

### Introduction

"Kith and Kin" offers a diverse range of opportunities for people with Psychiatric disabilities, Physical disabilities, Acquired brain injuries, as well as to people with intellectual disabilities.

The organisation operates from a 400 m<sup>2</sup> office building located at 711 Flinders Street, Townsville.

The Directors and Staff of Kith and Kin have been very proactive in reducing energy consumption with a 6.6kW solar (PV) array installed in August 2009. <http://live.livinglevel.com.au/kith&kin.php>

### What we did

Queensland Energy Alliance in association with Ergon Energy carried out an energy evaluation and implementation program to further reduce Kith and Kin's energy consumption, operating costs and carbon footprint. This was achieved by:

- Thermal roof protection to reduce building heat loads (roof did not have any insulation)
- Installation of high efficiency LED lighting.
- Installation of ceiling fans in strategic locations to create air movement and allow the air conditioning plant temperature to be elevated (25°C to 26°C).
- Air conditioning unit condenser discharge baffles to prevent the hot air from recirculating around the air conditioning units. This initiative improved the air conditioning plant efficiency.

### What was achieved?

According to historic billing information, in September 2009 the premises used 689 kWh of energy from the power grid (234 kWh was generated on site by the solar panels). In September 2010 after the energy efficiency implementation was completed, the premises used 354 kWh of energy from the power grid (275 kWh was generated on site). The **energy savings achieved to date is 45%**.



BEFORE PHOTOS

AFTER PHOTOS



CEO & EO of Kith & Kin

"Queensland Energy Alliance is proud to be a part sponsor in this project"

Energy Management Company

**Queensland Energy Alliance Pty Ltd**

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