

Barriers for energy Efficiency

Title:

Techno-economic evaluation of measures

Category:

Analysis and report preparation

Summary:

Energy conservation opportunities require some amount of investment. Investment oriented proposals require a different financial evaluation based on the amount of money required and its payback period.

Back ground:

Normally energy audit consultants resort to simple payback calculations irrespective of the investment required and simple payback period. This is calculated by dividing annual savings by investment required. No other components are considered. Simple payback period may workout in cases of low investments and short-term measure.

If the same concept (simple pay back period) is applied to the long term measures and high investment proposals, the economics may appear very attractive. But in actual practice the finance personnel will subject the expected returns from these measures to the relevant economic evaluation by using parameters of -

- Internal rate of return or/and
- Present worth or / and
- Annualized costs / Life cycle cost

These detailed evaluation will consider all components such as interest, insurance, manpower cost, depreciation, operation & maintenance cost, spares, other cost components, etc.

In practice, the decision makers finally see how much profit is made from the business and they rely on economic analysis rather than a technical evaluation. The incomplete economic evaluation of investment in the report is also one of the reasons to draw less attention towards the long-term measures.

Lesson learnt:

The proper application of economic evaluation methods, during the detailed analysis, improves the comprehensiveness of the report and also provides leverage in convincing the management during the presentation stage.