

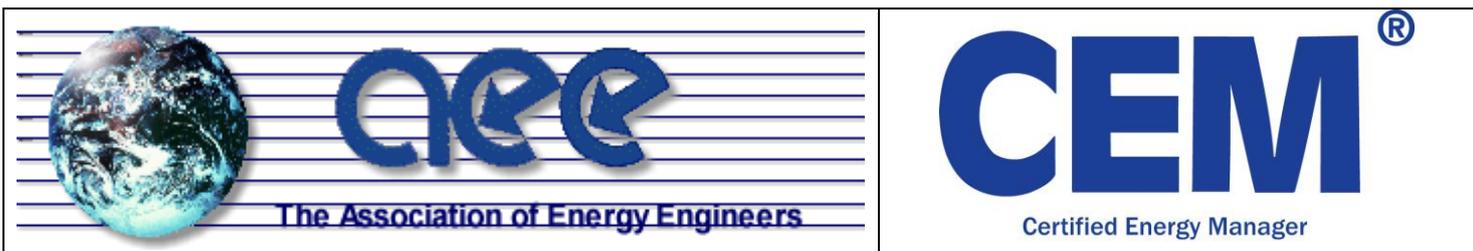
## Certified Energy Manager Training

When you have earned the right to put the initials CEM<sup>®</sup> behind your name, you have distinguished yourself amongst energy management professionals.

The designation CEM<sup>®</sup>, which stands for Certified Energy Manager, recognizes individuals who have demonstrated high levels of experience, competence, proficiency, and ethical fitness in the energy management profession.

By attaining the status of CEM<sup>®</sup>, you will be joining an elite group of professionals serving industry, business and government throughout the world. These high-achieving individuals comprise a "Who's Who" in the energy management field. The qualification is recognized by UK Environment Agency for the purposes of becoming an ESOS assessor and SEAI for the purpose of registering for the energy audit scheme.

The CEM<sup>®</sup> qualification is awarded by the Association of Energy Engineers<sup>®</sup>, headquartered in the USA, with chapters in 77 countries worldwide.



### Companies & People who would benefit:

- Those considering certification to Energy Managements Systems: ISO50001/ 2018
- Engineering Managers
- Facility Managers
- Energy team member
- Energy Managers
- Energy Team Leaders
- Commissioning personnel.
- Design Engineers
- Senior Technicians
- Energy Consultants

### The CEM is presented in a number of different ways:

1. 6-day public course presented by Target Energy at any location in various formats, e.g. 2x 3 day.
2. In an industrial setting where the course is contracted by an individual organization.
3. In an online format (presented over Webex) with an online examination.

The course is presented in a lecture and discussion format, with an open book 4 hour examination on completion.

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## Course Content

- Introduction to energy and CEM
- Importance of energy management.
- Fuel supplies & pricing
- Energy Auditing
- Audit instrumentation
- Lighting systems
- Boiler & Thermal systems
- Industrial systems
- Building automation systems
- Economic analysis and lifecycle costing
- High performance green buildings.
- Electrical power systems.
- Electrical motors & drives
- HVAC Systems
- Maintenance & Commissioning
- Energy accounting & analysis
- Thermal energy storage
- Co-generation & renewable energy
- Control systems

## Entry Requirements

A delegate wishing to achieve CEM certification must have:

- Four years engineering degree coupled with three years energy related experience **or**
- Four years business related degree coupled with five years energy related experience **or**
- Two years technical degree (Level 6 on the National Framework Qualification) coupled with eight years energy related experience (Engineering related Certificate qualification or time served electrician/ fitter) **or**
- Ten or more year's documented and verifiable energy related experience - backed up with letters from employers.

Where an individual meets the pre-qualification, experience, and required examination mark, the CEM qualification will be awarded by the Association of Energy Engineers.

## Tutor



Ian is an experienced energy professional and trainer that has trained hundreds of energy professionals worldwide. A Chartered Engineer, qualified electrical engineer with a masters degree in sustainable energy, Ian is a former president and current Board Member of the Association of Energy Engineers, (AEE), is a member of the Efficiency Valuation Organization (EVO) strategic advisory board, an active member of ISO TC301 (the technical committee responsible for developing ISO 50001) and owner of Target Energy. He has delivered energy training, audits and consultancy in fifteen countries worldwide and an acknowledged expert and auditor to the International energy management standard ISO 50001.