

## Paper # 2 Energy Manager Certification

Just a requirement or selection of the best?

The Energy Conservation Act 2001 is all about a movement to force energy intensive industries to make more profit. Such an Act must therefore not be enforced but rather marketed. Marketing of Laws may sound strange for those who feel that laws are sort of a necessary Government intervention to streamline human behavior keeping the peace between warring fractions.

Most experts in the field of public compliance with Indian laws agree that the issue are not the quality of hundreds of rules and regulations, notifications, directives and orders but knowledge and compliance by those who are affected. A synonym for that is the so called "law abiding citizen".

The Energy Conservation Act says:

"The Central Government may, by notification, in consultation with Bureau,

- (i) direct, if considered necessary for efficient use of energy and its conservation, any designated consumer to get energy audit conducted by an accredited energy auditor.
  - (ii) direct any designated consumer to designate or appoint energy manager in charge of activities for efficient use of energy and its conservation and submit a report, in the form and manner as may be prescribed, on the status of energy consumption at the end of the every financial year to the designated agency.
  - (m) prescribe minimum qualification for energy managers to be designated or appointed under clause (l).
- 13(2) The Bureau may perform such functions and exercise such powers as may be assigned to it by or under this Act and in particular, such functions and powers include the function and power to
- (o) maintain a list of accredited energy auditors as may be specified by regulations.
  - (p) specify, by regulations, qualifications for the accredited energy auditors.
  - (r) specify, by regulations, certification procedures for energy managers to be designated or appointed by designated consumers".

Most economy professors' favorite hypothesis is: "In a free market economy any well informed investor will naturally make the right decision". This is wishful thinking. However, there is some truth in this statement that if firm's management is ignorant about highly profitable energy conservation measures, it of course, cannot make the right decisions.

All companies have a finance manager looking after cash inflows and outflows and managing an annual budget. Why not have an energy manager looking after energy inflows and outflows and managing energy costs, particularly if energy costs are larger than 20% of manufacturing costs?

There is a simple cause-effect chain affecting energy costs in a firm:

If there is no energy manager, there is no voice to invest in energy efficiency measures during the annual budget allocation meeting of a firm. No money in the budget means that no investments in energy conservation measures are made. If no investment is made, no energy conservation takes place.

If no energy conservation takes place, no financial benefit is achieved. If no financial benefit is achieved, no increase in profit follows.

I think everybody gets from the above the message why employing an energy manager may be a good deal for a firm and not an unnecessary government intervention.

For those who confuse "investment" with pouring some money into a non-moveable asset, i.e. equipment, let me point out that investment in human resource development in my opinion is the preferred choice of investment.

I am amused by all of the detailed project reports passing my table, telling me how attractive particular investments in energy efficient technologies are. So what! Who cares about internal rates of return of 18.7% or even 50%. My concern is why many firms don't touch investment opportunities with much larger IRR's of 100% to infinite, with pay back periods of months or minutes

You may have guessed those high yield strategies are investments in training and motivation of personnel working with energy intensive equipment.

The Confederation of Indian Industries (CII) got it right in their newest study on strategies for a competitive manufacturing sector in the northern region: "Focus on people to revive the ailing manufacturing sector". Looking at our newest September 2003 statistics of applicants for 24/25 April 2004 energy manager and energy auditor examination, 1563 opted to take the exam for energy auditors and only 472 are planning to take the energy manager exam.

This rather strong response to the provisions of the Energy Conservation Act may have to do with the following miss-conceptions and concerns:

- 1.) Applicants may believe that if they pass as an energy auditor they could prepare the required energy audit for their own company. This is certainly a miss-conception, since a designated consumer cannot audit himself.
- 2.) Applicants believe employment opportunities are better for energy auditors. It is pointed out that energy audits can only be done by registered energy audit firms who employ certified energy auditors. No single energy auditor will qualify. In my opinion there may be room for 10-20 large energy audit firms employing 10-20 certified energy auditors each in the country. At least this would be the best approach to get some quality into energy auditing and wipe out fly by night operators and note-pad auditors with no instruments.
- 3.) Applicants feel that since the fees for taking the energy manager and energy auditor exam are the same, it is more advantageous for them to take the energy auditor exam. I agree, because whoever qualifies as an energy auditor also qualifies as an energy manager.

There is a nagging doubt about the usefulness of an energy manager exam for various reasons:

- The exam is by no means a good yard stick for who will be an excellent energy manager in the future and who will fail to deliver.
- There are many excellent energy managers already working in firms who may not even pass the exam but nevertheless have already proven their worth.
- Many who will pass the exam with flying colors may not even be allowed to function as an effective energy manager in their firm.

- Some who are already excellent energy managers may not apply to take the exam because they feel it will not benefit them.

A pragmatic approach to the generation of a pool of energy managers would be to pass as many as possible, and then start training them once they are appointed. My simple yard stick of an effective energy manager is the level of investment and yield he/her has managed to pursue in energy conservation at the firm.

Being an effective energy manager has little to do with knowing how electric motors or boilers work, or what instruments are used to conduct a transformer test.

It has far more to do with building up a culture of efficient and effective utilisation of the resource “energy within the company” and lobbying with management how to reduce energy costs, as well as knowing when to hire external advice. Therefore please no Arnold Schwarzenegger terminator approach.

Learning about how to be a good energy manager starts in earnest after passing the exam.

As of now many seem to be busy studying for the exam, learning where coal is mined in India and what boiler efficiency means.

It will be interesting to see how BEE will then organize and support all those energy managers who have passed the exam in the performance of their duties and responsibilities under the Energy Conservation Act.

Stay tuned for more news!

Yours

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