



## INTRODUCTION

In every industrial activity energy is used in various forms and is an issue of great importance to the industry as well as the nation. Energy is an issue that is directly connected to economic health, climate change and energy security of the nation. Hence the demand for sustainability is of growing importance by the day. Commonly used form of energy in most of the industries are Electricity, compressed air, water, oils of various types, steam, etc. Where energy is consumed, wastages also go hand-in-hand. One is the wastage by way of leakages unaccounted wastes and the other one is inefficient use of energy by the equipment.

In many of the activities the cost of energy forms a considerable percentage of input cost. This is more visible with the increasing cost of energy available in the market, be it any form. In an effort to achieve the most competitive product cost the efforts are made to control the cost components where energy is the principal constituent.

The other aspect of energy efficiency is how efficiently the energy is used in the process. Efforts are being made by industry to:

- Increase production without increasing energy cost
- Use energy efficient equipment
- Consider payback period while investing in energy efficient equipment
- Start energy audits
- Rate products with a star rating to promote energy efficient products

Standards Organizations have come out with various standards in respect of energy usage. Energy used should not cause any detrimental effect on the environment.

Keeping this in mind, IMTMA is conducting an online training program on Improving Energy Efficiency at Plant Level.

## FOCUS AREAS

- Various types of energy used in industries.
- Identification of areas of energy wastage in industries
- Energy intensive areas in industries and energy management systems
- Industrial Heat pumps & options for use of cooling water in place
- Energy savings in utilities – Electrical network and KVAh billing
- Energy savings in compressed air systems
- Energy audit in manufacturing industries – needs, benefits, procedure with case studies
- Better practices of plant maintenance in the backdrop of energy savings
- Approach for energy conservation and potential savings thru conservation
- Energy cost reduction in a manufacturing industry setup
- Harvesting solar energy

## KEY TAKE AWAYS

At the end of the program, the participant shall be able to understand:

- Concepts of Energy conservation and energy efficiency.
- Broad energy scenario of energy in the country
- Energy wastage in different forms in an industry
- How to manage energy cost by monitoring and managing electricity consumption
- How to save energy where heating / cooling applications are in use
- How to save heat losses in hydraulic oil, pumps, motors and compressors
- Areas and scopes for increasing the energy efficiency in plants.
- Energy audits
- Monitoring of energy consumption
- Role of maintenance in enhancing the energy efficiency

## FEE PER PARTICIPANT (PER LOGIN)

**Rs. 7500/-**  
+18% GST

**IMTMA Members/ Micro Companies/ Individuals/  
Educational Institutions / Students/ IMTMA Non  
Members/ Others**

**USD 300/-**  
**Overseas Participants**

**Group Concession : 10% for 3 to 5 and 30% for 6 and more delegates being nominated from the same company**

## FACULTY

This programme will be delivered by **Mr Upadhya.**

Mr. Upadhya is a graduate in Electrical Engineering from Karnataka Regional Engineering College, Surathkal, now known as NIT-K. He has over 35 years of experience in Plant Engineering from a large public sector undertaking. He has worked in taking care of manufacturing facilities, captive generation facilities, HT and LT power transmission, distribution systems, and all other utilities associated with townships. Besides maintenance, he has worked in Material engineering, Projects, after-sales service, and assembly. He has undergone training in Germany on plant engineering, machine tools, and diesel-operated HT generators. He has wide-ranging experience in conducting various technical training programs for Engineering Industries, Process Industries, and Service Industries. He is currently engaged with IMTMA as a trainer.

### For Registration Contact

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