Title: The Energy Savings Opportunity Scheme

Regulations 2014 – second PIR

PIR No: DESNZ012(PIR)-25-CIDA

Original IA/RPC No: RPC13-DECC-1779(2)

Lead department or agency: DESNZ

Other departments or agencies:

Environment Agency

Contact for enquiries:

businessenergyuse@energysecurity.gov.uk

Post Implementation Review

Date: 18/07/2025

Type of regulation: Domestic

Type of review: Statutory

Date measure came into force:

17/07/2014

Recommendation: Keep

RPC Opinion: Green

1. What were the policy objectives of the measure?

The Energy Savings Opportunity Scheme (ESOS) is a mandatory energy assessment scheme for large UK businesses and their corporate groups. The objectives of ESOS are to provide organisations with tailored advice on making cost-effective energy savings to stimulate the take-up of cost-effective energy efficiency measures via audits of their energy use every 4 years, whilst minimising the cost to businesses and maximising synergies with existing policies. Significant changes were made to strengthen ESOS regulations in 2023 to increase the energy savings and the uptake of energy efficiency measures by participating businesses (see paragraph 12 in the further information sheet for details).

2. What evidence has informed the PIR?

This post-implementation review is based on the best available evidence at the time of writing. The data comes from the Phase 3 notification of compliance data published by the Environment Agency and unpublished interim data from Phase 3 action plans provided directly to DESNZ by the Environment Agency. However, we do not have data on the actual energy savings achieved from actions in the action plans, as the deadline for participants to provide this is 5 December 2025, and we do not have any further quantitative or qualitative data from ESOS participants. We are in the process of procuring a full evaluation to address these evidence gaps which we expect to conclude in May 2026.

3. To what extent have the policy objectives been achieved?

This PIR is unable to fully assess whether the objectives of the amended regulations have been met. However, preliminary compliance data for Phase 3 of ESOS shows that some of the necessary building blocks for the regulations to have impact have been achieved. Initial compliance data indicates that compliance with the regulations is high, and efficiency opportunities identified through ESOS would result in substantial energy savings. There is no evidence to suggest that these objectives are no longer appropriate.

Recommendation: That no major changes are made to the ESOS regulations until the conclusion of a full evaluation of ESOS in May 2026, at which point a comprehensive PIR will be completed.

I have read the PIR and I am satisfied that it represents a fair and proportionate assessment of the impact of the measure.

Signed: Minister of State for Industry, Sarah Jones MP & Chief Economist, Donna Leong

Date: 22/04/2025

Further information sheet

Please provide additional evidence in subsequent sheets, as required.

4. What were the original assumptions?

That there is a market failure of imperfect information whereby businesses are unaware how to reduce their energy use and do not act to independently to gather this information. The amendments to the ESOS regulations in 2023 assumed that there was the potential to strengthen the impact and additionality of ESOS and its ability to achieve its objectives by, among other things, improving the quality of audits through increased standardisation of reporting requirements and requiring participants to publicly disclose the actions that they would take in response to audits and their progress against delivering these actions.

5. Were there any unintended consequences?

This PIR is based on changes to the Phase 3 regulations, but it is too early to be able to fully assess the impacts of these changes. This is because organisations are not required to publish data on the actual energy efficiency savings made as a result of implementing actions in their action plans until they publish their first progress updates, the deadline for which is 5 December 2025. The available evidence to date does not highlight any unintended consequences of the updated regulations or their impacts. However, this will be explored in the planned evaluation.

6. Has the evidence identified any opportunities for reducing the burden on business?

It is too early to be able to identify any opportunities for reducing the burden on businesses based on the data and evidence available to date. However, the further evaluation will allow for a better assessment of the interaction of ESOS regulations with wider systemic developments in environmental corporate reporting which will be used in conjunction with a pre-existing internal programme of work within DESNZ to streamline energy and emissions reporting requirements with a view to reducing the burden these place on businesses.

7. How does the UK approach compare with the implementation of similar measures internationally, including how EU member states implemented EU requirements that are comparable or now form part of retained EU law, or how other countries have implemented international agreements?

ESOS is the UK equivalent of the EU's Energy Efficiency Directive (EED) which also requires eligible organisations to complete mandatory independent energy audits and reporting at least every four years. Audits must result in a list of recommendations for reducing energy consumption. EED Member States each have an indicative national energy efficiency target which is based on either primary or final energy consumption, primary or final energy savings, or energy intensity. The EED is enshrined in EU law and each EU Member State has its own. Although the schemes are similar in requirements and scope, there are some minor variations between countries' in-scope qualification definitions and project delivery methodologies.

Energy Savings Opportunity Scheme (ESOS) Post-implementation Review April 2025

Background

- 1. The Energy Savings Opportunity Scheme (ESOS) is a mandatory energy assessment scheme for large UK businesses and their corporate groups. Participants must undertake audits of their energy use at least every 4 years, which identify cost-effective measures to save energy, covering buildings, industrial processes and transport.
- 2. ESOS aims to address a market failure of imperfect information businesses lack information on how to reduce energy use, but do not act to gather this information.
- 3. ESOS requires large businesses (with either more than 250 employees or annual turnover of more than £44m and an annual balance sheet of more than £38m) to carry out an energy audit which must:
 - a. Analyse the business's energy consumption,
 - b. Identify any ways energy efficiency could be improved,
 - c. Recommend all cost-effective measures to improve energy efficiency, and
 - d. Identify the costs and benefits of each measure recommended.
- 4. ESOS was established in 2014 and Phase 1 of ESOS ended in December 2015. Phase 2 of the scheme ran from December 2015 to December 2019. Phase 3 of the scheme ran from December 2019 to December 2023. Phase 4 of the scheme started in December 2023 and ends in December 2027.
- 5. The Environment Agency is the UK scheme administrator and is responsible for collecting and publishing ESOS data provided by participants. The Environment Agency is also responsible for enforcement for organisations whose registered office is in England. The regulators in other parts of the UK are: Natural Resources Wales for organisations whose registered office is in Wales, Northern Ireland Environment Agency for organisations whose registered office is in Northern Ireland, and the Scottish Environment Protection Agency for organisations whose registered office is in Scotland. The Secretary of State for the Department for Energy Security and Net Zero is the regulator for organisations whose activities consist wholly or mainly of offshore activities.
- 6. There is a legal obligation to conduct and publish a review of the ESOS scheme (a 'post-implementation review' or 'PIR') every five years under regulation 3 of the ESOS Regulations 2014¹. A PIR was conducted in 2020² with the next PIR due in February 2025. The regulations state that the conclusions of the review must be published in a report that:
 - a. sets out the objectives intended to be achieved by the regulations,
 - b. assesses the extent to which the objectives are achieved,
 - c. assesses whether the objectives remain appropriate, and

¹ The Energy Savings Opportunity Scheme Regulations 2014 https://www.legislation.gov.uk/uksi/2014/1643/contents

² Energy audits and reporting research, including the Energy Savings Opportunity Scheme https://www.gov.uk/government/publications/energy-audits-and-reporting-research-including-the-energy-savings-opportunity-scheme

- d. where the objectives remain appropriate, assesses the extent to which they could be more effectively achieved.
- 7. The PIR conducted in 2020 took place at the end of Phase 2 of the scheme³. The 2020 PIR focused on the 2014 ESOS regulations, which were in place for Phase 1 and Phase 2 of the scheme. It focused on Phase 1, however, given that the requirements for Phase 2 were very similar to those for Phase 1, it is expected that the findings from Phase 1 would generally also hold true for Phase 2 of the scheme. Furthermore, there was very limited additional data collected in Phase 2 to inform an alternative opinion, which was one of the reasons behind the changes introduced in Phase 3.
- 8. In the 2020 PIR, ESOS was found to have met its original objectives of providing organisations with tailored advice on making cost-effective energy savings to stimulate the take-up of cost-effective energy efficiency measures, whilst minimising the cost to businesses and maximising synergies with existing policies⁴. ESOS was found to result in annual energy savings broadly in line with the overall saving of 3.0TWh per year estimated in the original Impact Assessment and the costs of compliance were also broadly as anticipated. The introduction of ESOS led to many organisations carrying out energy audits for the first time and encouraged increased collection of data and awareness of energy costs. Audits were useful both for identifying new opportunities and validating already identified measures. The evaluation found a varying level of engagement, and businesses also reported barriers to implementing recommendations. In addition, the evidence for the additionality of ESOS was weak whilst 90% of organisations in the evaluation reported having planned or implemented an energy efficiency measure, only 6% of measures were directly attributed to ESOS, with 38% being at least partially attributed.
- 9. Drawing on the evidence in the 2020 post-implementation review, BEIS ran a consultation from July to September 2021 on proposed changes to improve and strengthen ESOS for Phase 3 and beyond. The consultation found widespread support for the three main proposals:
 - a. Improving the quality of audits through increased standardisation of reporting requirements,
 - b. Requiring participants to publicly disclose high-level recommendations, and
 - c. The inclusion of a net zero element to audits.
- 10. The government included powers in the 2023 Energy Bill to make the changes outlined in the ESOS consultation. The passing of the Energy Bill as the Energy Act 2023⁵ enabled changes to the requirements for Phase 3 of ESOS through The Energy Savings Opportunity Scheme (Amendment) Regulations 2023⁶ (the "2023 regulations"), which was accompanied with a final Impact Assessment of the likely costs and benefits⁷.

Aims and scope of the post-implementation review

 $^{^{\}rm 3}$ Post Implementation Review of the ESOS Regulations 2014

https://www.legislation.gov.uk/uksi/2014/1643/pdfs/uksiod_20141643_en.pdf

⁴ Post Implementation Review of the ESOS Regulations 2014

https://www.legislation.gov.uk/uksi/2014/1643/pdfs/uksiod 20141643 en.pdf

⁵ Energy Act 2023 https://www.legislation.gov.uk/ukpga/2023/52

⁶ The Energy Savings Opportunity Scheme (Amendment) Regulations 2023 https://www.legislation.gov.uk/uksi/2023/1182/contents/made

⁷ 2023 Impact Assessment for Strengthening the Energy Savings Opportunity Scheme (ESOS) https://www.legislation.gov.uk/ukia/2023/153/pdfs/ukia 20230153 en.pdf

- 11. The ESOS regulations were amended substantially by the 2023 regulations to improve and strengthen ESOS in order to increase the uptake of energy efficiency measures by participating businesses and therefore increase energy savings. This post-implementation review relates to the ESOS regulations as amended.
- 12. Changes made to the ESOS regulations for Phase 3 include:
 - a. Requiring organisations to produce an ESOS compliance report, provide an energy intensity ratio, and justify the methodology used for their site sampling.
 - b. Requiring organisations to submit additional information from their ESOS report to the Environment Agency, including total energy consumptions, predicted savings, and savings achieved.
 - c. Improving the quality of assessments by requiring lead assessors to provide more information including on next steps for organisations.
 - d. Requiring organisations to produce an action plan and progress updates, to be published by the Environment Agency.
 - e. Reducing the percentage of total energy supplies that an organisation can choose to exclude from ESOS audits (the 'de minimis energy consumption') from 10% to 5%.
 - f. Facilitating access to half-hourly energy use data from smart meters for ESOS participants and assessors, to inform ESOS audits.
 - g. Requiring ESOS reports to be disseminated to subsidiaries.
- 13. In alignment with the requirements in the ESOS regulations, this post-implementation review aims to:
 - a. set out the objectives intended to be achieved by the regulations,
 - b. assess the extent to which the objectives are achieved.
 - c. assess whether the objectives remain appropriate,
 - d. where the objectives remain appropriate, assess the extent to which they could be more effectively achieved and,
 - e. set out a recommendation for the policy.
- 14. This post-implementation review is based on the best available evidence at the time of writing. The data comes from the Phase 3 notification of compliance data published by the Environment Agency⁸ and unpublished interim data from Phase 3 action plans provided directly to DESNZ by the Environment Agency.
- 15. The evidence currently available is limited. The data from Phase 3 notifications of compliance and action plans is provisional as ongoing compliance and enforcement action by the Environment Agency means that organisations continue to submit notifications of compliance and action plans, in turn adding to the dataset. In addition, we do not have data on the actual energy savings achieved from actions in the action plan, as the deadline for participants to provide this is 5 December 2025, and we do not have any further quantitative or qualitative data from ESOS participants, beyond what is in the notifications of compliance and action plans.

Findings of the post-implementation review

⁸ Published data from the Energy Savings Opportunity Scheme https://www.data.gov.uk/dataset/15eb8228-32e4-40e1-b722-b2efe571edd3/energy-savings-opportunity-scheme

Objectives intended to be achieved by the ESOS regulations

- 16. The objective of ESOS is to provide organisations with tailored advice on making cost-effective energy savings to stimulate the take-up of cost-effective energy efficiency measures, whilst minimising the cost to businesses and maximising synergies with existing policies⁹.
- 17. The objective of the 2023 regulations is to increase energy savings by improving and strengthening ESOS to increase the uptake of energy efficiency measures by participating businesses.

Extent to which the objectives of the ESOS regulations are achieved

18. This PIR is unable to fully assess whether the objectives of the amended regulations have been met. However, preliminary compliance data for Phase 3 of ESOS shows that some of the necessary building blocks for the regulations to have impact have been achieved.

Key evidence

- 19. **Compliance with the regulations is high**. The Environment Agency believed that 9,871 corporate groups met the qualifying criteria for Phase 3. The compliance data published in February 2025¹⁰ shows that 8,581 corporate groups (equivalent to 87% of the Environment Agency's estimate) had submitted a notification of compliance, and 7,145 of these groups confirmed that they are indeed required to comply with ESOS regulations. In addition, 5,403 (76%) of corporate groups that provided a notification of compliance with Phase 3 of ESOS have submitted an action plan. The data shows that 4,716 (87%) of plans include at least one energy saving action.
- 20. The efficiency opportunities identified through ESOS would result in substantial energy savings. Compliance data published in February 2025 shows that participants reported potential annual savings of 47 TWh that had been identified through Phase 3 audits, which compares to a reported 900 TWh of energy consumed by ESOS participants in a 12-month period around the qualification date (31st December 2022)¹¹. A simple comparison of these figures suggests ESOS recommendations would equate to a 5% reduction in energy consumption¹².
- 21. The above findings are provisional as ongoing compliance and enforcement action by the Environment Agency means that organisations continue to submit notifications of compliance and action plans, in turn adding to the dataset.

Discussion of evidence

22. The additional detail expected in audits resulting from the changes to Phase 3 as set out in paragraph 12 have facilitated this assessment while we await further data and evaluation evidence. The fact that energy savings identified through the scheme amount to at least 5%

⁹ Post Implementation Review of the ESOS Regulations 2014 https://www.legislation.gov.uk/uksi/2014/1643/pdfs/uksiod_20141643_en.pdf

¹⁰ Published data from the Energy Savings Opportunity Scheme https://www.data.gov.uk/dataset/15eb8228-32e4-40e1-b722-b2efe571edd3/energy-savings-opportunity-scheme

¹¹ To note: some energy consumption is double counted. Power stations and grid operators report total energy consumed, including that which ends up as useable electricity for end users. Other ESOS participants then also report their use of this useable electricity.

¹² It is unlikely that energy saving opportunities would be subject to the same double counting as energy consumption (as outlined in footnote 11). Energy efficiency measures for end users of electricity only relate to final energy demand; efficiency measures for power plant and transmission operators will not affect final energy demand (only the amount of energy lost via heat, transmission and storage). As such, the 5% figure is an underestimate; energy savings opportunities represent a larger fraction of total energy consumed.

show that the scheme, at an overall level, is still identifying meaningful amounts of cost-effective energy savings. This supports some level of additionality, although this cannot be quantified with available data. Further, it is not possible to directly compare these findings with those from the evaluation of Phase 1, which instead used an approach of assessing what proportion of implemented energy saving measures were attributable to ESOS. The 2014 Impact Assessment for the original regulations anticipated the scheme would lead to an average reduction in energy consumption of 0.7% in 2016 (section 6.4.7.1, p33). For the most recent Phase to match this, this would require 15% of the energy savings identified to be implemented, which seems feasible given 87% of action plans include at least one energy saving action.

- 23. Furthermore, the high rates of compliance with the scheme mean that the regulations' benefits are being made available to the intended population of businesses in scope.
- 24. In conclusion, there is emerging evidence that the regulations continue to meet the objective of stimulating the take-up of energy saving measures.

Assessment of whether the objectives remain appropriate

- 25. We have assessed whether the objectives of ESOS remain appropriate, namely, to provide organisations with tailored advice on making cost-effective energy savings to stimulate the take-up of cost-effective energy efficiency measures whilst minimising the cost to businesses and maximising synergies with existing policies.
- 26. There is no evidence to suggest that these objectives are no longer appropriate, however, this conclusion may need to be reviewed once more data on the effectiveness of the changes made by the 2023 regulations, such as data from action plans, is available.

Extent to which objectives could be more effectively achieved

- 27. It is not possible to determine whether the objectives of ESOS could be more effectively achieved until we have determined the extent to which the objectives have been achieved with the existing regulations. This requires further analysis of data from the Phase 3 notifications of compliance, action plans, and evaluation activity with ESOS participants, particularly on the cost of compliance and factors that lead to higher additionality.
- 28. Some changes to further refine ESOS have already been announced, including the removal of Display Energy Certificates and Green Deal Assessments as compliance routes and requiring participants to include their progress against their action plan commitments in their ESOS reports. However, the data to assess the impact of these changes will not be available until participants submit their notifications of compliance for Phase 4 of the scheme, the deadline for which is 5 December 2027.

Limitations of the post-implementation review

29. To fully assess whether planned energy saving actions are implemented, whether they are additional to what would have happened anyway, and whether they actually lead to the intended energy savings, further compliance data and evaluation is required. In particular, progress updates provide information on the actual energy savings achieved from the actions in the action plan. The deadline for organisations to provide a first progress update on their Phase 3 action plans is 5 December 2025, with another progress update due on 5 December 2026. This means that data is not yet available on the actual energy efficiency savings made as a result of the actions in participants' action plans.

Recommendation of the post-implementation review

- 30. In conclusion, we have evidence that ESOS audits continue to identify potential energy savings. However, the extent to which the objectives of the changes made by the 2023 regulations are achieved is not yet known. DESNZ is currently commissioning an evaluation to answer this. In part, the evaluation will likely use the data that already exists from action plans. However, to fully assess the impact of the scheme, it will also need data that does not yet exist from progress updates, business surveys and future changes to energy usage measured through energy meter data. Further details about the intended evaluation are outlined in the 'next steps' section.
- 31. We have assessed whether the objectives of ESOS remain appropriate. Whilst we have found no evidence to suggest that the objectives are no longer appropriate, this conclusion will need to be reviewed once further data, such as the data from action plans, is available. Further data is also needed in order to assess whether the objectives of ESOS could be more effectively achieved.
- 32. In light of the incomplete evidence base, we recommend that no major changes are made to the ESOS regulations at present. Some minor amendments to the Phase 4 regulations, such as those set out in paragraph 28, are already planned. The need for any further changes will be reviewed in the first half of 2026 when we will have further data and evaluation findings.

Next Steps

- 33. Given that we are unable to fully realise the aims of this post-implementation review of ESOS using the evidence that is currently available, we intend that this post-implementation review be followed by a commissioned evaluation of the policy in 2025, to first report in 2026. This evaluation will assess the extent to which ESOS meets its objectives, and the extent to which they could be more effectively met, in light of that further data.
- 34. In particular, the evaluation will seek to assess:
 - a. The costs to businesses of complying with ESOS, including the additional costs introduced in Phase 3, such as the requirement to publicly disclose more data. This will be compared to the costs estimated in the Impact Assessments associated with the regulations.
 - b. The extent to which Phase 3 has led to the introduction of energy saving measures that otherwise would not have occurred, and how this compares to the findings from the evaluation of Phase 1. In particular, whether the added stringency and reporting requirements of Phase 3 have led to more effective recommendations for businesses and greater impetus to implement such recommendations.
 - c. The extent to which measures implemented due to Phase 3 have actually led to reduced energy consumption and the extent to which this has reduced carbon emissions. For instance, has the implementation of behavioural measures actually reduced energy consumption?
 - d. The extent to which measures taken in response to historic phases continue to yield energy savings.
 - e. Any unintended consequences, such as reputational benefits for businesses in reporting additional data.
- 35. To assess these questions the evaluation is likely to use a combination of:

- a. Analysis of data from Phase 3 notifications of compliance and action plans, in particular on the type and magnitude of energy saving measures planned.
- b. Research with businesses to collect detailed information on costs and the impact of the scheme on decision making.
- c. Quasi-experimental methods to compare ESOS participants to similar businesses out-of-scope of the regulations, where possible using data from energy meters or other schemes, or otherwise relying on data collected through business surveys.
- 36. In addition, the further evaluation will also allow a better assessment of the interaction of ESOS with wider systemic developments in environmental and corporate reporting.
- 37. The timing of the further evaluation means that it can be used to provide an evidence base for changes to future phases of ESOS, particularly changes to be made in 2026 and 2027 for Phase 5 and beyond.