Institution of Chemical Engineers

Leading an Energy Savings Opportunity Scheme (ESOS) Assessment

**Experience Questionnaire**

The following information is requested to help us ensure that those initially accepted to undertake the course have suitable background experience to achieve a successful outcome and ultimately become an Energy Savings Opportunity Scheme Lead Energy Assessor (ESOS LEA) and also to allow us to arrange participants into effective working groups, with a balance of disciplines, present activities and experience.

Please return the completed form as soon as possible to: [**courses@icheme.org**](mailto:courses@icheme.org)

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| **NAME:** |
| **COMPANY:** |
| **COURSE APPLICATION:**  Are you a Chartered Member (MIChemE) or Fellow (FIChemE)? |
| **FIRST DEGREE SUBJECT:**  eg Chemical Engineering, Mechanical Engineering, Chemistry, etc |
| **PRESENT POSITION:** |
| **DOES YOUR ENERGY MANAGEMENT AND RELATED EXPERIENCE SPAN MORE THAN 2 YEARS?** |
| **EXPERIENCE:**  **A requirement for acceptance onto the ESOS LEA register is two years of professional energy assessment and energy audit experience.**  Please give a statement of your experience in carrying out energy management and energy auditing activities, number of audits and any other information that you think relevant.  **We are particularly looking for evidence of the required PAS 51215 competencies which have not been previously demonstrated through the Chartered Chemical Engineer process. The competences can be found on the next page**  **Types of evidence that it would be useful to include are:**   * **Familiarity of energy assessment methods** * **Knowledge of a range of energy use and opportunities** * **Knowledge of using metering sampling** * **Years of energy assessment / energy audit experience, particularly any experience of identifying energy opportunities that is not part of a pre-determined scope of works** |

**ESOS Lead Energy Assessors - competence requirements**

| **Core Competency in PAS 51215:2014** | **IChemE Chartered Member /Fellow** | **Please confirm that you have maintained competence in this area since becoming a Chartered Member** |
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| **- Understanding the operational context of an organisation being assessed;** | All IChemE Chartered Chemical Engineers will have met all of the standards within UK-SPEC |  |
| **- Familiarity with, and ability to apply, the requirements of energy efficiency assessment methods** | All Chartered Chemical Engineers will have undertaken extensive academic study which comprehensively covers the measurement of energy & mass balances, efficient energy utilization, thermodynamics, control, assessment and optimization of complex process systems. For many these skills are constantly applied to their professional work in design and operational contexts.  Energy assessment methods are covered in the requisite ESOS training programme that chemical engineers have to complete to become Lead Assessors. |  |
| **- Scoping an energy efficiency assessment, as applicable to the organisation being assessed** | All Chartered Chemical Engineers will have undertaken academic study which covers the ability to scope complex process engineering processes which always involve energy optimization. This fundamental skill is routinely applied for fresh process plant designs, management of change to existing plant and to routine optimization of process plant operation. The required training course for ESOS LEAs covers methods to scope an ESOS compliant energy assessment. |  |
| **- Understanding, in detail, of energy use and energy systems applicable to the organisation being assessed; (buildings, industrial, transport)** | All Chartered Chemical Engineers will have undertaken academic study which covers this aspect and have ability to apply this to a wide variety of sectors and situations. |  |
| **- Managing energy efficiency assessment teams and budgets, and managing working relationships (link also to Section 4.5 of PAS);** | All IChemE Chartered Chemical Engineers will have met all of the standards within UK-SPEC which includes financial aspects and teamwork. |  |
| **- Understanding the techniques of measuring, sampling, sub-metering, and establishing an energy balance** | All Chartered Chemical Engineers will have undertaken academic study which comprehensively covers the measurement of energy balances and optimization of required energy transfer. The skills necessary for measuring, sampling, sub-metering, and establishing an energy balance are reviewed in the training course for ESOS LEAs. |  |
| **- Data interpretation, including analysis and scrutiny of energy use, energy consumption, and energy performance data;** | All IChemE Chartered Chemical Engineers will have met all of the standards within UK-SPEC. All Chartered Chemical Engineers will have undertaken academic study and professional practice which comprehensively covers data interpretation, including analysis and scrutiny of energy use, energy consumption, and energy performance data. The skills necessary to analyse energy data are reviewed in the training course for ESOS LEAs. |  |
| **- Identification, quantification, ranking and prioritisation of opportunities for improvement;** | All IChemE Chartered Chemical Engineers will have met all of the standards within UK-SPEC (UK-SPEC Section C4 (page 27) |  |
| **- Preparing and presenting a technical and non-technical report for an energy efficiency assessment.** | All IChemE Chartered Chemical Engineers will have met all of the standards within UK-SPEC Section C4 (page 25/26). Reporting of energy efficiency assessment is explicitly covered in the training course for ESOS LEAs. |  |

**Continuing Professional Development**

**ESOS LEAs on the IChemE register will be expected to record and have available for review, on an annual basis, CPD which relates to the competencies above. Registrants are required to set at least one ESOS related CPD objective each year and undertake a minimum of 10 hours CPD annually linked to ESOS.**

Date form completed:

Name:

Signature: