MR 16	15	55.00	825	6w MR LED	15	6	90
Rear Bar Store	50w MR 16	3	55.00	165	6w MR LED	3	6	18
Under Bar Area	50w MR 16	21	55.00	1155	6w MR LED	21	6	126
Underside of Red Bulkhead	50w MR 16	33	55.00	1815	6w MR LED	33	6	198
Top Side of Bulkhead	36w T8 Fluoro	40	40.00	1600	28w T5 Fluoro	40	30	1200
	150w Par 38	9	150.00	1350	23w CLA Par38	9	23	207
Function Room 1	50w MR 16	10	55.00	550	6w MR LED	10	6	60
	36w T8 Fluoro	8	40.00	320	28w T5 Fluoro	8	30	240
Function Room 2	50w MR 16	12	55.00	660	6w MR LED	12	6	72
	36w T8 Fluoro	5	40.00	200	28w T5 Fluoro	5	30	150
	60w FR GLS	2	60.00	120	11w CLA CFL	2	11	22
Kitchen	36w T8 Fluoro	38	40.00	1520	28w T5 Fluoro	38	30	1140
Toilets	50w MR 16	15	55.00	825	6w MR LED	15	6	90
Storeroom	36w T8 Fluoro	4	40.00	160	28w T5 Fluoro	4	30	120
Over Bar Pendants	60w R63 GLS	8	60.00	480	13w MEGA R63	8	13	104
Behind Bar Displays	50w MR 16	3	55.00	165	6w MR LED	3	6	18
Total				11910				3855

Table One: Original and efficient lighting replacements during the retrofit

Post the eco lighting retrofit, Tho Tho Restaurant looks beautiful and stylish. You would never imagine that efficient globes power the elegant lighting.

With the environmental challenges we all face, Tho Tho Restaurant's proactive decision to adopt efficient lighting means it now creates 67% less CO² emissions for its lighting, while still creating an ambient environment to dine in.

Tho Tho Restaurant has reduced its lighting costs by **\$8,583** a year, with substantially less impact on the environment with a saving of **50.3** tonnes of CO² emissions per annum.

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.

