



ZERO & LOW-COST MEASURES MAKE AUDIT EXPENSES PROFITABLE FOR THE END-USERS!

An Energy Audit is a series of actions, carried out by highly skilled specialists, in public, commercial or industrial (C&I) facility, to quantify the energy use in the facility and to identify ways by which energy optimization can be achieved.

Energy optimization will result in energy

efficiency (EE) improvements and reduced energy consumption. The managers of the facilities are confronted with the additional expenses needed for the development of an EE project development while they target to reduce their energy costs! This document will present why such additional expenses are profitable for the end-users.

01 Classifying the EE recommendations

Energy audit reports contain recommendations which are divided into four groups:

- 1 *Zero Capital Expenditure (CAPEX) recommendations:* These are measures which are implemented without spending any money. An example of this measure includes increased awareness among staff, on the need to cut down on energy use.
- 2 *Low CAPEX recommendations:* These are measures which are implemented by spending very little money. For non-commercial facilities, low CAPEX measures will cost less than 0.01% of the annual maintenance cost of the property while for commercial facilities, low CAPEX measures will be less than 0.01% of the annual operational cost. An example of this measure includes replacing non energy efficient bulbs with energy efficient ones.
- 3 *Medium CAPEX recommendations:* These are measures which can be implemented by spending between 5.0% and 10.0% of the annual maintenance cost for non-commercial facilities and same range of expenditure of the annual operational cost for commercial facilities.
- 4 *High CAPEX recommendations:* These are measures which can be implemented by spending over 10.0% of the annual operational costs for commercial facilities.

All Zero and Low CAPEX measures are normally strongly recommended for implementation by the energy auditor because the cost-benefit for implementing these groups of recommendations is always positive due to the low-cost impact on the facility's profitability.

02 How to recover the audit expenses?

For the purpose of energy audits, Zero and Low CAPEX measures are normally referred to as 'low hanging fruits' because of the very low-cost implications for their implementation.

By implementing all Zero CAPEX measures

recommended in the energy audit report, energy reduction values, ranging between 3.0% - 9.0% can be achieved. In absolute terms, 6.0% is normally used to forecast the energy reduction which can be achieved by implementing Zero CAPEX measures.

By implementing all low CAPEX measures recommended in the energy audit report, energy reduction values, ranging between 6.0% - 12.0% can be achieved. In absolute terms, 9.0% is normally used to forecast the energy reduction which can be achieved by implementing Low CAPEX measures. Thus, the C&I consumers who are interested to perform an energy audit of their

facility will compare the audit expenses and the low-cost measures implementation costs to the cost savings that can be generated by the implementation of the expected zero and low-cost measures (between 6% and 9%) to determine in how many months they can recover their additional investment.

03 How to generate the maximum energy savings?

While zero and low-cost measures generate usually acceptable energy and costs savings, by implementing all Medium CAPEX measures recommended in the energy audit report, energy reduction values are much higher ranging between 15.0% - 25.0%. In absolute terms, 20.0% is normally used to calculate the energy reduction which is achieved by implementing all Medium CAPEX measures in the facility.

Higher CAPEX measures are also recommended in an energy audit report and implemented when the managers are interested to save a maximum of energy, costs, and consequently improve the business sustainability and reduce the impact of the operations on the environment.

04 Conclusion

The short payback period for implementing all Zero and Low CAPEX recommendations is one of the motivating factors for Facility Managers



to carry out energy audits. Within a year, the cost of an energy audit is normally recovered by implementing all Zero and Low-cost measures.

- * **ENERGY AUDITS CAN HELP WIPE AWAY THE WORRYING LOOK ON YOUR FACE WHEN YOU RECEIVE YOUR ELECTRICITY BILL FROM THE POWER UTILITY AT THE END OF THE NEXT MONTH.**
- * **WHY WAIT ANY LONGER? IMPLEMENT ENERGY AUDIT IN YOUR COMPANY NOW TO IMPROVE YOUR BOTTOM LINE.**

For additional information on this opportunity, please contact:



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