

# ISO 50001 Energy Management Systems

## INTRODUCTION

- This training course on ISO 50001: Energy Management Systems provides a clear structure for identifying and then reducing energy consumption in any large business or organisation.
- The focus on reducing energy consumption is now a major international consideration in socially responsible management as environmental and sustainability concerns worldwide look to reduce our human impacts on planet Earth.

This training course will highlight:

- A systematic approach to determining energy use in any organisation
- Planning to set targets for energy usage reduction where practical
- How and where to measure energy consumption
- How to plan actions to manage energy consumption in the best way
- Energy management improvement

## OBJECTIVES

- This training specifies requirements for establishing, implementing, maintaining and improving energy management. The purpose of this Energy Management Systems training is to provide a systematic approach to achieving continual improvement of energy performance including energy efficiency, energy use and consumption.

By the end of this training course, participants will learn to:

- Produce an energy policy for an organisation
- Conduct an energy 'REVIEW'
- Establish an energy 'BASELINE', 'PERFORMANCE INDICATORS' and 'OBJECTIVES'
- Determine practical energy measurement processes
- Plan actions to improve energy efficiency and use
- Understand the importance of management systems in achieving the above

## TRAINING METHODOLOGY

This training course on ISO 50001: Energy Management Systems is based on the concept accelerated learning. This means that there will be:

- Class lectures with delegates encouraged to take part in discussions and sharing their experiences

followed by,

- Team exercises to test and consolidate delegates' understanding of the presented topics

## ORGANISATIONAL IMPACT

- The organisation should benefit by being seen internationally as an ecologically conscious operation setting out to improve the impact of its operations on the environment.

The organisation's employees will gain enhanced knowledge in how to:

- Identify and measure energy use in the organisation
- Plan actions to reduce and improve energy use
- Understand the role of management in producing a systematic approach to energy use

Delegates themselves will improve their knowledge and practice of:

- Assessing documentation requirements relevant to energy management
- Energy management planning techniques
- Energy management performance measurement techniques
- Improving energy efficiency, consumption and use

## PERSONAL IMPACT

Participants will increase their personal knowledge of and performance abilities as follows:

- Understanding good management practice in energy management
- Advising staff on good energy management practice
- Documenting and presenting to management observations and concerns in a concise manner so that energy improvement can be ascertained
- Gaining knowledge of parts of their organisation that they would not normally see, thus offering themselves a greater flexibility to take on responsibilities in a wider range of departments

## WHO SHOULD ATTEND?

- This training course on ISO 50001: Energy Management Systems is aimed at those members of management responsible for best practice in the organisation. This training course is suitable to a wide range of professionals but will greatly benefit:
- Operational Managers
- Design Managers responsible for New Facilities
- Project Managers (especially those responsible for new facilities)
- Facilities' Managers
- Persons keen to improve the environmental performance of their organisation

## Course Outline

### Introduction to the ISO Standard on Energy Management

- Introducing ISO 50001 – The need for the standard
- Introduction to Energy Management Systems
- The Standard – clauses 4.1 and 4.2
- Energy POLICY
- Energy Policies vs. ISO 50001

### Planning Requirements of ISO 50001

- Meaning of Energy Review
- Energy Review Methodology
- Energy Performance Indicators (EnPIs)
- Energy Baselines
- Developing Possible EnPIs

### Operational Planning and Implementation Requirements of ISO 50001

- Energy Objectives, Targets and Action Plans
- Development of Possible Action Plans
- Compliance with Legislation & other Requirements
- Implementation & Operation
- Identification of Operational & Implementation Controls

### Monitoring and Measurement Requirements of ISO 50001 and Review

- Monitoring & Measuring
- ISO 50001 Requirements
- Identification of Monitoring & Measuring Controls
- Preparing Questions to Check that Appropriate Monitoring and Measuring Takes Place & Identification of Weak Areas
- Interpreting the Standard

## The Role of Auditing in ISO 50001

- Non-conformities & Reporting
- NCR Reports
- Corrective Action Activities
- Examples
- Performing an ISO 50001 Audit
- End of Course Review