RHBEEP-ing the Rewards

Overview

Riverina Highlands Building Energy Efficiency Project (RHBEEP) aimed to reduce energy consumption and associated costs at the RHB (Riverina Highlands Building) by replacing the existing lighting, heating, air conditioning and ventilation system, and installing insulation and solar panels. Tumut Shire’s RHBEEP is educating the community about energy efficiency through scheduled promotion of the project and with best practice strategies.

With a simple payback of 9.1 years and an 11% return on investment the project has reduced Council’s carbon emission by 303 tonnes of CO₂ per annum, a 62% reduction in emissions.

Background

The Riverina Highlands Building (RHB) is located in Tumut, NSW. The RHB houses Council’s main administration activities as well as providing a base for State Government tenants such as Forest Corporation, Rural Fire Services and Correctional Services NSW. In 2011 annual maintenance and repairs were approximately $80,000 per annum and annual electricity costs $165,000. Following a feasibility study, Council undertook an Energy Audit that identified components of the building that consumed the most electricity.

The objective of the Riverina Highlands Building Energy Efficiency Project (RHBEEP) was to transform an early 1980’s building with high energy and maintenance requirements into an energy efficient facility that is a showpiece for the community and future generations.
Implementation

Council comprehensively planned for the RHBEEP by bringing together a team to manage components of the project including Project Management, Financial Management, Energy Efficiency Management and Communications. A project plan was prepared and implemented in stages.

Council had to take into consideration that throughout the renovations, these agencies had to be provided with a suitable office space. Council only removed half of their staff from the building during construction and the staff moved from one floor to the next as the project was constructed.

RHBEEP has created a change in culture internally and the organisation is actively pursuing other energy savings such as the implementation of solar panels on all Council sewage treatment plants. Increasing staff and community knowledge on energy efficiency has aided in building the capacity of the energy services sector and in supporting competitive Australian manufacturers.

Outcomes

RHBEEP’s estimated annual electricity savings were originally projected at $94,456 but the actual savings to date are over $116,000. Additional savings of $80,000 per annum are the result of reduced maintenance costs, and the improved building environment has enabled an increase in tenancy income. The combined total savings for RHBEEP is $196,000 per annum.

Council has been undertaking a communication strategy for the RHBEEP and as a result the project is being nominated for a Australian Institute for Refrigeration, Airconditioning and Heating Awards 2014 Award for Excellence.

Key Learnings

Council has learnt some valuable lessons from this project, such as:

- Being a small rural Council doesn’t mean that you can’t think and act big to implement change into organisational culture to reduce energy consumption.
- Projects like the RHBEEP have the capacity to change staff, community and business perception on energy and cost, with these changes leading to tangible results.
- Projects such as the RHBEEP have flow on effects and have created a culture in the organisation that is now actively examining assets and the use of assets to reduce our carbon emission and associated costs.

The work flow of the project was impeded by contractors and the supply of products. If Council was to embark on a similar project, Council would ensure that contracts are bound to a strict time line with stringent delivery deadlines and that products are ordered and delivered well before estimated installation date.

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This project was the 2014 winner of the Climate Change Action Award at the LGNSW Excellence in the Environment Awards.