

3 ways energy auditing can help save energy & cost

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Energy is one of the real catalysts to the economic development of any nation. Energy auditing helps in standardizing the circumstances of energy crises by giving long term conservation plans. Today, India is vastly focusing on enhancing sustainable power generation and power trading solutions, yet additionally utilizing it more proficiently. Every small step taken towards energy conservation is an endeavour towards finding ways and methods to save the depletion of energy resources.

PTC India Ltd. took the initiative of internal energy audit and implemented corrective measures to optimize the usage of energy, improve efficiency and reduce cost simultaneously.



Usage of energy



Improve efficiency



Reduce cost

How they made it happen ?



The Energy Audit :

- PTC's Energy audit team conducted the energy audit in 2017.
- Steps for the audit included Building Utility Data Analysis, Walk-Through Survey, Baseline For Building Energy Use and Evaluating Energy-Saving Measures.
- The inspection survey involved processes and systems to reduce the amount the energy input into the system without negatively affecting the output.



Energy Conservation Measures (ECM) :

As per the energy audit, various ECM were recommended. ECM is basically designed, installed and commissioned in a way that they guarantee energy savings. This included both industrial and commercial facilities.

- **ECM-1 :** Replacement of existing CFL & FTL with the LED lights
- **ECM-2 :** Improvement in Facility Electricity Trends
 - Reduction in contract demand
 - Revision of Traffic Structure
- **ECM-3 :** Improvement in power factor
- **ECM-4 :** Installation of new glazing's on window



Implementation of ECMs :

Successful implementations of ECM led to the subsequent but relevant changes reducing cost and saving energy.

The Outcome of the Energy Audit



12,00,000 saved in the first year of ECM implementation. ECM has a payback of 3 years

Improved avg. power factor by 5% from 0.94 in FY18 to 0.99 in FY19

Reduced electricity consumption by almost 22% from 0.42 MUs in FY18 to 0.32 MUs in FY19

Carbon Footprints

- Small steps to make the environment clean and green
- ECM implementation led to reduction in carbon footprints reducing almost 70 tons co2 every year.
- Implementing the ECMs led to electricity savings (0.1Mus/annum)

