

Implementing Energy Assessment Recommendations for a Chemical Industry for saving energy and reducing costs

ITEM 5603 – Project Management



Team: Cowboys

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DESCRIPTION OF THE PROJECT

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Title: Implementing Energy Assessment Recommendations for a Chemical Industry for saving energy and reducing costs.

Purpose of the project:

A chemical based industry had asked for a private energy auditing company to perform the energy assessment in its major energy consuming equipment like Boiler, HVAC system, motors, air compressors and lighting. The private company provided the industry with major energy assessment recommendations to be implemented in order to reduce costs. The time period to implement these recommendations is 1 year. The industry is going to form a committee in order to implement these recommendations and the committee will perform the necessary tasks in the form of project.

Scope of the project:

The project covers mainly tasks required for the implementation of energy assessment recommendations. This project will not cover waste reductions. Furthermore, the project will start after receiving the assessment report and continue over the course of 1 year when a final report is provided which will state how many recommendations were implemented. The project will involve, internal employees and third-party contractors.

Estimated Project Cost:

The project cost will mainly incur the implementation cost of the assessment recommendation which comprises of buying new equipment, third-party contractor costs, training of employees, buying accessories to supplement energy consuming equipment in order to reduce costs etc. The estimated costs for the whole project will be approximately \$200,000 over the project time frame.

Expected Resources Needed:

For the project, the resources needed are listed below.

- Energy Assessment Report
- Third party contractors for implementing recommendations
- Monetary fund
- Internal Employees etc.
- The new equipment that has to be retrofitted into the current system

Note: Additional Information

Sequence of the major task to be accomplished after the completion of this project.

- Receiving final report from IAC, 60 days after the assessment day.
- Plant manager reads and understands all the recommendation provided in the report.
- Pass the report to all managers.
- The report is analyzed, and queries are cleared by the phone conference with the IAC's lead author for the report.
- Plant manager calls out a staff meeting to discuss the feasibility and urgency of different recommendations.
- The report is passed on to the general manager.
- The report is approved and request for the financial resource is made to CEO.
- CEO evaluate the report.
- Checks the current year's budget for energy efficiency funding.
- Funding approved from CEO.
- Plant manager splits the funding into department/equipment.
- Selected employees are assigned to a particular equipment energy efficiency improvement program.

HVAC recommendations - (implementing maintenance program) (office area night set back programmable thermostat installation)

Air compressor recommendations - (reducing the set air pressure) (installing the fresh air intake lowers in the air compressor room)

Boiler recommendations - (fine tuning of the boiler) (steam pipe insulation)

Lighting recommendation - (installing LED lighting fixtures throughout the facility)

Motor recommendations- replacing oversized or undersized motors depending upon requirements

Listed are some of the major tasks covered for almost all the equipment's energy efficiency program. Further, in the project, all the tasks will be segregated, and more details will also be added.

- Budget recheck by the equipment representative.
- Call a meeting of all the employees associated with the equipment.
- The list is made of all the equipment that must be bought.
- Select the most efficient and cost-effective equipment.
- Order the equipment.
- Installing energy efficient equipment.
- Third party maintenance company is selected.
- Recommendations are implemented and are under review.

- ✓ **After one year of the assessment, feedback of the report is provided.**