



“The audits offer opportunities to make significant savings in energy and costs.”

ESOS Explained

All organisations with more than 250 employees or over €50m turnover have to comply with ESOS. What does this mean?

ESOS, the ‘Energy Savings Opportunity Scheme’ is the Government’s approach to implementing Article 8 of the EU Energy Efficiency Directive (2012/27/EU) and affects non-SME undertakings. Following the UK’s decision to leave the EU, the requirement for companies to report under “The ESOS Regulations 2014” will not change as this is now enshrined in UK law

Under the scheme, approved assessors carry out ESOS compliant energy audits to identify cost-effective energy savings opportunities in participant buildings, industrial processes and transport. Around 7,300 large UK undertakings occupying between 170,000 and 200,000 buildings (of which 8,000 to 10,000 are industrial plants) will be covered by the legislation.

The Government estimates that the average large company should realise savings worth £56,400 per year on energy bills as a result of implemented ESOS improvement projects. In our experience using our bespoke survey tool, Energy Initiator®, the energy reductions within large industrial sites can be substantially greater, representing between 20%-40% reductions in energy consumption.

What are the key dates?

ESOS compliance is repeated every 4 years and for the next round, qualifying organisations must have carried out their ESOS audit by 5th December 2019. An organisation will be required to comply based on their situation (number of employees/turnover) as at 31st December 2018.

Twelve months’ energy data used in the ESOS audit must begin no earlier than 12 months before start of the compliance period, ie no earlier than 6th December

2015 for Round 2 and begin no earlier than 24 months before the start of the ESOS audit.

Therefore we can do an ESOS audit now for Round 2 as we will be able to base it on 12 months energy data starting after 6th December 2015 (eg 2016 or 2016/17 data), the audit can then be retained and submitted after 31st Dec 2018 using 2018 energy data as the Reference period energy consumption.

What will the audit cover?

The scope of ESOS will cover the energy used in buildings, transport and industrial processes.

What organisations will have to comply?

Your organisation will be in scope of ESOS if it qualifies as a large undertaking. You are a large undertaking if:

1. You have more than 250 employees in the UK; or
2. *You have fewer* than 250 employees, but have:
 - an annual turnover exceeding £42.5m; and
 - a balance sheet exceeding £36.5m; or
3. You are part of a corporate group containing a large undertaking

Who can carry out the audits?

Energy management and energy auditing professionals can demonstrate their competence as a Lead Auditor through registering with an approved professional body. Details of approved registers are published on the Environment Agency’s website. The standard of competency of lead assessors is defined by the specification PAS51215 and registers of professionals can also be used, such as the Register of Professional Engineering Consultants (RPEC).

What can I do to prepare?

There are several steps that you can start to take in preparation for the next round of ESOS.



1. Measure your total energy consumption across a 12 month period; this will include energy consumed in buildings, transport and industrial processes.
2. Identify your areas of significant energy consumption.
3. Consider who, within your organisation, is best placed to manage the audit process for you.
4. Ensure that relevant personnel have a thorough understanding of your current energy management systems and practices.
5. Identify energy efficiency specialists who are likely to have the relevant qualifications. You should also consider what other qualifications and/or experience that individual holds and how these might best benefit you in getting the best results from your audit(s). You may wish to consider your prospective auditor's:
 - sector-specific experience;
 - familiarity with industry specific technologies and processes; and
 - accreditation/certification to audit against prescribed standards (ISO standards) or other UK schemes.

Exemptions

Any organisation with a current EN ISO50001 Energy Management System certificate is deemed to be ESOS compliant, the principle being to avoid double regulation. Any audit certified by a UKAS approved body and carried out to EN 16247 standards is also considered to be compliant.

In addition, organisations with an ISO14001 Environmental Management System certificate could be deemed ESOS compliant, but only providing the approach taken has included an energy audit that meets the minimum standards of Article 8.

Enforcement

The Environment Agency administers ESOS and has powers to impose financial penalties on non-compliant organisations, and also publish information on non-compliant organisations. There are several potential non-compliance areas including:

- Failure to notify the scheme administrator
- Failure to maintain adequate records to demonstrate compliance
- Failure to undertake an ESOS assessment

- Failure to comply with an enforcement, compliance or penalty notice
- Making a statement which is false and misleading

The size of the penalties can range from a fixed penalty of £5000; to a fixed penalty of £5000 plus an additional £500 per day for continuing non-compliance; to a possible £50,000 fixed penalty plus £500 per day (to a maximum of 80 days) for the failure to undertake an ESOS assessment.

Compliance Reporting

If an organisation chooses to undertake the ESOS audits route to compliance, the audits must comply

with existing energy audits standards ISO 50002 and BS EN 16247, where practicable audits should use life cycle cost analysis for cost/benefit analyses instead of simple payback periods.

Other more specific assessment and auditing standards can be used, for example ISO 11011:2013 is relevant for the assessment of the energy efficiency of compressed air systems. If the organisation chooses to undergo another route to compliance e.g. ISO 50001, this must be notified to the Environment agency.

Summary

1. ESOS applies to all non-SME undertakings.
2. Audits must be carried out by an approved ESOS Assessor
3. ESOS energy audits are mandatory and must be completed by 5 December 2019.
4. The audits offer opportunities to make significant savings in energy and costs. A recent survey of one organisation conducted by JRP identified energy savings of over 41% in their manufacturing process. Both behavioural and technical savings opportunities will be identified including no/low cost options up to projects requiring capital expenditure.

More information about ESOS can be found on our website [here](#). If you would like to advice from one of our Lead Assessors, please do get in touch:

T: 0800 6127 567,

E: info@jrpsolutions.com