

PHARMACEUTICAL ENERGY REDUCTION ASSESSMENT WORKSHOP IN INDIA

CLIENT | LOCATION

Global Pharmaceutical Manufacturer | India

SECTOR

Pharmaceutical Sterile Injectable Manufacturing

PROJECT BRIEF

EECO2 was appointed to carry out a pharmaceutical energy reduction assessment workshop, which included a HVAC energy assessment and major capital project review.

The objectives of the workshop were to create a cost-effective plan to reduce energy consumption at the client site whilst maintaining product quality, compliance & safety. Any identified projects were expected to be practical, realistic and implementable, considering site constraints, development plans and new investments.

METHODOLOGY

EECO₂ conducted an on-site HVAC projects and energy reduction Assessment Workshop event working together with the client site engineering team.

METHODOLOGY CONT.

- Phase 1: Data collection, analysis, energy trending and mapping
- Phase 2: On site Assessment Workshop event
- Phase 3: Final report preparation, review and action planning

Energy maps were produced by analysing the data provided by the site. The previous full year data was used to prepare the maps. These were split by uses and by buildings to identify significant energy uses and locations to focus on.

SOLUTION

The solutions below are based on 24 developed projects for the site:

- Biomass Boiler
- Fresh Air Pre-treatment
- HVAC optimisation - air change rates in areas are higher than needed to maintain air cleanliness/classification
- Condensing Economiser for Fuel Oil Boilers
- New RO to treat waste streams

RESULTS



Annual energy savings identified:

21.7 GWh (24% site reduction)

Annual energy cost savings identified:

\$3.15 Million (40% site reduction)

Annual CO₂ savings identified:

26 tonnes (51% site reduction)

Annual water savings identified:

102,000 m³

The savings identified have an overall simple payback period of 1.8 years.

FOR FURTHER INFO

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