



Stronger ESOS, better ESOS?

The Energy Savings Opportunity Scheme (ESOS) consultation proposes to strengthen the scheme by improving the quality of audits through increased standardisation of reporting, ensuring that ESOS Lead Assessors have the right skills and knowledge, inclusion of a net zero element to audits, and requiring public disclosure of high-level recommendations by participants in Phase 3.

The consultation also looks for views on additional options, possibly implemented in Phase 4, such as mandating implementation of ESOS recommendations and extension of ESOS to medium sized enterprises. We have asked four EMA ESOS Lead Assessors to share their views on the proposed changes.

Mark Taylor – Owner, Taylor Made Energy Solutions Ltd



I think a review of ESOS is probably overdue after 2 phases without change and welcome this consultation. There are some good proposals in the consultation, recognising some of the problems that have been seen in phases 1 and 2, although some of the ideas put forward would radically change ESOS with the potential for making it very much more expensive for participants.

The proposals to try to improve the quality of audits and assessments are particularly welcome given the variable and quite often poor

quality seen in the first 2 phases. The removal of repeatedly poor assessors from registers and ensuring that properly skilled staff undertake audits is, I think, a priority to give ESOS more credibility and to convert opportunities into real energy reductions rather than just a compliance activity.

However, I do think many of the proposals are trying to create a more rigid framework for assessors to work within in the hope of improving their performance rather than addressing the issue that many audits are undertaken by unqualified staff using “tick sheet” methods. The existing guidance is already quite clear on many of the proposal areas so I am not sure any more notice will be taken of a stricter framework as the current rules are quite obviously being ignored now to produce the volume of poor audits.

The proposed aligning of ESOS with net zero is also good news as up to now, they did almost clash in

some ways, and using ESOS as an additional driver can only be a good thing and create extra engagement. It will however create quite a lot of additional work and ultimately cost for participants, whichever way it is included.

Many of the proposals should be relatively easy to implement such as including emissions as well as energy consumption and creating benchmarks. For some proposals, such as making analysis of half hourly data mandatory where it is available, it seems unacceptable that there are currently lead assessors who do not do this as a matter of course anyway. But there are some proposals that could perhaps require a step up in knowledge and expertise for some lead assessors. Expanding audits to include forms of on-site generation and the assessment of low carbon technologies could create some issues, especially when carbon savings do not always guarantee the energy cost savings on which ESOS is predicated.

It does appear that for many auditors and lead assessors, some upskilling may be required to maintain their competence and their accrediting bodies are also likely to have to improve their accrediting and monitoring procedures.

Another proposal that may cause many issues is on sampling. The possible requirement to sample far more sites (potentially having to audit every site within a given number of ESOS phases) could hugely increase the time and cost requirements for many multi-site participants but provide little benefit in the way of more opportunities identified.

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The proposed reduction of any de-minimis exemption from 10% to 5% will definitely have an impact on large energy users who will now have to audit far more assets but it does prevent large areas going unaudited.

However, it could also cause large increases in time spent on audits of relatively small energy uses such as gas bottles and static equipment like standby generators where again, the benefit could be very small.

One element likely to be welcomed by participants and lead assessors is the discussion on extending the qualification date to remove the heavy workload on assessors in the last year of each phase and stagger assessments more. This should in theory also reduce costs if much of the last minute rush can be avoided.

There is of course an issue with some of the proposals in that they are likely to be included in phase 3 which has already started. Site audits which have already been completed may now not conform to any revised ESOS regulations, especially given the net zero proposals. Either some dispensation will have to be given for early starters or some repeat audits may be needed.

While the proposals do address a number of issues and areas that needed review, the one conclusion that seems inescapable is that the requirements of ESOS are going to be much wider in future which will inevitably increase the costs of any assessment to participants. Hopefully, the increased cost will be rewarded with better opportunities found and delivered by better qualified and trained lead assessors.

Stuart Jackson – Director, Stuart Jackson Associates Limited



Strengthening the Energy Savings Opportunity Scheme (ESOS) Consultation:

- Concentrates on 3 main areas: improving the quality of audits, the inclusion of a net zero element to audits and public disclosure of high-level recommendations, these being for immediate action.
- Seeks opinion on extending the scope of the scheme to include medium sized businesses and mandating action on audit recommendations, these being possibilities for future action.

I think it is accepted that the range of participant acceptance for ESOS is wide and there was at times a shortage of Assessors, and these issues need addressing.

Suggestions of standardised reports and common sampling methodologies in Chapter 1 of the consultation are sensible.



The consultation also refers to inclusion of Energy Intensity Ratios (EIR) and Behavioural Change audits, both of which I would suggest are important.

It is also important to address Assessors in relation to quality of reports. The consultation discusses ESOS Lead Assessor Registers and Assessors' skill sets. As a member of the EMA ESOS Lead Assessor register, I am aware that these are available on line. I believe there is merit in selection of Assessors on their skill sets. However, this may well reduce Assessor availability. Training and updating Assessors seems to be the key.

The consultation discusses options for staggering the phases or qualification dates. It also highlights possible coordination with other schemes, particularly Streamlined Energy and Carbon Reporting (SECR). This could enable Lead Assessors to manage more audits, and I would strongly support a change, especially if the scheme is expanded to include Medium Enterprise Undertakings, as is mentioned. The proposed link with SECR is supported by the suggestion that eligibility for each scheme is the same. Again, a laudable thought. However, I feel it could go further and utilise the SECR requirement as a means of ESOS follow-up. Especially so, if some of the suggestions for ESOS follow the pattern of SECR, Intensity Ratios or suggested reporting formats for example.

One important suggestion for inclusion is a net zero element to audits. This is probably the area which could cause the biggest effect in terms of analysis of the opportunities. It is vital that we take a long-term view on

carbon reduction but analysis of the opportunities needs much detailed work. Some companies are already evaluating their opportunities for net zero carbon, whilst reporting within ESOS and SECR, with a view to support their aims within Environment, Social and Governance (ESG) Corporate Reporting. Some schemes can be complex and very long term.

“ **ONE IMPORTANT SUGGESTION FOR INCLUSION IS A NET ZERO ELEMENT TO AUDITS. THIS IS PROBABLY THE AREA WHICH COULD CAUSE THE BIGGEST EFFECT IN TERMS OF ANALYSIS OF THE OPPORTUNITIES. IT IS VITAL THAT WE TAKE A LONG-TERM VIEW ON CARBON REDUCTION BUT ANALYSIS OF THE OPPORTUNITIES NEEDS MUCH DETAILED WORK.** ”

To include net zero element in an ESOS report would increase costs of audits and it is likely to be initially in a very generic format. I see the value and would be broadly supportive but would caution more thought on its implementation. Should we move to net zero inclusion in audits, there will be a need for clarification training for all, participants and assessors.

I have some concerns regarding the practicality of encouraging take-up of the recommendations. At present there is no mandatory requirement to adopt any suggestions. I can see the value in preparing an action plan. At present, it is included but with a light touch. The consultation discusses possible added requirements, such as mandatory follow up reporting, although with initially no penalties. It suggests annual progress reports and extra information on a central portal for public access. However, yet another set of reports will be a further burden on companies and I feel it will reveal very little. We should not forget that many companies already report carbon emissions through

UKETS (formerly EUETS), CCA and energy performance through SECR. These can fall for submission at various times of the year and, I would argue, directly or indirectly contain the same data for evaluation. I doubt further reporting would be welcome, and I am of the opinion it would really prove ineffective in overcoming the lethargy of the passive Undertakings.

Assisting participants with their ESOS compliance, I have identified various projects and energy savings but these are prioritised over a number of years. Annual or interim reporting will simply be a further report with little information.

Timescales for implementation of proposed measures are discussed within the consultation document, too. We are approximately half way through phase 3 of ESOS. Responses to this consultation close 28 September 2021 and I assume it will be 2022 before we have chance to digest any changes. I will be encouraging my clients to start assessment next year and would think it prudent to activate any changes for phase 4 of ESOS.

If we are to adopt some of the suggestions in the consultation, there will be a requirement for clarification of the new reporting and updating skills.

There is much more detail in the Consultation Document and I commend you to read in full and offer your opinions.

Adam Fairman – Senior Energy Analyst, Welsh Water*



When it comes to energy management, there are three types of companies:

- Those who pay others to do it.
- Those who do it themselves.
- Those who do not do it at all.

Reading between the lines, ESOS seems to be aimed at the 3rd group. The thinking was, if only the directors of those companies knew how much money they were wasting, they would take action. If you made them spend a little money on energy management, they would save lots of money and help the environment. ESOS phase 1 and 2 was fairly light touch, presumably because the Government did not want to create an undue burden of regulation and thought that the businesses themselves were best placed to decide how to audit their energy use.

However, now the Government have decided that ESOS needs strengthening because the pesky 3rd group has been finding ways of ‘complying’, and still not doing energy management.

My perspective is from the middle group, working in the energy team of a large energy user in a highly

regulated industry. We already report annually to our regulator on our energy consumption and carbon emissions in detail and are externally audited on this every year. We have supportive management who are happy to invest in energy efficiency measures. So, when it comes to ESOS, it is not really changing anything, it is just more reporting when we would rather be doing more energy management.

Despite that, I do not want ESOS to be scrapped, but I do have some ideas as to how ESOS can get the recalcitrant 3rd group to step up to the plate whilst minimising the burden on the rest of us. How can we go from energy saving opportunity to energy saving reality?



One concern is the quality of audits not being sufficient to identify savings because people are abusing the sampling approach and only auditing a few sites within a portfolio. There is concern that this flexibility is being abused and so minimum standards need to be set. There is a danger though that in spreading resources more thinly you reduce the quality of individual audits. This is a challenge for multi-site organisation like ourselves with over 4,000 electricity supplies. Pareto analysis applies though, so we can cover 80% of our energy use by auditing 20%

of our sites. I think a fair approach would be to set a site level de minimis requirement rather than a fixed % of Total Energy Consumption as this better reflects the inefficiency of visiting lots of small sites.

And while we are on that subject, as we have all learnt to work remotely, do we still need the requirement for a physical site visit to count as an audit? I gain very little from visiting a remote pumping station when all the asset data, flows, pressures, power etc. are available from my desk. Let’s make energy auditing energy efficient!

Having set the scope appropriately, I think we also need to have other routes to compliance. If the goal is energy savings, then why not make that a route to compliance rather than just audits.

So, for example if you can evidence a monitoring and targeting system for a site that goes beyond comparing annual numbers to budget, then that should count as compliant. After all, we all know that this is better than a once every 4-year review of the data and a walk-through

survey. It goes part of the way to ISO 50001 and could be a stepping stone there for organisations.

Similarly, if there has been financial spend on energy efficiency within the compliance period that should count as compliant, which would answer the question of how to encourage companies to implement measures. If companies are faced with a choice of spending time and money doing an audit to get the same results, or to actually save energy, hopefully they will choose the latter! This offers a cost-free

carrot (or at least a promise to withdraw the stick!) to implement measures without the legal minefield of mandating them.

“ **FOR MOST BUSINESSES, THE BEST THING THEY CAN DO TO HELP THE UK REACH NET ZERO IS TO BRING DOWN THEIR ENERGY CONSUMPTION. DO WE REALLY NEED 100S OF REPORTS WEIGHING UP THE PROS AND CONS OF A NEW BOILER VS A HEAT PUMP WHEN IT SHOULD BE THE GOVERNMENT LEADING ON THE STRATEGY OF DECARBONISING HEAT AND SETTING THE INCENTIVES ACCORDINGLY?**

One final word on carbon, which BEIS want to bring into ESOS. For most businesses, the best thing they can do to help the UK reach net zero is to bring down their energy consumption. Do we really need 100s of reports weighing up the pros and cons of a new boiler vs a heat pump when it should be the Government leading on the strategy of decarbonising heat and setting the incentives accordingly? Let's keep the focus on energy efficiency and tackle strategic questions about carbon reduction at a sector level where Scope 3 emissions can also be considered.

You might disagree but hopefully this has given you some ideas as to how you can respond to the consultation.

**The opinions expressed within the content of this feature are solely the author's and do not reflect the opinions of Welsh Water.*

Neil Fright – CEO, Carbon Numbers Group



In my view, the initial scheme achieved broad compliance, but as more businesses actively work towards gross and net zero, the timing is right to take ESOS from what can be largely a box-ticking exercise to a step-change in the way businesses proactively measure, monitor and disclose energy consumption.

In my opinion, the overall theme of the consultation is that we need to see significant changes in the whole ESOS process to get anywhere near the outcomes we want to achieve.

This is evidenced in chapter one, page 24 outlining 'Improved information on energy management practices,' where it is disappointing to read that only 50% of all ESOS reports audited by the Environment Agency contained energy management recommendations. In addition, BEIS analysis found the majority of those recommendations were generic with no guidance on implementation or benefits. Many of these businesses haven't even been introduced to building management and monitoring systems, because their ESOS assessor isn't qualified or experienced enough to make recommendations.

Some of the BEIS' proposals in chapters one and four on improving the scope and standardising the

audit schedule to align ESOS with SECR will lead to greater transparency and consistency with findings, because businesses will be providing information in a format that is uniform and verified, with metrics they are able to benchmark and understand. In chapter one particularly, the consultation talks about the importance of proactively changing behaviours within an organisation.

I believe this is the missing link, where we have the ability to influence these step-changes in the behaviour of stakeholders across the organisation that will lead to real change. With the right guidance and measures that are easy to understand and implement, wider management can be involved to ensure the level of quality, insight and organisational change we want to achieve.

Of course, every sector is different, and it's positive that the consultation considers the different nature of companies. To add value and present ESOS as a positive scheme, we need to go in with an understanding of the diverse challenges businesses face as well as the practical reality of adopting recommendations. For instance, is it right to recommend a business with a short lease make a large capital investment in energy efficient lighting?

Looking beyond the numbers to present not just change, but the reasons for the change will help the scheme drive best practice and go a long way in enabling a generation of Energy Conscious Organisations (ECOs).

I wholly agree that a clear, fair set of recommendation and measures that looks at the wider organisation will pay long-term dividends. This is

especially pertinent when we look at chapter four of the consultation and the proposal for public disclosure of high level information from their ESOS report. I am reassured to see that the recommendation is not to go for a league table format and that metrics will be focused around progress on energy management proficiency and actions rather than performance.

Subsequently, these proposals will then go a long way towards helping businesses see the value of ESOS and have a better understanding of the broad range of opportunities available to them.

A key factor that stood out to me throughout the consultation was the references to behavioural research. In addition to

recommending radical changes in the way businesses measure and report, it is clear that ESOS Lead Assessors have a critical role to play in using their experience and resources to influence positive change. To make that happen we again need to look beyond reporting and work with

businesses to give them roadmaps and outcomes that are meaningful and achievable.

In 'Routes to compliance,' the consultation looks at three alternative routes to be ESOS compliant; Display Energy Certificates (DECs), Green Deal Assessments (GDAs) and ISO:50001, with ISO being the favoured approach. I wholly agree with recommendations to remove DECs and GDAs and would go further, to say that the long-term approach of ISO accreditation is the only route that cultivates the ongoing responsibility and engagement in making sustainable, measured changes across a business.

If Lead Assessors can move away from the four-year compliance cycle and work with companies in line with ISO standards, there is an opportunity to look beyond reports, cost savings and carbon offsetting, to embedding ongoing improvements to the way they

power their businesses and the environment they create as ECOs.

This proposal has a timely opportunity to present ESOS as an energy efficiency policy rather than remaining focused on auditing. The changes could lead to businesses concentrating on an achievable long-term roadmap that the whole organisation buys into.

Finally, there is no doubt that mandating actions and disclosure, as proposed in chapter six of the consultation will drive change. However, to embed a meaningful transformation, the policy needs to create value and build trust to lead a broader conversation around what

energy efficiency means and how every touchpoint can contribute to better working environments as well as gross/net zero targets and cost savings.

The consultation talks about being 'ambitious,' and as well as guiding better practice, I believe it presents a strong case for the cultural change that will lead to ESOS being a core contributor to Corporate Social Responsibility.

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