



**Century Solar Energy**

## Efficient lighting upgrade Case Study



# 705 Candle Lights Upgrade

705 Pak Lighting LED 3W Candle Light (E14)

**Kogarah - NSW Australia**

# Project Summary

**Location**  
Kogarah NSW

**Project Type**  
Lighting upgrade to LED

**Project Size**  
705 candle light replacement (E14)

**Existing Lights**  
Mirabella Spiral CFL 8W & Various incandescent 25W

**Replacement Lights**  
PAK LED Candle Lights 3W 2700K

**Date Installed**  
November 2014

Kogarah Greek Orthodox Parish is situated at the heart of Kogarah and is one of the oldest building in the suburb. Many members of the community visit the church every week to give their prayers. Since the church is not built for business, there are no income to cover the rising electricity costs. Owners of the church came together with Century Solar Energy to work out a solution to reduce their high electricity & maintenance cost and at the same time requested to keep the changes as small as possible.

The church initially had very inefficient lighting such as the incandescent lights that rated at 25W and most of them were replaced with compact fluorescent lights (CFL) few years ago. Replacing these lights with LED lights could save up to 80% and guarantee to reduce maintenance cost. One of the most difficult task for this project was finding lights that not only replace but will give out the same luminosity and appearance to match the themes of the church. A trial period was conducted to achieve that purpose and the results were that non of the visitors noticed that the lights were changed.

At the peak hour rates of as high as \$0.53/kWh (inc. GST) in current electricity market, replacing exiting lights with more efficient lighting will help maximize savings by covering the costs of electricity used during that period.

## Product Highlights

High quality aluminum body and finish

Same plug-in as exiting lights, easy installation

Up to 80% energy saving

Built-in long life LED driver

Instant start & flicker-free

Comes in warm or cool colour temperature and different shapes



## Project Energy Saving: 80.5%

Estimated Yearly Savings<sup>2</sup> **\$1,900/Annum**

Estimated Energy Saving<sup>1</sup> **5.9MWh/Year**



1. Based on a energy usage of 676 hours per year. 2. Based on current electricity market rate of \$0.32/kWh.