



All Energy Pty Ltd
www.allenergypl.com.au

CARBON ZERO STRATEGY:

Cost Reduction via Energy Efficiency & Increased Renewables.

CASE STUDY: South Burnett Regional Council.

Project: All Energy Pty Ltd completed a deep dive into power metering, power invoices and council infrastructure, including Scope 1, 2 & 3 GHG emissions. Some options analysed as part of this project to reduce costs and emissions simultaneously included:

- Solar PV at potable and wastewater treatment plants
- Load scheduling to take advantage of free solar and cheaper off-peak power. Using spare reservoir capacity as a 'battery'
- Aeration efficiency through dissolved oxygen sensing and feedback control
- Flocculant dosing to improve clarification and reduce required retention time
- Variable speed drives on pumps to match speed to demand

The above measures were estimated to save

- 879 MWh/yr of grid power
- More than \$163,000/yr in reduced bills
- Scope 2&3 GHGs reduced by 668 tonnes/yr

This project was developed with the support of the Australian Government, through the *Community Energy Upgrades Fund (CEUF)* program, and the Queensland Government.

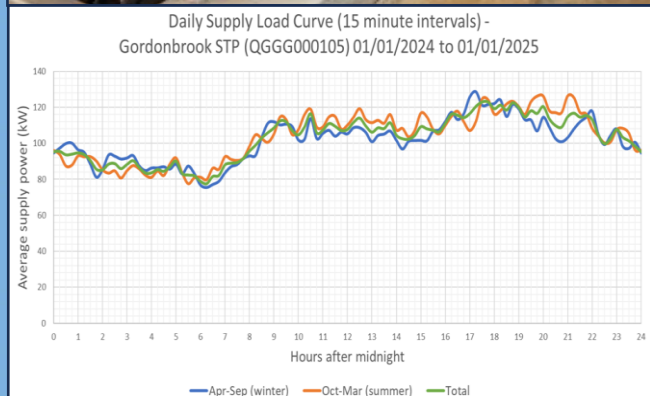


Figure 1: Treated water pump set and performance curve showing efficiency gains from reducing drive power and impeller diameter

For further information please contact:

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