



# *The* **CUBE**

A LOW CARBON CENTRE OF EXCELLENCE



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# BER Assessor (QQI Level 6)

## Who should attend?

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This course is aimed at those involved in new dwellings and the sale or rent of existing dwellings

## Aims and objectives

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- Be familiar with the key objectives and background to the European Performance of Building Directive
- Demonstrate the ability to accurately collect BER data on dwellings from surveys, specifications and plans that affect energy and CO2 emissions performance.
- Demonstrate the ability to undertake limitation of primary energy and/or CO2 emission calculations as required by the Building Regulations
- Input data into the Dwelling Energy Assessment Procedure (DEAP) software
- Explain the significance, in BER terms, of varying the specifications for dwellings.

## Expected Outcomes

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Sustainable Energy Ireland (SEI) is the regulatory body for Building Energy Rating (BER) Assessments in Ireland. It sets out the requirements which all validated training courses must meet, and is the body which registers Assessors. To become a registered BER Assessor you must complete an SEI-listed training course, pass the SEI Domestic BER examination, and register with SEI. CMSE is an SEI-listed provider of BER Assessor courses.

## Course outlines

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- Background to Energy Performance of Buildings Directive (EPBD)
- Irish legislation on building energy ratings
- Building Regulations Part L
- Dwellings Energy Assessment Procedure (DEAP)
- Measuring relevant building dimensions
- Calculating U Values
- Energy assessment on domestic hot water systems
- Alternative energy heating systems
- Assessments from plans and specifications
- Surveying of existing dwellings
- Assessments of existing dwellings

### Assessment

4 Case Study Assignments (50%), 10 Short Answer Questions (10%), Practical BER Assessment (40%)

## Additional information

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Duration: 5 days + Exam

Maximum number of delegates: 10 persons

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# ISO 50001 – Implementing Energy Management

## Who should attend?

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- Practitioners who want to implement an energy management system or those with responsibility for energy management in their organization.
- Practitioners responsible for improving energy performance and energy efficiency
- Energy managers (operations managers, plant managers, facility managers)
- Those responsible for coordination of specific elements or aspects of energy systems (engineering, integrated processes, environmental)
- Energy System Auditors (Internal / External-Professional Service Providers)
- Energy Providers (Utilities) - understanding customer needs and managing energy efficiency support programs

## Aims and objectives

Upon completion of this training, you will be able to:

- Develop a plan to implement and ISO 50001 based Energy Management System
- Use provided resources to support the implementation of ISO 50001
- Develop energy policies and processes
- Define and develop baseline energy performance indicators
- Create appropriate measures and internal benchmarks for improving energy performance

## Course outlines

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Based on ISO 50001:2011, this two-day course provides guidance on how to implement an energy management system. The course enables practitioners to build the necessary systems and processes to improve energy efficiency, help reduce consumption and their associated costs and improve overall energy performance in their organization's operations.

An experienced energy management practitioner will serve as expert resource and instructor as you review the requirements of the standard with a focus on the practical demands of the implementation process. Case work and provided resources will help you to gain an appreciation of the various strategies and tactics you can employ to deal with various constraints and typical roadblocks that need to be addressed during the implementation process.

## Additional information

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Duration: 2 Days

Maximum number of delegates: 12 persons

## Assessment

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Written and practical assessments

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# ISO 14001 – Internal Auditor Training - Energy

## Who should attend?

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All personnel with responsibility for internal auditing of Environmental Management System ISO 14001

## Aims and objectives

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To give participants an understanding of

- What are the new requirements with ISO 14001:2015
- How to Identify Internal & External issues and relevant interested parties
- How to Define the scope of the EMS
- Identifying Risks & Opportunities
- The role of leadership in ISO14001:2015
- The audit process
- The competency to conduct an internal Environmental Audit
- the skills to write up an audit report
- the competency to present audit findings to the auditee

This course provides knowledge and understanding to help your organisations manage their risk.

It reviews how and why your organisation should develop, implement and continuously improve a framework with the purpose of integrating the process for managing risk into the overall governance, strategy and planning, management, reporting processes, policies values and culture.

Once implemented and maintained, ISO 31000 the management of risk enables your organisation to increase the likelihood of achieving objectives, encourage proactive management, be aware of the need to identify and treat risk throughout the organisation. The course teaches how improvements in the identification of opportunities and threats can be achieved as a result of having a risk management framework in place as well as ensuring that compliance with relevant legal and regulatory requirements and norms are met.

## Course outlines

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### Day One

- Overview & Benefit of ISO 14001:2015
- Elements of Environmental Management System - ISO 14001:2015
- Workshops on the new elements of ISO 14001:2015
- Environmental Aspects and development of objectives and targets
- The Audit Process

### Day Two

- The Audit Process (cont.)
- Performing an audit
- Reporting and presenting audit findings

## Additional information

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Duration: 2 Days

Maximum number of delegates: 10 persons

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# OHSAS 45001 – Internal Auditor Training – Health

## Who should attend?

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All personnel with responsibility for internal auditing of Health and Safety Management System OHSAS 45001

## Aims and objectives

To give participants

- an overview of OHSAS 45001
- an understanding of the documentation requirements of OHSAS 45001
- an understanding of the audit process
- the competency to conduct an internal Health and Safety Audit
- the skills to write up an audit report
- the competency to present audit findings to the auditee.

## Course outlines

Day One

- Overview of OHSAS 45001
- Benefits of OHSAS 45001
- Elements of Health and Safety Management System OHSAS 45001
- Hazard Identification and Risk Assessment
- The Audit Process

Day Two

- The Audit Process (cont.)
- Performing an audit
- Reporting and presenting audit findings

## Additional information

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Duration: 2 Days

Maximum number of delegates: 12 persons

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# Carbon Emissions Introduction Course

## Who should attend?

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**This course is aimed at two main target audiences. Firstly, company directors and managers, management accountants and those with general responsibilities in the area of corporate governance. Secondly our course is aimed at those who have an interest in climate change and methods of carbon emissions reduction.**

## Aims and objectives

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This popular half day course is designed to provide attendees with a basic understanding of carbon emissions, carbon foot printing and general climate change issues.

This is a carbon emissions awareness course aimed at people looking for a foundation of knowledge in this sector. The course is flexible and in addition to the topics below attendees will be able to ask questions on specific issues affecting them or on areas of particular interest to you. Attendees will be given an overview of UK and other legislation (both current and proposed). Typically, attendees ask about LSE and FTSE requirements; mandatory carbon reporting; CRC; carbon trading; etc. Additional information sources and further courses will also be discussed.

## Course outlines

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- The course will be flexible and driven to some extent by the course attendees. The course programme will cover the following topics at a minimum:
- Definition of carbon emissions
- An understanding of carbon emissions and their effect on climate change
- An outline of the UK and international legislation covering carbon emissions
- Introduction to the GHG protocol for corporate accounting and the GHG protocol for project accounting
- General introduction to carbon foot printing processes
- Carbon trading - Carbon pricing - trading mechanisms and platforms
- Legislative compliance in the FTSE, LSE and other UK contexts
- Carbon accounting and related issues for UK companies
- Related environmental issues affecting climate change
- Carbon emissions, business management and corporate governance
- Commercial opportunities from carbon projects

## Additional information

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Duration: 0.5 Days

Maximum number of delegates: 12 persons

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# ISO 14064-1 – Carbon Measurement Course

## Who should attend?

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This course is designed for attendees who need a foundation course in carbon emissions footprinting (measurement). This course will enhance your knowledge and CV in this rapidly expanding area of carbon emissions.

## Aims and objectives

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Attendees at this course will learn the essentials of GHG management and carbon performance. This course will provide the attendee with an excellent knowledge and understanding of ISO 14064-1 to facilitate quantification and management of your carbon footprint and greenhouse gas (GHG) emissions.

This course was developed by CSA Standards and is delivered by Carbon Action. Carbon Action is a leading provider of carbon training in the UK and has the exclusive rights to provide CSA developed training courses to ISO 14064, the ONLY globally recognised standard. Carbon Action are also an education and training provider partner of the Carbon Disclosure Project.

## Course outlines

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Learn how to measure your organisations carbon footprint using ISO 14064 - 1. The course breaks the subject down into five key areas.

1. Introduction to GHG inventories
2. ISO 14064-1 and GHG protocol
3. GHG management handbook
4. GHG information management system
5. Case Study

## Additional information

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Duration: 2 Days

Maximum number of delegates: 12 persons

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# ISO 14064-2 – Carbon Reduction Projects Beginner

## Who should attend?

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This course looks at detail around reducing the environmental impact of organisations. Attendees at this course will learn how to reduce their organisations carbon footprint and will get a good grounding in greenhouse gas projects using ISO 14064-2.

## Course Developers

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This course was developed by CSA Standards and is delivered by Carbon Action. Carbon Action is a leading provider of carbon training in the UK and has the exclusive rights to provide CSA developed training courses to ISO 14064, the ONLY globally recognised standard. Carbon Action are also an education and training provider partner of the Carbon Disclosure Project.

## Course outlines

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The course breaks the subject down into eight key areas:

1. Introduction to GHG projects
2. ISO 14064-2 terms and definitions
3. Identifying sources, sinks, reservoirs
4. Determining the baseline scenario
5. Quantifying the baseline scenario
6. GHG monitoring and data management
7. Documenting and reporting
8. Case study

## Additional information

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Duration: 2 Days

Maximum number of delegates: 12 persons

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# ISO 14064-2 – Carbon Reduction Projects Course

## Who should attend?

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Attendees at this intensive course will receive in-depth validation and verification training on the ISO 14064-3 standard. This includes specific examples of how verification would be applied to a GHG inventory prepared according to the ISO 14064-1 or a project that conforms with the ISO 14064-2.

## Course Developers

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This course was developed by CSA Standards and is delivered by Carbon Action. Carbon Action is a leading provider of carbon training in the UK and has the exclusive rights to provide CSA developed training courses to ISO 14064, the ONLY globally recognised standard. Carbon Action are also an education and training provider partner of the Carbon Disclosure Project.

## Course outlines

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The programme covers:

1. Quantification, monitoring and reporting requirements for greenhouse gas emissions and removals
2. Measuring your organisation's greenhouse gas inventory
3. Creating a project to reduce your environmental impact through emission reductions and removals
4. The requirements for quantifying, monitoring and reporting project under ISO 14064-2

## GHG Verification using ISO 14064

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Verification is the systematic, independent and documented process for the evaluation of a greenhouse gas assertion against agreed verification criteria. Verification provides an independent assessment of the data associated with a GHG inventory or project and typically offers an opinion on the accuracy of the estimates or measurements, thus giving confidence to others interested in the results

## Additional information

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Duration: 2 Days

Maximum number of delegates: 12 persons

# CHRIS MEE GROUP

incorporating CMSE and Carbon Action



**CMSETRAINING** is a leading provider of Environmental, Health & Safety training courses in Ireland. We pride ourselves on the quality of our staff, course content, accreditations, record management and our venues. Our accreditations include Solas, QQI, Irish Department of Transport, NEBOSH, IOSH, IMO, SEAI, CSA, Engineers Ireland, City & Guilds, and more. All of our courses can be customised to your business operations.

**CMSERECRUITMENT** is a government registered niche provider of recruitment and placement solutions. We provide personnel in the areas of EHS, Engineering & Maintenance, Quality, Construction, Projects, and more. Our recruitment solutions can be permanent or temporary, full time or part time.

**CMSECONSULTANCY** is a leading provider of EHS, Quality, Risk & Change Management consultancy to many national and international customers at home and abroad. We have experts in many areas such as Construction Safety, PSCS & PSDP, Safety Management Systems OHSAS 18001, ISO 14001, Process Safety, Behavioural Based Safety, ISO 50001 Energy Management Systems, Fire, Ergonomics, Asbestos, DGSA, Chemical, Explosion Safety, Nuclear, Industrial Hygiene and much more.

**CARBONACTION** is a leading provider of GHG Emissions training and consultancy in the EU and beyond. We assist clients in Carbon foot printing and carbon emissions projects. Our courses are designed by the Canadian Standards Association (CSA) and include ISO 14064 Carbon Quantification, Projects, Validation and Verification; ISO 31000 Risk Management and ISO 50001 Energy Management.