

## Energy Audit Scheme Guidance Note

The **EU Energy Efficiency Directive** (2012/27/EU) identifies measures that are required to be introduced by member states in order for the EU to meet its binding energy efficiency and emissions targets. The measures cover activities in the public sector, utilities, buildings and transport, financing of energy projects, and energy use in large enterprises.

The directive has been transposed into Irish Law as **Statutory Instrument (SI) 426 of 2014**. Part 3 of the Legislation covers energy audits. The basic requirement is that “non-SMEs” (large enterprises) must carry out an energy audit of their operations every four years. The first such audit must be completed by 5<sup>th</sup> December 2015.

EED Article 8, section 4: *“Member States shall ensure that enterprises that are not SMEs are subject to an energy audit carried out in an independent and cost-effective manner by qualified and/or accredited experts or implemented and supervised by independent authorities under national legislation by 5 December 2015 and at least every four years from the date of the previous energy audit.”*

The following EU Audit Definitions are noted:

EED Article 1 (25), “an ‘energy audit’ means a systematic procedure with the purpose of obtaining adequate knowledge of the existing energy consumption profile of a building or group of buildings, an industrial or commercial operation or installation or a private or public service, identifying and quantifying cost-effective energy savings opportunities, and reporting the findings”

For the purposes of complying with the SI 426 of 2014, SEAI have developed the Energy Audit Scheme for large enterprises/organisations.

A large enterprise (public or private) is defined as:

- 250 or more employees (on payroll);
- or any number of employees and an annual turnover in excess of €50m; and an annual balance sheet total in excess of €43m.

If your organisation meets any of these criteria then you are subject to Article 8 and this requirement applies to your organisation.

**EED Article 8, Annex VI: *“Minimum criteria for energy audits including those carried out as part of energy management systems***

*The energy audits referred to in Article 8 shall be based on the following guidelines:*

*(a) be based on up-to-date, measured, traceable operational data on energy consumption and (for electricity) load profiles;*

*(b) comprise a detailed review of the energy consumption profile of buildings or groups of buildings, industrial operations or installations, including transportation;*

*(c) build, whenever possible, on life-cycle cost analysis (LCCA) instead of Simple Payback Periods (SPP) in order to take account of long-term savings, residual values of long-term investments and discount rates;*

*(d) be proportionate, and sufficiently representative to permit the drawing of a reliable picture of overall energy performance and the reliable identification of the most significant opportunities for improvement.*

*(e) Energy audits shall allow detailed and validated calculations for the proposed measures so as to provide clear information on potential savings.*

*The data used in energy audits shall be storable for historical analysis and tracking performance.”*

The completed audit should meet the provisions outlined Annex VI of the EU Energy Efficiency Directive (2012/27/EU) detailed above and this includes any alternative route to compliance being considered.

An audit template will not be provided, as the level of detail will depend on the scale and nature of the operation being audited, auditors might find the following references useful for guidance:

- ISO 50002: 2014 Energy audits: Requirements with guidance for use;
- EN16247 Parts 1-4 covering energy audits in buildings, process and transport;
- CIBSE AM5:1991 Energy Audits and Surveys.

## Derogations

The Energy Audit Scheme will allow for some derogation for organisations already implementing structured energy management. In general, companies must ensure that 70% of their total primary energy use is captured either within an audit or one of the alternative derogations proposed in the directive.

The following are the circumstances in which you may be eligible for derogation and the attaching conditions:

- a. If you have a Greenhouse Gas Emissions Permit (S.I. 426 of 2014 Part 1(5), Page 10)), then your enterprise is exempt;
  - i. You must be in a position, with evidence, to demonstrate your eligibility for this derogation.
- b. If you have ISO 50001 certification, you may be eligible for a derogation, but:
  - i. You must have valid certificate on December 5<sup>th</sup> 2015 (certification typically lasts 3 years, with annual compliance checks);
  - ii. You must satisfy yourself that the approach taken meets the minimum audit requirements set out in the Annex VI of Energy Efficiency Directive. See details at: [http://www.seai.ie/Your\\_Business/Energy-Auditing-Scheme/Guidance-note-for-Enterprises.pdf](http://www.seai.ie/Your_Business/Energy-Auditing-Scheme/Guidance-note-for-Enterprises.pdf);
  - iii. The management system must cover at least 70% of your total primary energy and include all categories of energy use e.g. thermal, electrical and transport;
  - iv. If you have commenced implementation of ISO50001 through an SEAI Energy Agreement, whether through the LIEN or Public Sector Programme, then certification must be complete by June 2016. You must be in a position to demonstrate that your initial energy review is complete by December 5<sup>th</sup> 2015 to avail of this extension.
  - v. A Registered Energy Auditor will need to confirm that the report attached to the certification meet the required standard

If you have ISO 14001 certification, then a derogation may apply:

- i. You must have valid certificate on December 5<sup>th</sup> 2015 (certification typically lasts 3 years, with annual compliance checks);
- ii. You must satisfy yourself that the approach taken meets the minimum audit requirements set out in the Annex VI of Energy Efficiency Directive. See details at: [http://www.seai.ie/Your\\_Business/Energy-Auditing-Scheme/Guidance-note-for-Enterprises.pdf](http://www.seai.ie/Your_Business/Energy-Auditing-Scheme/Guidance-note-for-Enterprises.pdf) ;
- iii. The management system must cover at least 70% of your total primary energy and include all categories of energy use e.g. thermal, electrical and transport;
- iv. A Registered Energy Auditor will need to confirm that the report attached to the certification meet the required standard.

## Registered Energy Auditors

*Statutory Instrument (SI) 426 of 2014. Part 3 12 (1) The SEAI shall establish and maintain the operation of a national registration scheme for energy auditors (“energy audit scheme”). Access by market participants offering energy services shall be based on transparent and non-discriminatory criteria.”*

SEAI has now set up and is maintaining a registration scheme for the purpose of meeting the requirements of the directive and this will allow enterprises select an energy professionals based on sectoral and technical experience.

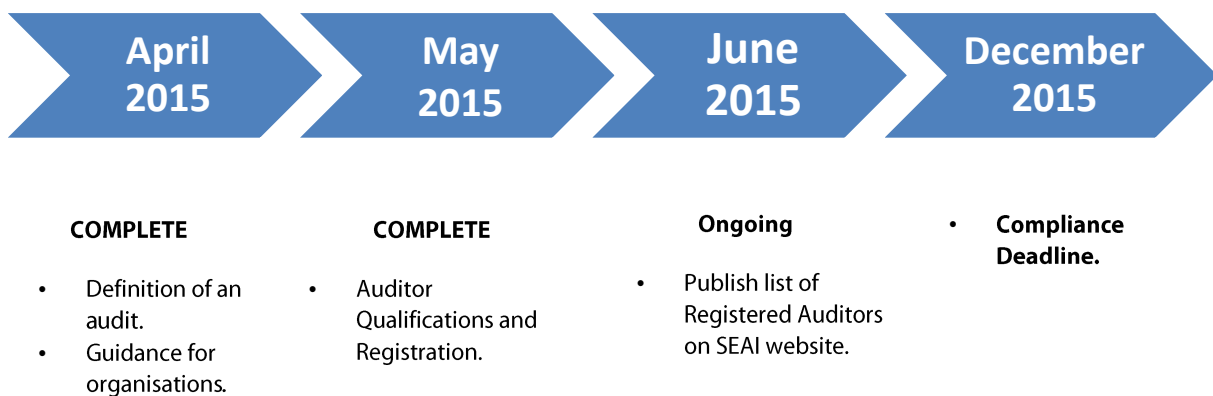
As the scheme develops, SEAI will establish an interactive online register of energy auditors which will make the selection process simpler.

Auditors will not be requested to provide samples of previous client audits to SEAI on application but SEAI will recommend to enterprises that they request examples with references relevant to their business area. Each enterprise can review this information and make an informed judgement as to the suitability of an auditor for their class of business.

SEAI will also recommend useful tools to enterprise to assess auditor competence when procuring the service. The British Standards Institution (BSI) –‘Publically Available Specification (PAS) 51215: Energy efficiency assessment - Competency of a lead energy assessor’ specification would be the key example as it gives a methodology to assess the competency of a person for conducting an energy audit assessment. Hence it provides a consistent way for energy auditors with the right competencies to be identified.

SEAI will also recommend that three quotations are obtained from potential auditors prior to finalising an appointment.

SEAI has now developed the systems and procedures surrounding these requirements and may update these requirements at any time in the future. The programme timelines are as follows:



### Terminology:

<b>EED:</b>	EU Energy Efficiency Directive 2012/27/EU
<b>Article 8:</b>	The Article in the Directive that covers Energy Audits
<b>S.I. 426 of 2014:</b>	Statutory instrument 426 of 2014 – this is the <b>Irish legislation</b> mandating this requirement. Part 3 – Energy Audits specifically deals with the Auditing requirement.