West Gambier Football Club
&
The Community Energy Efficiency Program (CEEP)

Australian Government assistance into the

: Upgrade of Heating and Cooling
: Upgrade of Switchboard

Providing more efficient climate control & increasing capacity to run at load.

This activity received funding from the Australian Government as part of the Community Energy Efficiency Program.
1. EXECUTIVE SUMMARY

The West Gambier Football Club (the Club) replaced a water evaporative cooling system and fan heating system with an energy efficient ceiling mounted cassette air-conditioning system.

The Club demonstrated the energy efficient measures through local media, Council and Club website updates and educational forums.

This activity received funding from the Australian Government as part of the Community Energy Efficiency Program.

The views expressed herein are not necessarily the views of the Commonwealth of Australia, and the Commonwealth does not accept responsibility for any information or advice contained herein.

The Final Installation: Mitsubishi Electric Ceiling Air Conditioners inside the West Gambier Football Club

2. PROJECT OBJECTIVES

West Gambier Football Club acknowledges the Community Energy Efficiency and of the Federal Government of Australia’s support into assisting with the funding of “the upgrade switchboard and of heating and cooling” in the clubrooms of Malseed Park, White Avenue, Mount Gambier.

The plan was to provide an increased standard of heating or cooling for the complex and reduce the amount of energy by installing more efficient units to cope with the conditions. An upgrade of switchboard also allowed increase of power, thus reducing the load output, making for a more efficient power source.

The replacement of inefficient wall mounted fan heaters (3.6KW each) has dramatically reduced the amount of energy used to heat the room. The replacement of 3.2kw water evaporative coolers has reduced the amount of energy used to cool
the Club during hot periods, due to the soft start and economical properties of the upgraded air-conditioning.

The ability to accurately control the atmosphere has also directly assisted with reducing the power usage of the bar and kitchen fridges and cool-rooms further reducing the energy required to run the complex.

The club lounge was retrofitted with the Air-conditioning and with soft start and state of the art units installed, has greatly reduced the amount of energy required.

3. PROJECT ENERGY EFFICIENCY ACTIVITIES

The Club installed 4 Mitsubishi Electric Ceiling Air Conditioners, Model PLA-RP125BA/PUHZ-RP125YKA-A with single phase inverters, 12.5KW capacity per unit in the clubrooms of Malseed Park, White Avenue, Mount Gambier. As part of this installation, the Club also upgraded the switchboard and power source.

The Club faced no issues implementing the installation activities by using qualified and accredited contractors for all of the retrofitting of the project.

4. PROJECT ENERGY EFFICIENCY IMPROVEMENT AND COST BENEFIT DATA

<table>
<thead>
<tr>
<th>PROJECT TITLE</th>
<th>Air-conditioning and Electrical Upgrade</th>
<th>PROJECT ID</th>
<th>CEEP2091</th>
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</thead>
<tbody>
<tr>
<td>FUNDING RECIPIENT</td>
<td>West Gambier Football Club Inc.</td>
<td>DATE</td>
<td>19/06/2014</td>
</tr>
<tr>
<td>Building, Facility or Site 1</td>
<td>WEST GAMBIER SPORTSMENS CLUB</td>
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<tr>
<td>Name of Building, Facility or Site</td>
<td>WHITE AVENUE, MOUNT GAMBIER SA 5290</td>
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<tr>
<td>Location (address)</td>
<td>SPORTS CLUBROOM, COMMUNITY FACILITY</td>
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<tr>
<td>Type of building, facility or site</td>
<td>UPGRADE AIR HVAC SYSTEM</td>
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</tr>
<tr>
<td>Activity Type and Measure</td>
<td>Refer Attached</td>
<td></td>
<td></td>
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<tr>
<td>Baseline Energy Usage</td>
<td>30,830 kWh per annum</td>
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<tr>
<td>Baseline Energy Efficiency</td>
<td>39 kWh x 3.6 = 140 MJ per m2 / annum</td>
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<tr>
<td>Energy Efficiency Improvement</td>
<td>34 kWh x 3.6 = 122 m2 / annum</td>
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<tr>
<td>Reporting Data (Measuring Energy Efficiency and Additional Data)</td>
<td>A total area of 700m2 operating 36h/w at 30,830 kWh annually, equates to 44 kWh per m2.</td>
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<td>Cost of Activity</td>
<td>$61,375</td>
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<tr>
<td>Estimated Cost Savings</td>
<td>$7,640.00 Per annum</td>
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</table>
5. PROJECT DEMONSTRATION AND COMMUNICATIONS

Through exposure to media and Websites (Club and council) we were able to inform, educate and demonstrate the energy efficiency activities throughout the life of the Project. The project will advantage, not only the users of the complex, at a reduced Energy rate, but would assist and advantage the whole community by awareness and willingness to reduce energy, overall in regards to the conservation of the environment.

The energy efficiency upgrade was promoted through cost effective mediums such as updates in the Club’s Newsletter and the Club’s and Councils website. We educated the community aware during the installation of the project but also plan to continue to advertise/ communicate the objectives, now that the project is completed.

Newspaper Article: The Club promoted the energy efficiency benefits of the upgrade in local media.

6. BENEFITS AND OUTCOMES

We believe we have achieved the benefits that we set out to do, whilst remaining in the CEEP program parameters, by improving our climate control in a publically used function area. We aimed and achieved to reduce energy usage. The new energy efficient Air Conditioners ultimately will have less impact on the environment control power output to inefficient sources.

A baseline Energy Efficiency Report was conducted prior to the installation of the new Air Conditioning units. The forecasted savings of the upgrade are $7,640 per annum. An updated assessment of the energy efficiency baseline will be made once a 12 month period has been completed but all indications point to this tracking well.

This upgrade project has also allowed the Club to hold functions to increase its capacity for Capital expense which was not possible when using the old inefficient Air Conditioning systems. The Club also decided to further improve the Energy Efficiency of the Building by replacing incandescent lighting with the latest energy efficient LED & CFL lamps and also installing motion sensor lighting in toilet areas and refrigeration systems. The additional upgrade allowed the Club to further improve the amenity of the building while minimising energy consumption and costs.

The benefit of greater comfort to the community is prevalent and allows for healthier activities to be conducted in relative comfort, as atmosphere control is achievable.
The Club has also received positive feedback, not only from members of our organisation, but the greater community of the district, enquiring what systems and practices, we have put in place, in regards to being environmentally aware of our energy resources and output.

With the awareness of reduced energy output from our complex and organisation, our co-tenant, the Blue Lake Gymnastics Club has made contact with us and we are assisting them in their quest to reduce their output of energy required, for various functions of their establishment.

Local contractors not only benefited by gaining employment, they also received the opportunity to build knowledge and capacity of the energy services and construction industry through the installation of the units.

7. BUDGET

The CEEP grant was $38,517 with an initial proponent contribution of $9,091. The total expenditure was $61,375 ex GST with matching income. Additional funding support was secured from the City of Mount Gambier of $10,000.

The project was completed with a minor increase of 6% to the total ex GST expenditure due to the CPI increase of the air-conditioning units from the time the project was quoted, until the time the project was approved to go ahead.

The overspend of $3,767 ex GST was underwritten by the West Gambier Football Club.

A signed financial statement, detailed financial report and copies of invoices are attached.

Technology, partners or supplies had no bearing on any issues to the project.

8. PROJECT OPERATION AND PROCESSES

The project was managed internally and given the size of the activity was very easy to manage with only three contractors involved.

This would be managed the same way if a similar project of this size was undertaken.

As with the size of the project, there were no issues or resources lacking to be implemented to make it any easier.

There were no difficulties or lesson that needed to be learned, as the project ran very smoothly from start to finish.
9. CONCLUSION/OBSERVATION

The main observation, brought about by this project, is the importance of reduced energy to minimise the impact to the environment and not just a cost saving to the organisation.

It has prompted our Club to investigate other possibilities to reduce our “footprint” by improving such things as floodlighting, refrigeration and water heating.

The Final Product: Mitsubishi Electric Ceiling Air Conditioners on the roof of the West Gambier Football Club
DECLARATION

The Authorised Officer of the organisation makes the following declarations:

☐ I declare that I am authorised to submit this Final Report (including any attachments) on behalf of ____________________________ (Name of organisation)

☐ I declare that the information provided in this Final Report is true and accurate.

☐ I understand, and acknowledge that giving false or misleading information in this Final Report is an offence under the Criminal Code Act 1995.

☐ I understand that final payment will only be made in accordance with the Funding Agreement including on satisfactory completion of Milestones.

Authorised Officer Signature: ____________________________ Date: 23/4/14

Name: ____________________________

Position: ____________________________ Organisation: ____________________________

Witness Signature: ____________________________ Date: 23/4/14

Name: ____________________________

Position: ____________________________ Organisation: ____________________________

The use and disclosure of information provided in this Final Report is regulated by the relevant provisions and penalties of the Public Service Act 1999, the Privacy Act 1988, the Freedom of Information Act 1992, the Crimes Act 1914 and the general laws of the Commonwealth of Australia.

Information contained in the Final Report may be disclosed by the Department for purposes such as promoting the program and reporting on its operation and policy development. This information may also be used in answering questions in Parliament and its committees. In addition, the selected project information will be made publicly available. Public announcements may include the name of the grant recipient and of any project partners; title and description of the project and its outcomes; and amount of funding awarded.