

SCC Marsfield Energy Efficiency Works Southern Cross Care (NSW & ACT), Australia

GGHH Agenda Goals

- Energy

Goal

- **Reduce energy costs**
- **Reduce carbon dioxide emissions**

Progress Achieved

- Financial benefits: Savings of USD \$16,000 (\$21,400 AUD) per annum on electricity costs
- Environmental benefit: Savings of 230,000 kWh per annum
- GHG emissions reductions of approximately 150,000 kg of CO₂ per annum for the years 2013, 2014 and 2015 compared to baseline year 2011

The Issue

On the second quarter of 2012, Southern Cross Care (NSW&ACT) contacted Net Balance to perform an energy audit at Southern Cross Marsfield Apartments. This was after monitoring the electricity usage on the Aged Care Resource Data Management Tool for over 12 months and concluding that SCC Marsfield Apartments is using a much higher amount of electricity than other Aged Care Facilities of a similar bed range in NSW & ACT (refer Figure 1.)

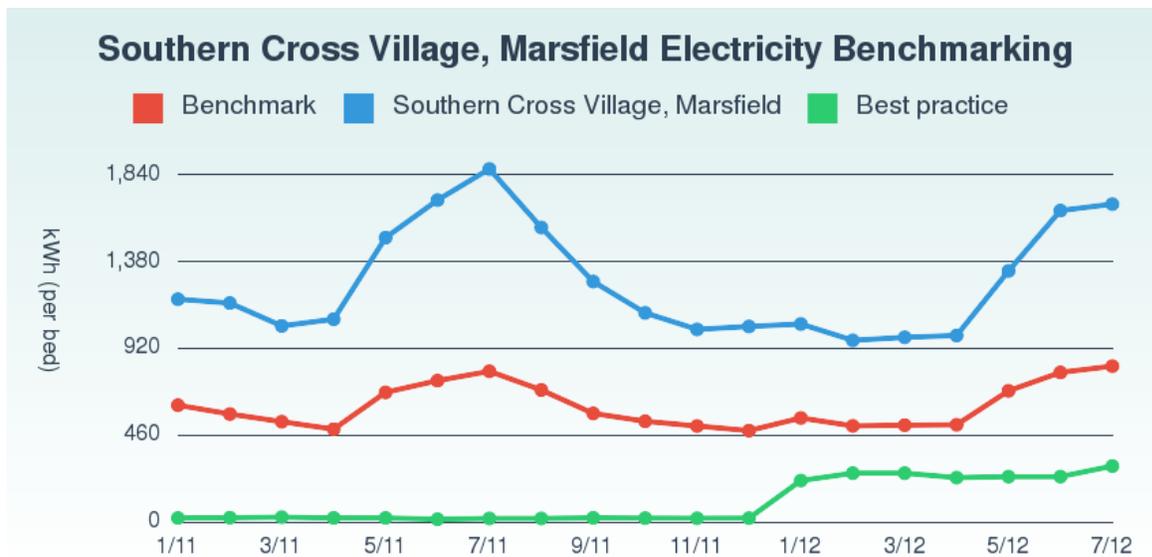


Figure1. Southern Cross Village Electricity Usage (kWh per bed) compared with Benchmark of facilities of similar bed range.

Sustainability Strategy Implemented

Sustainability is an important factor for Southern Cross Care, and it is significant to ensure that the entire organisation is being responsible to the environment and its community. On the third quarter of 2012, Net Balance performed the energy audit at SCC Marsfield Apartments in order to determine what is causing the higher than average electricity usage, and how it can be rectified. It is important to note that the gas usage at the facility was at a good level when compared to other aged care facilities, hence the energy audit focused primarily on saving electricity.

Implementation process

The findings of the audit were documented and actioned on the fourth quarter of 2012. One of the findings was that Southern Cross Care was being charged for double-metering, where the Aged Care Facility was being billed for both the electricity used by the Facility and the Independent Living Units, which were also getting billed for the electricity used separately. This earned Southern Cross Care a significant refund of approximately USD \$37,000 (\$50,000 AUD) from Ausgrid.

Furthermore, a number of electricity saving measures were also put in place following the audit. These measures included:

- De-lamping one of the twin heat lamps in the ensuites and replacing it with a standard light,
- Replacing fluorescent tubes and compact fluorescent lights with low wattage LEDs
- Installing movement sensors for the heat lamps in the ensuites, installing movement sensors for the lights in store rooms
- Amending the air-conditioners' temperature set points to 22' in winter and 24' in summer.

Some other work was done in the area of staff engagement, where sessions were run on the basic forms of energy savings and their importance. These sessions were run on site with the Facility Manager, Maintenance Officer, and senior care staff. The sessions were conducted prior to the energy audit, during the implementation of the energy audit works, and post completion of the works. SCC drew on the incentive approach to reward the staff for the savings and spent the money saved on staff amenities where possible.

The key staff engagement actions included:

- Turning off the lights and air conditioning in the rooms when not in use
- Printing in black and white and double sided
- Switching off equipment when not in use
- Reminding colleagues to do the same

Tracking Progress

The electricity cost savings have been significant ever since these works were conducted at SCC Marsfield Apartments, and the electricity savings in kWh have also been very significant. In total the facility in 2012 has used around 65,500 kWh less than in 2011, and around 230,000 kWh less in 2013 compared with 2012, and have been consistently efficient ever since. Southern Cross Care have saved a total of USD \$16,000 (\$21,400 AUD) per annum for each of calendar years 2013 & 2014 on electricity bills compared with what was spent in 2012. Electricity costs have continued to drop every year at this facility, in 2015 the total costs dropped by approximately USD \$27,000 (\$36,000 AUD) compared to 2012.

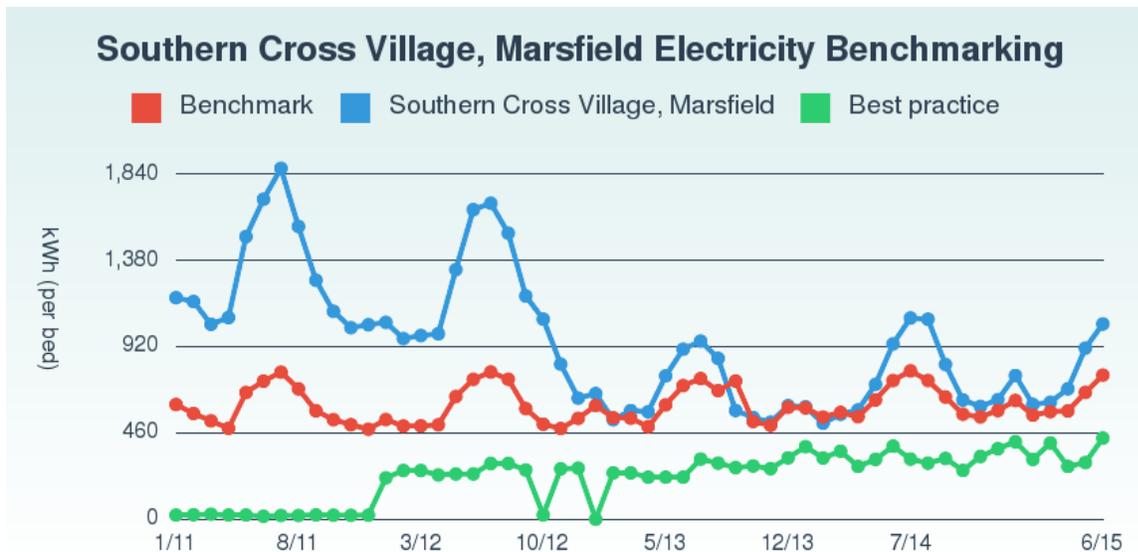


Figure2. Southern Cross Village Electricity Usage (kWh per bed) compared with Benchmark of facilities of similar bed range.

Next Steps

Figure 2 demonstrates the significant decrease in energy usage at SCC Marsfield Apartments since the fourth quarter of 2012 onwards. This shows the success of the energy audit, and puts Southern Cross Care back on the same competitive measures with the rest of the facilities on the benchmark. Further on, the positive results from the energy audit at SCC Marsfield Apartments encourages Southern Cross Care to continue with the resource usage tracking, to tackle any other issues, and keep SCC loyal to their promises towards sustainability.

The next step being undertaken at SCC Marsfield Apartments is a complete renovation and extension of the building that will include new sustainability features such as a Solar PV System, water efficient taps, Solar Hot Water System, and ethically sourced carpet and floor tiles across the building.

Demographic information

Southern Cross Care NSW & ACT (SCC) is a not-for-profit quality aged care service provider of 41 locations, across New South Wales and ACT. Southern Cross Care was established more than 40 years ago by the Knights of the Southern Cross, an order of Catholic laymen.

Throughout Southern Cross Care (NSW & ACT) is an unwavering commitment to provide superior care, services and accommodation in a Christian environment, while facilitating lives of dignity and purpose according to individual needs and aspirations. We have a responsibility to rural communities where we provide high quality care to these important communities.

We offer comprehensive services to older Australians within three care streams - Home Care services, Retirement Living and Residential Aged Care Homes. Comprising over 1,500 residential aged care beds, and over 900 retirement living units.

Our commitment to helping older people 'live life to the full' sits comfortably side-by-side with our goal of making sure we do so in an environmentally responsible way. Many of our 2,000 employees located throughout NSW & ACT, actively participate in our corporate sustainability program.

Submission date: 01/12/2016