



GUIDE TO:

ESOS (Energy Savings Opportunity Scheme)

ESOS is a mandatory energy assessment scheme for large undertakings in the UK.

This guide to provides you with an overview of the ESOS scheme's qualification criteria, requirements, and non-compliance fines. Make sure to read our **"Top 5 tips for success"** at the end!

ESOS overview

The Energy Saving Opportunity Scheme (ESOS) is a new mandatory energy assessment and energy reduction identification scheme affecting large undertakings and their corporate groups throughout the UK. In summary, ESOS requires qualifying organisations to measure their total energy consumption and carry out energy audits to identify cost effective energy savings opportunities.

ESOS will operate in four yearly compliance phases. UK organisations must assess if they are required to participate in ESOS on the qualification date of each phase. The table below outlines ESOS phase times for the first three phases:

| Phase | Qualification date | Four year compliance phase | Compliance date |
|-------|--------------------|------------------------------------|-----------------|
| 1 | 31 December 2014 | 6 December 2011 to 5 December 2015 | 5 December 2015 |
| 2 | 31 December 2018 | 6 December 2015 to 5 December 2019 | 5 December 2019 |
| 3 | 31 December 2022 | 6 December 2019 to 5 December 2023 | 5 December 2023 |

The final order and scheme operation was announced in June 2014 by the Department of Energy and Climate Change (DECC). ESOS has been created following the requirement for all Member States in the EU to comply with the Energy Efficiency Directive and is expected to deliver in the region of £1.6bn net benefits in the UK.

ESOS energy audits will allow your organisation to clearly understand its energy consumption profile, areas of significant energy usage and have the potential to boost business profitability and brand value through the identification of cost effective energy saving initiatives.

Scheme compliance should have been entailed by 5 December 2015 by qualifying UK undertakings.

Companies that are non-compliant and in breach of the ESOS regulations may face fines after 29 January 2016 if they have failed to act.

ESOS qualification

ESOS is a mandatory scheme applying to undertakings that meet the qualification criteria. The scheme is aimed at large undertakings and their corporate groups.

A large undertaking is identified based on its number of employees or financial information relating to its turnover and balance sheet. Smaller undertakings that are part of a corporate group may be mandated to participate in ESOS if another group member qualifies for the scheme.

Participation in the scheme is based on a qualification date of 31 December 2014. An undertaking is mandated to comply with ESOS legislation, if on the qualification date they are:

1. A UK undertaking which has 250 or more employees in the **UK or abroad**
OR
2. A UK undertaking which has fewer than 250 employees, but has:
 - a. An annual turnover exceeding €50m, **and**
 - b. A balance sheet exceeding €43m**OR**
3. Part of a corporate group which includes a UK undertaking that meets criteria 1 or 2 above.

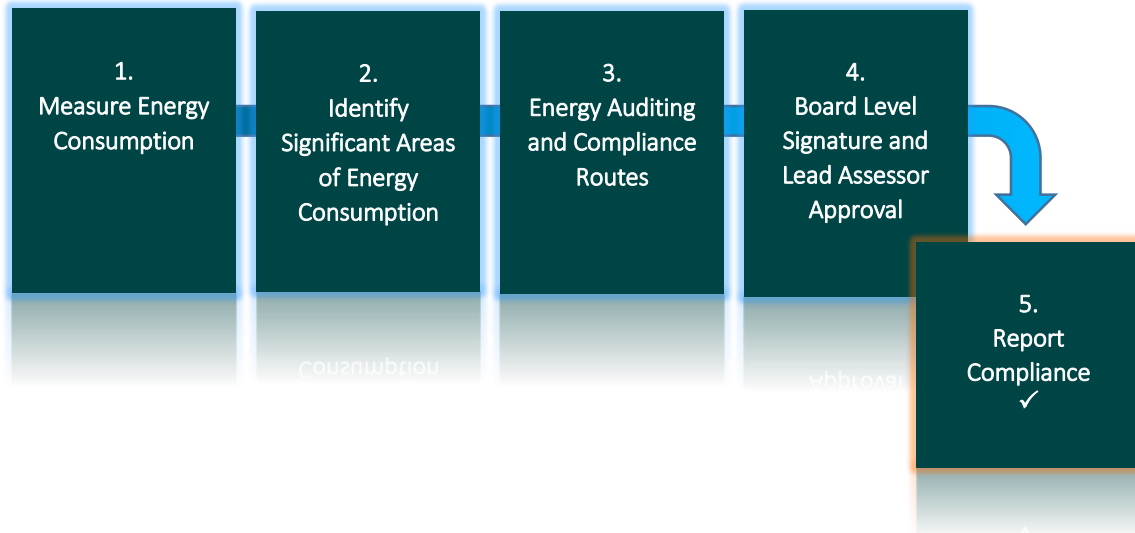
Envantage can advise you on the qualification rules around corporate group structures and borderline cases.

ESOS compliance

The scheme mandates qualifying undertakings to carry out an assessment of total energy usage for a 12 month period. This energy profile must be assessed and at least 90% of the total energy consumption must be subject to ESOS compliant energy audits. Energy audits and ESOS compliance evidence must be conducted and / or signed off by an approved Lead Assessor. Lead Assessors are registered professionals as approved by the Environment Agency. The ESOS evidence pack must also be signed off by a board member, and compliance reported to the Environment Agency.

This process is shown in the figure overleaf.

Steps to ESOS compliance



1. Measure Energy Consumption

Total UK energy consumption must be monitored and recorded for a 12 month period which is known as the reference year in ESOS.

Energy consumption must be recorded across the following areas:

- ✓ Buildings
- ✓ Transport (including company cars and employee owned cars)
- ✓ Industrial processes

Under the ESOS rules, energy consumption includes all forms of energy products, combustible fuels, heat, renewable energy, electricity or any other form of energy. Total energy consumption can be measured in either energy units or energy costs.

In order to be compliant with ESOS, the reference period must include the month of December 2014. Full evidential records and verifiable data must be held to support figures.

Generally speaking ESOS covered energy will be the energy you pay for and consume, however certain rules apply where this may differ hence this must be formally assessed. For example, you must typically include sites where you are renting from a landlord and buy your energy via a landlord supply, but can typically exclude portions of energy consumption at sites where you have tenants. ESOS also includes detailed rules on when a site has to be included in your reference year assessment, based on when and how you acquired it.

2. Identify Significant Areas of Energy Consumption

The scheme requires areas of significant energy consumption to be identified in order to determine areas that must be audited. Areas of significant energy consumption must account for at least 90% of the total energy footprint calculated in the reference year. In order to meet ESOS compliance, these areas of significant energy consumption must be covered by an ESOS energy audit or an alternative route to compliance.

The remaining 10% of the energy consumption can be excluded from auditing under the scheme de minimis rules.

The methodology used to identify areas of significant energy usage is at the discretion of each participant. The de minimis exclusion can be applied at various levels such as:

- ✓ Group level
- ✓ Organisation level
- ✓ Fuel level
- ✓ Supply point

3. Energy Auditing and Compliance Routes

Once the 90% boundary has been determined, the most appropriate route to meet the energy auditing compliance must be determined. The aim of energy auditing is to identify potential cost effective energy saving recommendations.

In ESOS there are four routes to compliance:

- ✓ ESOS Energy audits
- ✓ ISO 50001 certified Energy Management System
- ✓ Display Energy Certificates (DECs)
- ✓ Green Deal Assessments

Compliance can be entailed via a single route, or using a number of routes combined providing the selected routes cover all areas of significant energy usage (90%).

Envantage can help assess the most suitable route and cost effective way to meet your compliance.

4. Board Level Signature and Lead Assessor Approval

Unless compliance can be fully demonstrated via a certified ISO 50001 Energy Management System, a Lead Assessor must be appointed. Lead Assessors are professionals who have been approved by the Environment Agency.

A Lead Assessor will be required to undertake / oversee your energy assessment (reference year), identification of significant energy consumption, and energy auditing. In order to meet compliance, your ESOS energy audits must be communicated to the board and signed off by a board member, before being finally approved by the selected Lead Assessor.

5. Report Compliance

Notifications of compliance or intent of compliance should have been made to the Environment Agency between 1 January 2015 and 5 December 2015 via an online portal.

Qualifying organisations that missed this deadline may face fines. If this applies to your organisation, you should begin your ESOS assessment process immediately and then notify the Environment Agency straight away of when you expect to comply.

ESOS deadlines and fines

Undertakings that qualify for ESOS are mandated to have submitted their notification of compliance to the Environment Agency by 5 December 2015, stating that they have met the scheme requirements or that they soon will.

After 29 January 2016, the Environment Agency will carry out compliance checks and issue non-compliance enforcement notices, alongside potential financial penalties, to non-compliant organisations.

Non-compliant undertakings will be reviewed on a case by case basis. Companies in breach of the ESOS regulations may also be named and shamed.

Fines can reach £45,000 for businesses that do not respond to enforcement notices. Other ESOS fines include:

Failure to notify (Regulation 43)

Fixed fine of up to £5,000 and then £500 per day, for a fine of up to **£45,000**

Failure to maintain records (Regulation 44)

Fixed fine of up to **£5,000**

Failure to undertake an energy audit (Regulation 45)

Fixed fine of up to £50,000 and then £500 per day, for a fine of up to **£90,000**

Failure to comply with compliance, enforcement or penalty notices (Regulation 46)

Fixed fine of up to £5,000 and then £500 per day, for a fine of up to **£45,000**

False or misleading statement (Regulation 47)

Fixed fine of up to **£50,000**

Envantage are here to help

If you think you may qualify for ESOS or you are unsure, please contact us. We can provide you with more details about ESOS, and discuss how we can help you minimise fines.

Our Chartered Energy Managers and ESOS approved Lead Assessors are available to carry out your ESOS assessment and ensure you meet the requirements of the scheme.

Top 5 tips for success: ESOS reference year energy

Envantage have successfully delivered ESOS compliance for businesses with an annual energy spend from £100,000 to £4million, from large industrial sites to offices and transport fleets. These small steps have a big impact on the speed and cost effectiveness of ESOS assessments:

- 1. Assess only the required sites and energy supplies as per supply rules**
Review when you acquired and exited all of your relevant sites, and your supply arrangements. You can typically exclude assets that were not held on the qualification date of 31 December 2014, or not still held on the compliance date of 5 December 2015. Ensure you understand which assets must remain included if they were moved from a closing site to a new location. Similarly, where your sites are tenanted you can typically exclude tenants' energy use.
- 2. Get an early start with your assessment of transport mileage and cash claims**
For organisations that pay for transport via mileage claims and cash claims, this is often one of the more time consuming elements of the ESOS process. Ensure that you start this process early, and review whether you can utilise a sampling process (e.g. collate mileage data for a few representative months only) whilst remaining within the ESOS guidelines.
- 3. Make use of Excel fuel card transaction reports**
If you use transport energy purchased on fuel cards, you can usually call your supplier to obtain a report in Excel that contains all of your transactions within the reference year period. When assessing this source of data, ensure that you only include relevant fuels and purchases, and convert these into kWh energy using conversion factors for each fuel.
- 4. Use benchmarking where electricity or gas invoices are not available**
Many organisations operate from rented sites and pay for their electricity or gas as part of a standard service charge. This energy consumption must typically be included in the ESOS reference year, and can be estimated based on floor area. Use standard published benchmarks for your type of facility.
- 5. Store evidential records and calculations in your evidence pack**
Save all required evidential records such as invoices in an evidence pack, alongside any estimates and calculations. For example, if you use pro-rata to assess energy usage at the end of your reference year period, include your method in the spreadsheet where you keep your reference year data.