by Rustin Cooper, Alan Ford, Peter Lindersen and Daniel Shanley

Comparing and Contrasting ESOS and SECR

Companies have been complying with ESOS since 2014. For some, ESOS proved to be a motivation for energy efficiency improvements and opportunities, others thought of it as a bureaucratic and costly quadrennial burden. Last year, SECR kicked in as another significant regulation to strengthen the environmental reporting commitment. As organisations are preparing to file their first reports as part of the annual accounts, four EMA ESOS Lead Assessors share their thoughts on whether ESOS has contributed to an increased energy efficiency, express their expectations of SECR and contemplate whether any learnings from ESOS could be applied to SECR.

Rustin Cooper, Director at Coopertec Systems Ltd

ESOS working with SECR

ESOS Re-cap

ESOS (Energy Savings Opportunity Scheme) was transposed from the EU Energy Efficiency Directive and mandated into UK legislation in 2012. The intent was to raise energy awareness at 'senior level' and to highlight opportunities that may exist to reduce energy waste.

Organisations that qualify must carry out ESOS assessments every four years. These comprise of reviewing energy used by their buildings, industrial processes and transport, in order to identify cost-effective energy saving measures.

The scheme was originally estimated to achieve £1.6bn net benefits to the UK, with the majority of these being directly felt by businesses as a result of energy savings. The cost to businesses was predicted at £35m (ESOS Impact Assessment DECC0142 June 2014).

ESOS has been incorporated into the UK law and no impact from the Brexit Withdrawal Agreement is anticipated.

SECR Re-cap

On the 1st April 2019, new regulations came into force for public disclosure of carbon reporting for large businesses. This new reporting requirement is known as SECR (Streamlined Energy and Carbon Reporting). On the 1st April 2020 the first company disclosures were made, and by March 2021 all large organisations should have filed their first report.

SECR is designed to be a 'streamlined' replacement of the 'Carbon Reduction Commitment Energy Efficiency Scheme' (CRCEE).

SECR requires board 'sign off' and appears in the annual company reports. Green House Gas (GHG) reporting and underlying energy use must be declared.

So what have we learnt?

Well, a lot has happened since the first ESOS compliance year in 2015:

- Net Zero was passed into legislation.
- The Nuclear power plant at Hinkley C was approved.

- The onset of renewables in the UK manifested in zero dependency on coal for the first time since the industrial revolution.
- Demand Side Response is now a credible tool for Grid balancing.
- And of course, in the spring of 2020, COVID-19 impacted heavily on the global health and finance sectors and negative oil prices were recorded for the first time.

Now that two ESOS compliance years have been completed, has the legislation achieved its ambition to raise awareness amongst businesses? I would say yes, but maybe not in the form of the original thinking. ESOS audits are expensive, and a legal requirement, so these two factors alone will get senior management attention.

ESOS audits are expensive for the following reasons:

- Compliance years only come around every four years, creating a compressed time window for auditors to conduct their evaluations.
- They require detailed and time consuming analysis for all 'paid for consumption', some of which will not be directly addressable by the business.

Perhaps a more practical approach would be to stagger the audits over each four year period, whilst adapting the de-minis rule (currently at 10%), so that the lower value analysis is not required.

However, one important by-product of ESOS is the increased adoption of ISO50001 Energy Management Systems as a route to compliance. Complying to this standard forces businesses to ensure that their processes consider energy management and that there is a structure in place for regular review. A controversial point could be made that the Grid is decarbonising naturally (additionality of renewables), therefore, is energy intensity as big an issue as it was in 2014?

This year, we saw negative commodity costs with our exported solar costing us money. So, will negative commodity costs become more prevalent in the future, especially when Hinkley C comes online in around five years time, and Grid balancing becomes even more complex?

There is also the question around how nuclear power manifests in a carbon report. At present, there is no agreed mechanism for reporting on the carbon impact of nuclear generated power.

Net Zero has been billed as one of the most important pieces of legislation for many generations, in an attempt to tackle the climate emergency, with SECR developed as one of the support tools.

With many businesses now commencing SECR, here are some views around early observations:

- SECR does not enforce a detailed breakdown disclosure of carbon usage, eg. electricity, gas and refrigerant etc.
- SECR alone will not be an energy reduction 'driver', unless some industry benchmarking is applied.
- We have not yet had year-on-year reporting and the visibility of those comparisons may drive change.
- The current stakeholder focus is on greenhouse gas emissions and working towards net zero which has resulted in the sourcing of low-carbon energy becoming a greater priority over energy efficiency.

SECR disclosures are hugely important, but regrettably they are often relegated to the unfashionable end of a voluminous annual report. They appear as tiny summary tables, so the figures are not always meaningful. This is particularly true with the aggregation of fuel consumption into KWh. Nobody uses metrics of KWh equivalents to manage transport fleets. This means that stakeholders are unable to draw any direct comparisons between the data for companies operating in the same sector.

To summarise: ESOS audits are expensive and a grudge cost for business, but they have served their purpose in raising awareness around energy savings opportunities.

SECR is a positive step forward, but in truth, the summarised detail is lost in the annual report and it may be better if more analysis was provided in the disclosure.

For the next ESOS compliance year of 2023, it would be worth unwrapping the SECR summary for deeper analysis. This may support senior management in understanding the key drivers, as well as assist with the constant drum beat of energy awareness.

Alan Ford, Consultant at Auditel

Can SECR fill the void where ESOS failed?

Whilst SECR could be seen at first glance as a watered down ESOS without the site audits, it has the ability to deliver a wide range of energy efficiency and carbon reduction measures for organisations for years to come in a way that ESOS alone will never achieve.

ESOS – was it worth it?

Those organisations that are genuinely motivated to improve energy efficiency have used ESOS to provide a roadmap and action plan of deliverable projects. Hats off to them, as they reap the rewards for their hard work, and these are the organisations we all enjoy being involved with. Unfortunately, these are in the minority, and many organisations pass ESOS compliance down the chain until it is typically overseen by a facilities/property manager who is often required to provide compliance at the lowest cost possible.

Delivery of the service then becomes a race to the bottom, with lowest price winning out and little value being gained. Directors and high-level managers often see a report to sign off and fail to see any benefit beyond compliance. ESOS assessors have had to be forceful, or even pushy, to get the opportunity to present a compelling case at board level and to inject a call to action.

The best take-up of recommendations has been with

those organisations that had an active involvement in setting the goals and boundaries of their ESOS audits, taking it beyond a tick box compliance exercise. Organisations that opted (or were steered towards) the DEC route for compliance fared far worse with the result being large folders of worthless reports that will never see the light of day.

This may seem like a damning verdict on ESOS from someone who has completed many ESOS audits and has a vested interest in seeing it continue, but there has to be a better way to promote energy efficiency within organisations; one where decision makers and those who hold the purse strings are actively involved beyond signing the summary page of an energy report.

Step forward SECR - at least I hope so!

With SECR becoming part of the annual Directors' Report, this should give greater visibility of energy use and carbon emissions to those holding the purse strings. With the requirement for year on year reporting, just churning out the same old energy efficiency narrative with a new set of figures will no longer be enough, as interested stakeholders will be looking to see genuine improvement and, dare I say it, directors scratch around looking for something new to say each year. That partial LED project completed several years ago can no longer take centre stage to promote the energy credentials of the organisation.

With SECR, the benefits of energy self-generation and purchasing REGO electricity can be promoted to a wider audience, categories not required within the ESOS audit. Transport, often the poor but significant partner in ESOS audits, will become more prominent. This could even see the acceleration of directors' car park spaces being noted for their EV charging posts rather than the prominent prestige gas-guzzling vehicles often seen today.

SECR is not perfect and one item omitted is a cost attributed to energy and carbon, but with kWh and CO2 figures sitting in the same report as the financials, it is only a small step to understand the cost of these figures.

Of course, SECR could be seen as just another compliance exercise. However, I do hope it will not only drive top-level management to take more of an interest in energy efficiency but it will also see them engage more fully in future rounds of ESOS so that it goes beyond a box ticking exercise and the benefits of both schemes can be fully realised.

Peter Lindersen, Senior Consultant at DNV GL

ESOS and SECR pitfalls

The Energy Savings Opportunity Scheme (ESOS) has given many companies an opportunity to look at their own energy consumption and try to become more energy efficient. However, has it really contributed to an increased energy efficiency uptake in the way intended by the UK government? Having worked with ESOS since 2017, it seems clear that many companies still have a long way to go to make sure energy efficiency is part of their business DNA.

Improving energy performance versus reaching compliance

The purpose of ESOS is good, but in my opinion, it has had mixed outcomes, mainly due to different stakeholders' intentions. Experience shows that you can classify companies into three categories: (1) performing ESOS assessments merely for compliance, (2) already (partly) active in the energy efficiency topic, and (3) applying the knowledge gained from an ESOS assessment and putting in place new procedures to improve their overall energy performance. I hope one day all companies fit into the latter two categories.

How can you improve something you do not measure?

Many still need to start with the basics, which is getting an overview of their energy consumption. In the past three years, my team and I have performed hundreds of energy audits across the UK and Europe, and one of the most challenging steps in the process has often been to understand the companies' overall and site level energy consumption. Getting hold of monthly consumption data has proven to be very challenging, whereas access (to at least invoices) should be easy and should not only be used for ESOS compliance.

I have helped companies to look at their billing data, before I could do the actual energy audit and look for saving opportunities. This is a very time-consuming process that could be easily replaced by smart meters with direct access to the data. The most powerful part of an ESOS assessment is the site visits where you get to speak to people on site, learn how they have to deal with energy efficiency on a daily basis, and understand the commitment and/or involvement from top management.

From ESOS to SECR

When the Streamlined Energy and Carbon Reporting (SECR) came into force on 1st April 2019, it became especially important for companies that are required to report under these new rules to put in place a good system to collect their energy consumption data. Too much time is spent looking for these data, both by companies and ESOS consultants, instead of analysing them. The focus of both ESOS and SECR should be on identifying the energy saving opportunities and thereafter act on as many of them as reasonably possible.

SECR could become a key efficiency driver, but needs to be improved, especially focusing on those companies that are merely looking for compliance. Working with companies that performed ESOS assessments in phase one in 2015 and in phase two in 2019, have shown a wide variety of outcomes, whereas many did not act after the first phase.

My key takeaways?

Companies need to be pushed to get their energy management up to speed by – at least – collecting and analysing monthly consumption data, and – preferably – installing smart meters to follow-up consumption

more frequently. And as long as energy efficiency regulation does not oblige companies to implement energy saving measures with an economic payback, energy efficiency in practice will always run behind the theoretical potential.

Daniel Shanley, Low Carbon Consultant at Stopford Energy and Environment

ESOS and SECR compliance - pathway to energy efficiency

Last year, the UK became the first major global economy to pass net zero emission laws. As a result, there is a growing pressure on businesses to respond to the climate emergency and to meet the UK's net zero target by 2050. Energy efficiency improvement is a key Government objective to support the transition to a low-carbon economy, facilitating energy security and whilst enabling sustainable economic growth.

As such, there has been an increase in UK legislation requiring large organisations to actively commit to measures that will reduce operational carbon emissions. The Energy Savings Opportunity Scheme (ESOS), and most recently, Streamlined Energy and Carbon Reporting (SECR) are at the forefront of such initiatives encouraging organisations to reduce energy demand.

ESOS summary

ESOS has served to raise awareness of the potential opportunities to enhance energy efficiency and decrease operational energy demand to thousands of organisations across the UK. Whilst ESOS has supported the uptake of 'low hanging fruit' energy efficiency measures, which has been an excellent first step for many organisations, evidence suggests that as little as 5% of organisations have implemented scheme recommendations in full.

Capital investment is a key barrier towards the implementation of energy efficiency measures, with the commitment of Senior Leadership typically required for implementation of energy saving measures, especially for projects that have paybacks greater than 3 years. As such, there is an outstanding requirement to support organisations to implement real change with respect to their activities, which could be aligned to further fiscal subsidies to facilitate the transition to low carbon operations.

A number of organisations have prioritised efforts solely on achieving legislative compliance, without necessarily appreciating the wider benefits that energy efficiency improvements can present to their business. As such, the lack of accountability towards implementing the potential energy efficiency measures, which are voluntary for ESOS, has limited the overall effectiveness of the post ESOS assessment actions to date.

SECR as a driver

SECR can encourage organisations to be more proactive with respect to energy management, as part of wider Greenhouse Gas (GHG) emissions reporting. Importantly, unlike some historic policy mechanisms, the data collection process for both SECR and ESOS is similar, which is likely to streamline procedures in order to enhance energy efficiency, whilst enabling reporting consistency between the two schemes.

The lack of accountability regarding the implementation of relevant and practical energy efficiency measures from ESOS can be corrected through SECR, through the requirement of organisations to publish their energy and emissions data as part of their annual report. It is anticipated that such visibility of metrics relating to energy use and carbon emissions will drive activity within organisations to both reduce energy demand whilst enhancing energy efficiency measures.

This will be further intensified by the increased reporting requirements under SECR, with data being published on an annual basis as opposed to every four years under ESOS. Furthermore, it is hoped that the increase in monitoring and reporting requirements, under SECR, will help promote the importance of energy efficiency at a Board Level, which in turn will facilitate further strategic capital investment in low-carbon projects, above and beyond "quick-win" measures.

However, whilst the similarities between ESOS and SECR may facilitate a simple transition between schemes, there is also a danger that such similarities may also cause confusion with respect to requirements. Furthermore, whilst SECR aims to reduce the administrative burden of complying to multiple regimes, it is feared that the costs associated with meeting regulatory compliance may ultimately limit the available capital to implement identified energy efficiency programmes. Although it is hoped that with fewer overlapping reporting activities, organisations should be able to focus more clearly on what their energy and associated emission impacts are, and how to reduce them over time.

Could any learnings from ESOS be applied to SECR?

Whilst notification of non-compliance is made public for organisations that don't comply with ESOS, there is no accountability relating to the implementation of the energy efficiency measures. In contrast, with the increasing reporting requirements of SECR it is hoped that this scheme can drive change at a Senior Leadership level, promoting the importance of energy and carbon reporting akin to that of financial reporting.

Whilst there is room for optimism with respect to the potential positive impact of low-carbon policy measures on UK PLC, it is important that such measures and fiscal incentives facilitate long-term sustainable change as opposed to short-term, quick-win activity. This is even more pertinent as companies seek to recover from the impact of COVID-19, whereby adoption of energy reduction strategies may not be initially prioritised. It is therefore hoped that SECR will enable the momentum gained through ESOS Phase 2 to be maintained, whilst presenting additional opportunity for organisations to identify and manage the impact of their operations on the wider environment.

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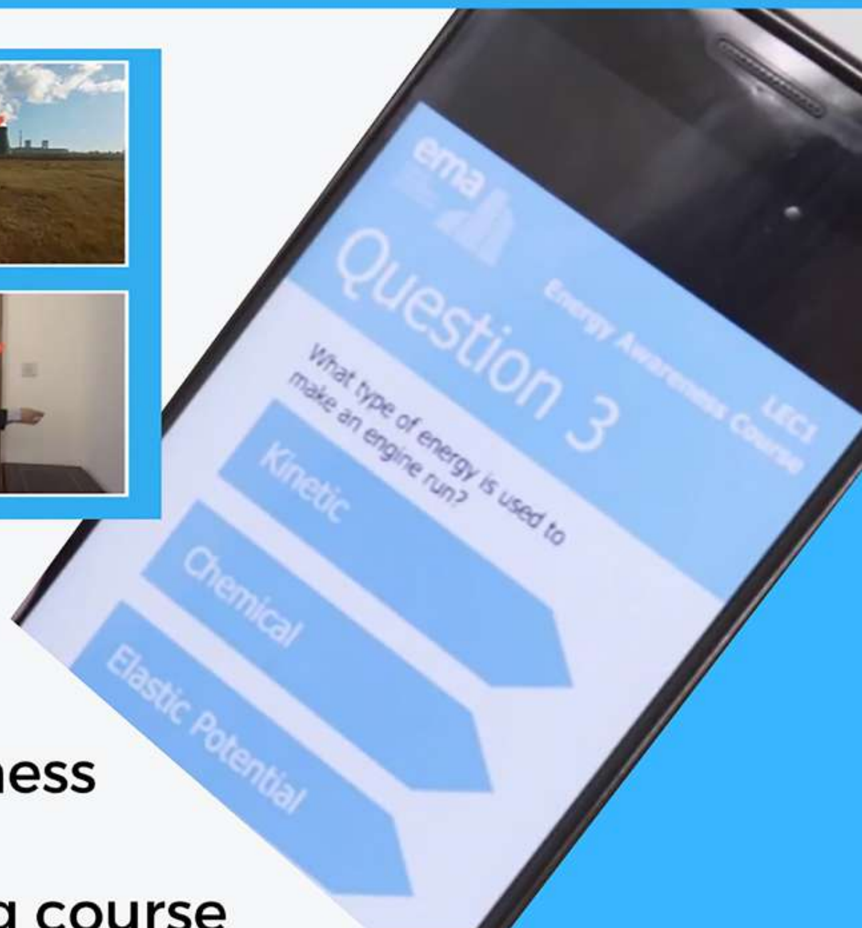

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