inenco

Does **energy reporting** really deliver carbon savings?

Why businesses must turn report recommendations into reality.

Produced in association with

the energyst

energy institute

Energy reporting - why are businesses failing to act?

By Tim McManan-Smith, Editor, The Energyst

the energyst

A little less conversation...

After years of languishing as the Cinderella of the energy industry, with procurement prioritised for many organisations and a Government fixation on power generation, energy efficiency is being viewed as an effective tool to combat costs and reduce emissions. Previous surveys suggest that this is due to a combination of higher energy costs, sustainability objectives and compliance schemes.

Interestingly from this report 81% of respondents said CSR is increasingly important or already embedded into their business. This shows how energy efficiency and its strategic role within organisations is not about to disappear. And compliance schemes do seem to raise awareness, 82% of respondents said energy reporting has either raised the profile of energy efficiency or the organisation already prioritised it. So it seems the message is getting out there.

In addition to the rapidly approaching ESOS phase 2 compliance deadline, the Streamlined Energy & Carbon Reporting (SECR) scheme has been launched.

SECR is a replacement for the CRC Energy Efficiency Scheme and requires organisations to report energy and carbon emissions in their annual report. This begins from on 1 April 2019 onwards.

Whereas the CRC applied to around 4,000 businesses, the SECR regulations will apply to an estimated 11,900 companies across the UK, increasing awareness further through the need to gather energy data. In addition, the SECR guidelines say that businesses are required to comment on any energy efficiency projects and provide a narrative description of the principal measures taken to increase energy efficiency during the relevant financial year. This means that an organisation's action or otherwise is the area of energy efficiency implementation will now be public and must be meaningful, informative and be commensurate with the size and level of energy use of the business.

However, despite an appreciation of the need to be more energy efficient, there is still inertia regarding its implementation. This report highlights that 61% of respondents do not think ESOS Phase 1 was worth it. Correspondingly and not surprisingly, the same number of respondents have not acted on their Phase 1 recommendations. Which explains to some extent why it was not worth it – if you do nothing then you'll get nothing back from it.

ESOS is meant to be about identifying energy saving opportunities, the benefit of which is realised when you act on them. The desire to reduce energy use within organisations appears to be there, yet some see compliance schemes as tick box exercises to be complied with and then forgotten.

Energy is fairly well integrated within many organisations' planning, and is often seen as an operational resource that can be improved upon, rather than just a necessary cost that you cannot do much about.

The question is how to make compliance schemes such as SECR and ESOS a starting point to go beyond the minimum. Going beyond minimum compliance will benefit organisations and this, the majority seem to understand. The report adds useful data to the energy conversation, ironically underlining that it's time for a little less conversation and a little more action.

Executive Summary

Energy reporting is back in the spotlight in 2019, with the new Streamlined Energy and Carbon Reporting (SECR) framework launching in April and Phase 2 of the Energy Savings Opportunity Scheme (ESOS) concluding in December. However, new insight reveals that not all businesses are turning data and insight into energy saving actions.

In a joint 'pulse check' survey between Inenco and The Energyst, business energy professionals have voiced their concerns over the effectiveness of ESOS, the resource constraints caused by increasing reporting requirements and the lack of board buy-in on energy-related issues.

A summary of the 320 ESOS audits delivered by Inenco during Phase 1 of the scheme is included in this report, providing an insight into the energy savings available to organisations, including average payback times. Yet the pulse check found that **just 39% of organisations have acted upon the energy saving opportunities identified in Phase 1,** primarily because it was not seen as a business priority. Furthermore, 61% did not believe that ESOS was worth the effort and resource required to comply and **54% of businesses have not yet commenced their audits for Phase 2.**

The new SECR requirements will mean over 10,000 organisations are required to include their annual energy and carbon emissions in their annual report, yet around half of businesses are unclear of what is required to comply, and 75% admit that senior managers are not fully aware of the new scheme. However, 25% of businesses have found that energy reporting has raised the profile of energy efficiency amongst senior managers and directors.

The data and energy saving opportunities identified by energy reporting provide businesses with a wealth of insight to not only reduce carbon emissions, but also cut costs and deliver a significant boost to both CSR credentials and, crucially, the bottom line. **Compliance is critical, but finding ways to turn recommendations into savings will be vital to make energy reporting a boost rather than burden for businesses.**

13% average kWh savings per organisation identified by Inenco in ESOS Phase 1

Manufacturing sector showed the biggest saving potential, accounting for **60%** of total savings identified

Just **39%** have acted on their ESOS Phase 1 recommendations.

Section One

Shining a spotlight on identified savings

Energy consultancy Inenco conducted 320 energy audits during Phase 1 of ESOS across a broad sample of organisations.

These results have been used to produce an insight into the energy savings available to the manufacturing, retail & leisure and business services sectors.

This third sector includes businesses dedicated to B2B banking, security, data-handling and IT services.

Key findings

Across all sectors, lighting was identified as having the greatest potential to deliver the most significant savings. Similarly, the data tells us that investment in energy management could give businesses across all three sectors valuable returns within less than two years.

Valuable energy savings opportunities exist across all UK business sectors, but the opportunity is largest in the manufacturing sector.

Over 60% of all cost and carbon savings were attributed to this sector, despite the fact just 28% of organisations were manufacturers.

Some areas can deliver savings quickly, while others will give a slower but still valuable return. Renewables and Combined Heat and Power (CHP) systems are a top 3 savings area for both the manufacturing and business service sectors. For the retail & leisure sector, a focus on heating, ventilation and air conditioning (HVAC) systems has the potential to deliver significant savings in under 2.5 years.

Manufacturing

For the manufacturing sector, the top three savings areas are lighting, renewables and CHP, and motors and drives; including retro-fitting of high-efficiency equipment. CHP energy management and HVAC are also key areas for manufacturers to consider.

Retail & Leisure

For the retail and leisure sector, the top three savings areas are lighting, energy management and HVAC. Power Management* should also be on the radar, with the potential to deliver more than significant savings.

*Power Management techniques include voltage optimisation, energy demand management and power factor correction.

Business Services

For the business services sector, the top three savings areas are lighting, energy management and renewables and CHP Power Management. Boilers and HVAC should also be on the radar to optimise savings.

What are the areas savings can be made?

The three most common opportunities from Inenco's Phase 1 findings are:

	Average return period	% of total potential savings across all three sectors
01 Energy Management	1.4yrs	11%
02 Lighting	3.5yrs	30%
03 Renewables & CHP	10.5 yrs	14%

01 Energy Management

- behaviour change, monitoring and targeting, energy reduction, procurement, and training.

Investment in energy management has the potential to deliver impressive savings, making it the third most important focus area across all businesses. For manufacturers, this area falls behind investment in motors and drives as a value-opportunity but could still deliver a significant impact to the bottom line within just over a year.

1.4yrs

11%

02 Lighting

- lighting controls, sensors, timers and retro-fitting of high-efficiency lighting and bulbs.

Lighting is the number one savings area for all sectors. Our data found that this was the most likely recommendation across all sectors, with the scope to deliver significant savings in a relatively short timescale.

3.5yrs

30%

03 Renewables & CHP

- installation of solar PV, air source heat pumps, biomass boilers and sustainable heating.

Renewables and CHP systems are the second most important savings area with the potential to deliver significant savings across all sectors, particularly manufacturing. However, the return on investment in these technologies is over a much longer period than other types.

10.5 yrs

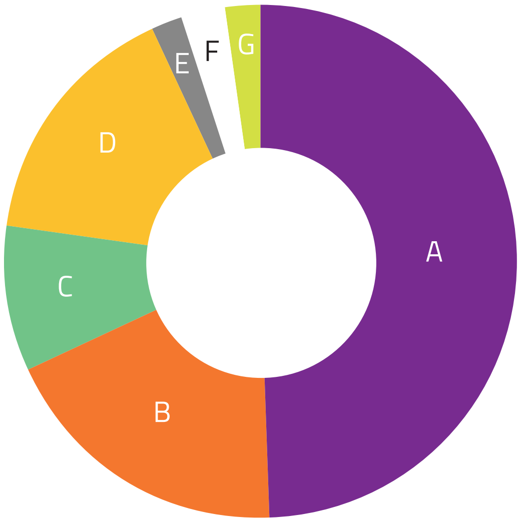
14%

Energy saving action to reap maximum reward

Energy Management

Energy management can provide all sectors with significant savings and is the action which provides the shortest return period.

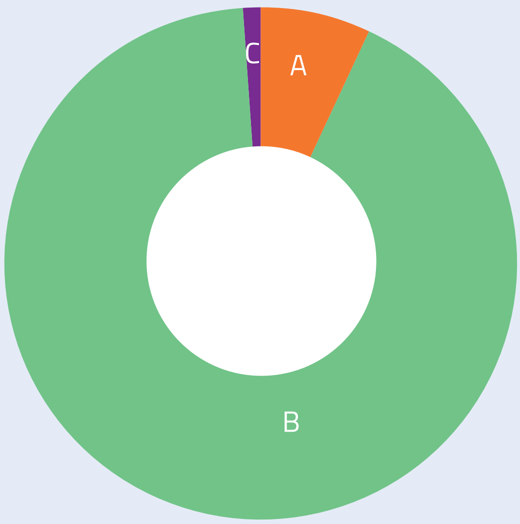
This broad category includes numerous activities, from behavioural change to an improved procurement strategy. Findings from Inenco's Phase 1 insight comprise:



A 49% Behaviour Change
B 19% Monitoring & Targeting
C 9% Energy Reduction Programme
D 16% Energy Management Training
E 2% Energy Management Secondment
F 3% ISO50001
G 2% Procurement

Lighting

As the top saving area for all three sectors, lighting provides businesses with an opportunity to cut costs within a relatively short time-frame.



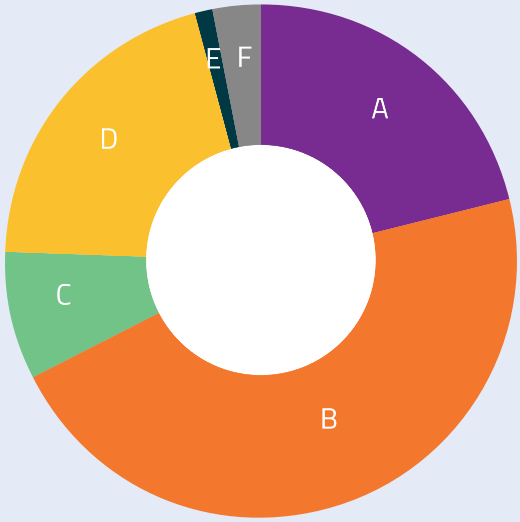
A 7% Local lighting controls
B 92% Retrofit - high efficiency
C 1% Other

Heating, air conditioning and circulation systems (HVAC) is also an important savings area across all three sectors, with potential to deliver cost savings in less than 10 years.

Renewables & CHP

Also within the top three savings areas for all three sectors, adoption of renewable energy and CHP provides tangible cost savings as well as carbon savings, although sometimes over a longer return period. Actions to take include:

A 22% Solar PV
B 46% CHP
C 8% Air Source Heat Pumps
D 20% Biomass Boilers
E 1% Sustainable Heating
F 3% Wind



Section Two

Pulse-check: Business attitudes to energy reporting

To gauge how businesses are responding to this focus on compliance, Inenco and The Energyst conducted a short pulse check of energy professionals. The results are as follows:

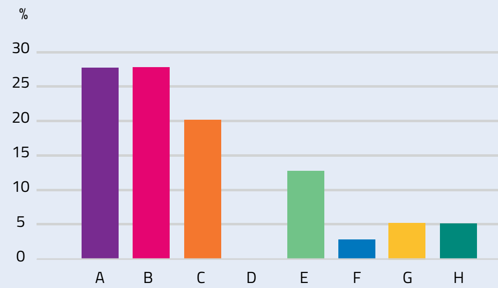
Part A

Energy Savings Opportunity Scheme (ESOS)

ESOS Phase 1 caught many businesses unaware, with just 18 months between scheme launch in 2014 and the compliance deadline in December 2015. The second phase concludes in December 2019.

Q1 What stage are you at with your ESOS Phase 2 compliance?

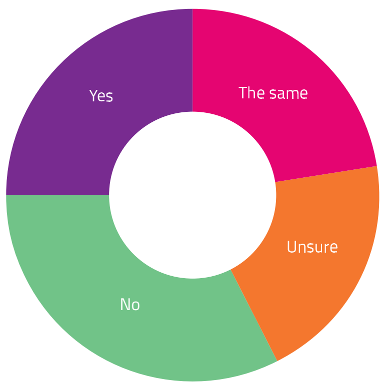
A I have not begun any ESOS Phase 2 work
B I have appointed an external Lead Assessor but not yet commenced audits
C I have my own internal Lead Assessor to submit our ESOS Assessment
D I have submitted my ESOS Assessment to the Environment Agency
E I am certificated to ISO50001 and do not require ESOS Phase 2
F I am planning to sign contracts with external parties
G I don't know
H Other



"54% of respondents haven't commenced their audits"

Q2 In your opinion, is Phase 2 more straightforward than Phase 1 (2014/15)?

Yes
No - it is the same
No - it is more challenging
I don't know

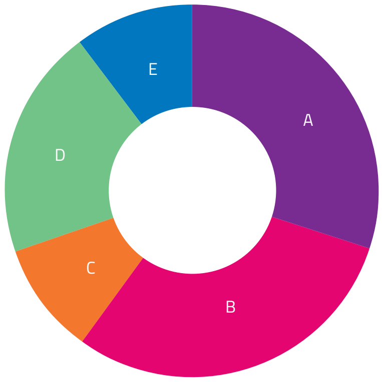


"47.5% of respondents are finding Phase 2 the same or more straightforward"

Q3a Why is Phase 2 proving to be more straightforward?

A I don't have to get my head around the scheme guidelines and requirements this time round
B Phase 1 was more challenging because it was the first time we had to collect this type of data
C Phase 1 was more challenging to get stakeholder/senior buy-in
D I am using a third party to support or manage our compliance (eg. a consultancy)
E I have a colleague who has completed Lead Assessor qualification to manage in-house

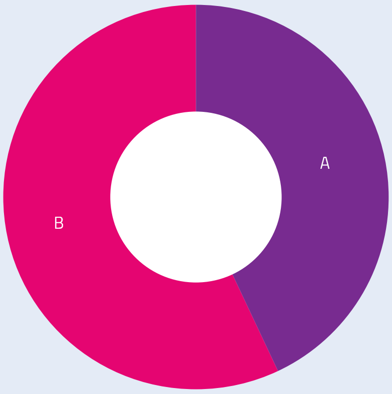
"Of those finding Phase 2 easier, 60% said this is because they now have experience in data collection and the scheme guidelines."



Q3b Why is Phase 2 proving to be more challenging than Phase 1?

A Our estate/portfolio has changed
B Our energy data is more complex this time round
C I have less stakeholder buy-in
D Other

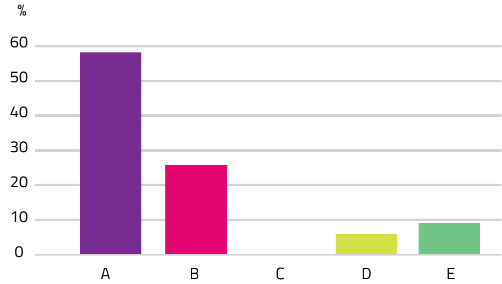
"Of those finding Phase 2 harder, 57% said this is because their data is more complex and 43% said this is because of portfolio changes."



Q4 How confident are you that you will complete all the required audits and reports by the December deadline?

A Very confident
B Somewhat confident
C Not very confident
D Not confident at all
E I don't know

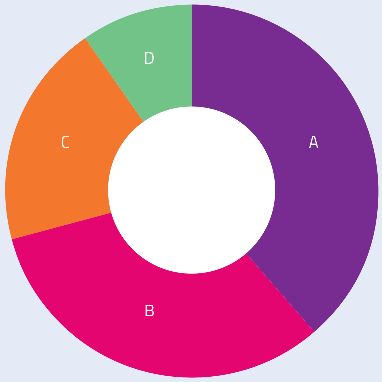
"Only 58% of respondents are very confident they will meet the December deadline."



Q5 Will you comply with ESOS using only internal resources?

A Yes
B No, we have appointed a third party to support us
C We may bring in a third party but we have not appointed anyone yet
D I don't know

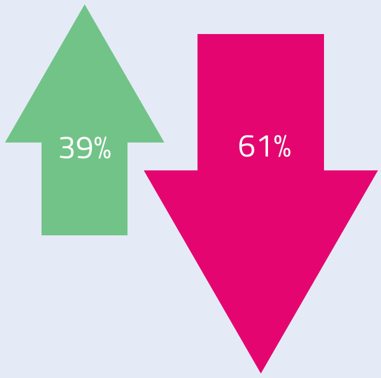
"52% of respondents have appointed/are considering appointing a third party to help them comply with ESOS."



Q6 Do you think ESOS Phase 1 was worth it?

Yes
No

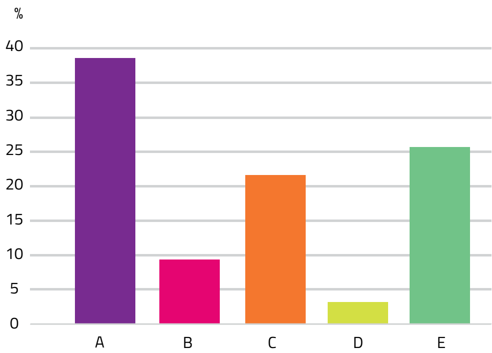
"61% do not think ESOS Phase 1 was worth it"



Q7 Did you act on any of the energy saving opportunities identified in Phase 1?

A Yes
B No, we did not have the budget or/capex to do so
C No, it wasn't seen as a priority
D Not yet, but we do have plans to do so
E Other

"Only 39% of respondents have acted on their Phase 1 recommendations"



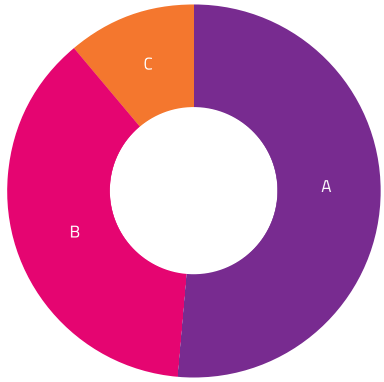
Q8 Do you feel the quality of your ESOS Report/assessor was:

"Interestingly, 53.6% rated the quality of their ESOS Report as good or higher and 35.7% rated it as adequate."

Part B
Streamlined Energy & Carbon Reporting (SECR)

The new Streamlined Energy & Carbon Reporting (SECR) framework comes into force in April 2019. It has been designed to 'simplify energy and carbon reporting requirements' and will require around 11,900 organisations to report on their annual energy and carbon emissions in their annual report for each financial year (beginning on or after 1 April 2019).

Q1 Did your organisation participate in the Carbon Reduction Commitment (CRC) energy efficiency scheme?



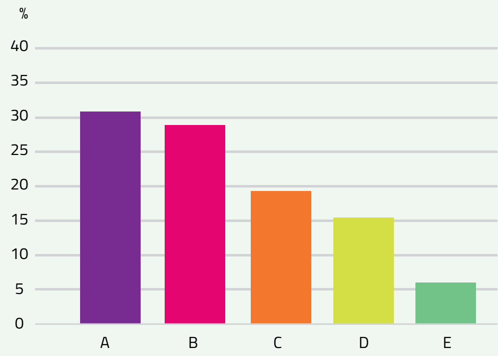
A Yes
B No
C I don't know

"52% of respondents participate in the CRC."

Q2 The new SECR framework comes into force on 1 April 2019. To what extent do you understand what is required of your organisation to comply with the scheme?

A I fully understand the new framework requirements
B I partially understand the new framework requirements
C I do not understand the new framework requirements
D I don't know
E Other (please state)

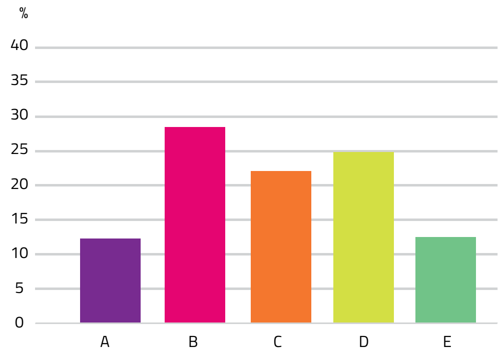
"47% of respondents don't fully understand the new SECR framework requirements."



Q3 To what extent is your board/senior management team aware of the new reporting requirements

A They are fully aware of the need to report on energy and carbon emissions within our annual report
B They are partially aware of the new requirements
C They have a very limited knowledge of the new requirements
D They are unaware of the new requirements
E I don't know

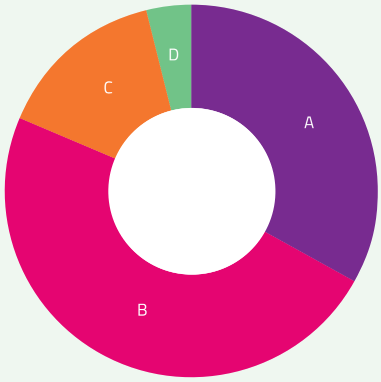
"75% of respondents' senior management team are not fully aware of the new reporting requirements."



Q4 For your organisation, is Corporate Social Responsibility (CSR)...

A Embedded into the business
B Increasingly important
C Not a priority
D I don't know

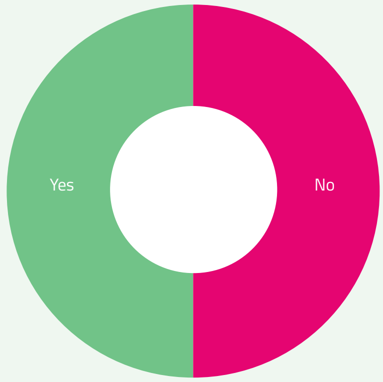
"81% of respondents said CSR is increasingly important or embedded into their business."



Q5 Has your board discussed the impact of CSR credentials being made available for public scrutiny?

A Yes
B No
C I don't know

"Half of respondents' boards have not yet discussed the impact of CSR credentials being in the public domain."

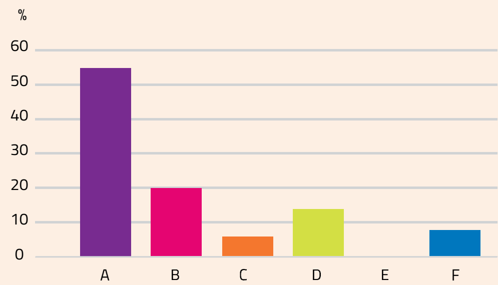


Part C
Energy compliance

Despite the introduction of a new "streamlined" framework, business energy professionals have faced a growing reporting burden in the last five years. This has presented some challenges for organisations, from resource constraints to accessing the data required to submit for various schemes.

Q1 Given the need to report on energy and carbon, how does your organisation allocate resources for this?

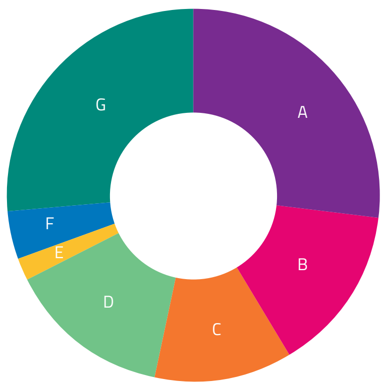
A We have an internal team/individual who manages it all
B We have an internal team/individual responsible and also work with third party consultants to support us
C We have some internal resource but not enough to keep on top of the growing requirements
D We don't have any internal resource dedicated to this
E I don't know
F Other



"54% of respondents use internal resources to manage reporting requirements."

Q2 What obstacles do you encounter when compiling energy and carbon reports?

A My energy data is not easily accessible
B The data I have from my suppliers/consultants is not in the same format as the reporting requirements
C Lack of support from the board for reports such as these
D These are tick box exercises that provide little business benefit
E We do not have the time or resource
F Other

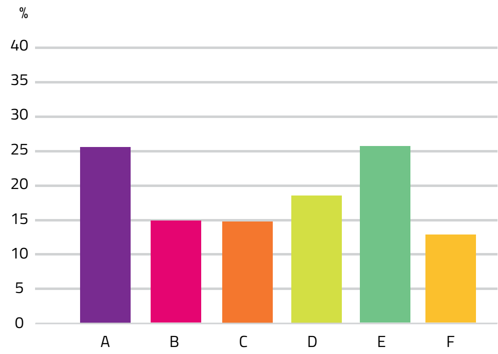


"Businesses cited data as the biggest obstacle to compiling reports, with over a third (34%) of all responses."

Q3 How has energy reporting impacted the profile of energy efficiency in your organisation?

A It has raised the profile of energy efficiency amongst senior management / directors
B It has changed business priorities to focus more on energy reduction
C It has raised awareness of energy efficiency amongst employees
D It has not changed the profile of energy efficiency - our organisation did not prioritise it before
E It has not changed the profile of energy efficiency - our organisation already prioritised it
F I don't know

"56% of respondents said energy reporting has raised the profile of energy efficiency in its organisation.

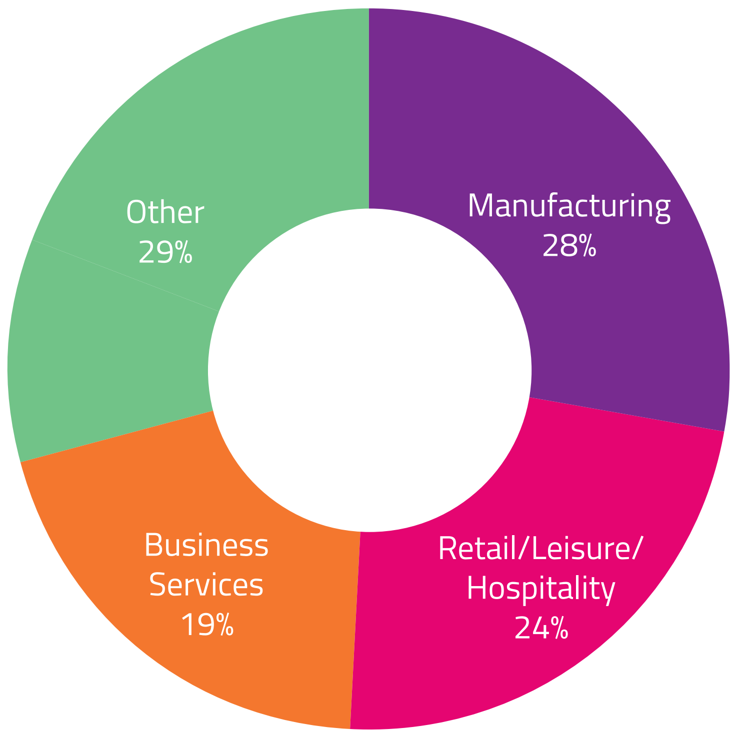


Methodology

To understand why businesses might be inhibited from acting on their report recommendations, Inenco teamed up with The Energyst to conduct surveys with businesses affected by ESOS and SECR during February / March 2019. This primary research delved into attitudes, preparedness for ESOS & understanding of SECR of business energy managers.

77 businesses surveyed during February/March 2019.

Sector breakdown of respondents



Sector insights

Large organisations across all sectors have revealed issues and obstacles, from a lack of board level buy-in to data challenges, resourcing and budget constraints. A combination of factors have limited their ability to invest in new energy saving measures.

Yet there are distinct differences between sectors. A tough retail environment and more immediate priorities could be a factor behind retailers lagging behind other industries in commencing their ESOS Phase 2 audits. Challenging economic conditions and Brexit uncertainty may be behind the fifth of manufacturers citing budget availability as the primary factor behind a lack of acting on Phase 1 recommendations.

However, despite these external uncertainties, opportunities do exist to quickly implement actions with a clear return on investment. This snapshot of trends summarises the key findings from the Inenco research and analysis for three key sectors.

RETAIL & LEISURE

27% of ESOS Phase 1 businesses analysed in this report were in the retail sector, accounting for **15% of all identified cost and carbon savings**

80%

80% of retail & leisure businesses have not yet commenced their Phase 2 audits

50% of respondents in this sector cited lack of board support as the biggest obstacle they encounter when compiling energy reports

Top area for savings identified for retail industries as part of Inenco's Phase 1 reporting was lighting, closely followed by HVAC

67%

67% of retail businesses do not think ESOS Phase 1 was worth it with over **50%** of respondents not having acted on their recommendations

Inenco's experience has shown **5%** savings within **3 months**

3 months

MANUFACTURING

An in-depth review of processes and efficiencies is at the heart of delivering energy optimisation

Top area for savings identified for manufacturing industries as part of Inenco's Phase 1 reporting was lighting, closely followed by renewables and CHP

38% of manufacturers cited data as the biggest obstacle for energy reporting

20%

20% of manufacturers did not act on their Phase 1 recommendations due to budget availability

60%

The manufacturing sector has the biggest savings potential of all, with **more than 60%** of all savings identified

BUSINESS SERVICES

23%

23% of all savings were identified by these businesses from Inenco's ESOS Phase 1 customers

33% of these businesses are not confident they will meet the ESOS Phase 2 deadline

Business services companies said the biggest obstacle to reporting is that their energy data is not easily accessible **(44%)**

Top area for savings identified for public sector industries as part of Inenco's Phase 1 reporting was lighting, followed by energy management

Conclusion and recommendations

Energy reporting provides businesses with the insight and recommendations needed to achieve cost and carbon reductions, but delivering tangible savings requires action.

The pulse check survey has identified limited uptake of ESOS Phase 1 recommendations and muted enthusiasm for the scheme, even though business energy costs have risen by up to 25% in the last four years.

The reporting burden placed on organisations has grown against a backdrop of a challenging economic climate, undoubtedly impacting budgets and business priorities. Yet the only certain way to reduce the impact of rising energy costs is to reduce consumption, making the insight gleaned from reporting an invaluable tool for all energy users.

Engage

2019 presents an opportunity to place energy in the spotlight in large organisations. Why not work smarter and engage senior management with compelling energy optimisation projects that will recoup the cost of regulatory compliance?

Prioritise

ESOS audits will identify a multitude of opportunities to reduce energy, from behavioural changes to new energy management processes. Working with an expert energy consultancy can help to define compelling business cases and support in the process of gaining buy in from the organisation's leadership.

Budget

Business energy costs are forecast to continue rising over the coming years for all organisations. Proposed Ofgem changes also mean a shake-up to network charging structures which could mean big cost increases, particularly for those businesses currently reducing consumption during Triad periods. Consider current and future energy costs when identifying and prioritising energy saving recommendations: taking action today could avoid a big hit to the bottom line in future years.

Inform

Getting to grips with energy reporting schemes can be challenging. Inenco's energy compliance hub provides up-to-date explanations and information about ESOS, SECR and the changing regulatory environment, helping businesses to keep abreast with compliance news and understand what it means for them: **www.inenco.com/insight/compliance-hub**

Professional body view

ESOS is about opportunity, not compliance

By Nick Turton, External Affairs Director, Energy Institute

The case for better managing how we use energy has never been so compelling. Cutting damaging carbon emissions, reducing business costs, consumer demand for high environmental standards – these are all pushing businesses, organisations and householders in the same direction.

And the availability of innovative, affordable technologies – in heating, lighting, insulation, small scale power generation and smart flexibility – is opening up myriad opportunities for action.

So businesses are mistaken if they pigeonhole legal reporting obligations such as ESOS and SECR as a compliance issue. They're about opportunity.

For large businesses, the Carbon Trust estimates improved energy efficiency can save twenty per cent on an energy bill. That's an annual average saving of £360,000. According to the International Energy Agency, forty per cent of the emissions abatement required by the Paris Agreement can be delivered by energy efficiency.

But the most effective, enduring outcomes only happen when implemented by skilled professionals using the best practices.

The Energy Institute – the chartered professional membership body for the energy sector – runs one of the biggest registers of qualified ESOS lead assessors. All our registrants are experienced professionals who hold chartered status. Under phase 1 they were responsible for carrying out 30% of the assessments undertaken, providing trusted advice and helping businesses get the most out of their energy spend.

We also provide a 5-hour CPD Training Package for those undertaking ESOS audits, a newly expanded ESOS Toolkit containing templates and guidance to support the auditing process.

Whatever your job title, whatever your business or organisation, if you want to help drive forward these transformational efforts, the Energy Institute is here to support you every step of the way.

Details on these resources can be found at www.energyinst.org/industry/esos

ESOS Case Study

100% compliance, 100% customer satisfaction

Client:

FMG - Incident management and roadside services

The UK's leading provider of fleet incident management chose Inenco as their trusted partner for ESOS Phase 1. Inenco's ESOS experts worked closely with the internal teams at FMG, beginning with a site audit to assess their requirements and advise on timescales, before guiding them through the reporting process.

Objective:

The aim was to remove FMG's reporting burden and to avoid costly penalties by ensuring 100% compliance.

Action:

Consumption was evaluated right across the business by an Inenco Lead Assessor, using innovative data handling systems and tried-and-tested processes to identify areas for improvement. Support was then provided to complete all necessary documentation.

Outcome:

ESOS notification was submitted in full and on time, and FMG also passed an important Environmental Agency audit as a result of their work with Inenco.

"I wanted to say thank you for your support throughout the ESOS process. You've been polite and knowledgeable at all times, efficient when responding to requests and helpful in explaining this new process to me. Thank you!"

- Janette Waterhouse,

Procurement & Facilities Manager, FMG

FMG

THINKING AHEAD

inenco

Over 223 tonnes of carbon savings identified for our customers.

The Inenco experience:

Inenco is one of the largest business energy consultancies, with a team of compliance and solution experts working with organisations across the country.

We have completed over **1,440** site surveys and identified **223,199** tonnes worth of carbon savings for our customers.

We've helped businesses to identify potential savings of **495,338,992 kWh**, with a combined total of **£37,531,485** per annum - equating to **13%** average kWh savings per organisation.

Shaping the future of business energy

Speak to a member of the Inenco compliance team today to find out how we can help your business make the most of your energy reporting.

Get in touch on **08451 46 36 26**
email **enquiries@inenco.com**
or visit **www.inenco.com**