

# ENERGY AND WATER ASSESSMENT WORKSHOP IN AUSTRALIA

## CLIENT | LOCATION

Global Pharmaceutical Manufacturer | Australia

## SECTOR

Pharmaceutical Manufacturing - Sterile Products

## PROJECT BRIEF

EECO2 was commissioned to perform energy and water assessments on a pharmaceutical manufacturing client site in Australia.

The objectives of the workshop were to create a cost-effective plan to reduce energy and water consumption at the site whilst maintaining product quality, compliance & safety.

The data analysis showed that HVAC (air movement, cooling & dehumidifying) and associated services were a large user in terms of energy consumption at 52% of site energy consumption and cost approximately Aus \$1.5million/year to deliver the required environmental conditions.

## METHODOLOGY

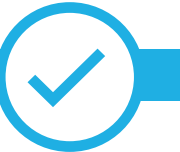
The team began with a data collection exercise, liaising with site team, followed by a desktop review and initial analysis. The next step was a visit to the client site in Australia. EECO2 facilitated an on-site energy and water reduction assessment workshop event, working together with the client site team.

## SOLUTION

A total of 38 energy efficiency opportunities and 6 water reduction were developed, including the following solutions:

- HVAC & BMS – Air Change Rate Reduction, Demand Control, Setback, BMS Optimisation
- Chilled Water – Pumping Optimisation and Adiabatic Cooling
- Steam Systems – Economisers, Hot Water Setpoint Optimisation & Insulation
- Lighting – LED Upgrades
- Solar PV
- Water – Bypass RO Plant Softener, WFI Blowdown back to boiler & Stoppers arriving clean

## RESULTS



Energy savings identified (per year):

**8,800 MWh (26% reduction)**

Water savings identified (per year):

**10,900 m<sup>3</sup> (14% reduction)**

Total cost savings identified (per year):

**Aus\$ 802,000**

With an average simple payback period of 3.4 years.

“As always EECO2 identified significant areas of energy reduction opportunity that the site was not aware of. In addition to detailed quantification of the potential costs and savings, you identified internal organizational issues that would need to be overcome to deliver the improvements... nice work!

Senior Manager, Global Engineering

## FOR FURTHER INFO

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