

Inside an SI 426 Audit.

*What happens between the first email
and the signed report, and what happens
after.*

A practical guide for CFOs and Finance, Operations, Energy
and Sustainability leaders preparing for their first
mandatory energy audit, or their next one.

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July 2026

Exemplar

EXECUTIVE SUMMARY

What an SI 426 audit involves, and what it delivers when done well

If Article 11 is likely to bring your business within the energy-audit regime as it is implemented in Ireland, an audit may become a compliance requirement. It covers **every fuel your business uses**: electricity, gas, oil, LPG, transport fuel and on-site generation. More usefully, it is *a structured decision-making process* in six discrete stages, each with a specific ask on your team and a specific output that lands with your board and, finally, with SEAI.

The report is only the starting point. The real value comes from the decisions and improvements it supports over the following four years. Sections 5 and 6 walk through two anonymised cases: how an audit scales across a national network of over 100 sites, and what the second audit measured of what the first identified five years earlier. That progression, not the box ticked in year one, is what a well-run audit cycle should look like.

What follows is what actually happens in an SI 426 audit engagement with Exemplar.

This paper explains

- The six stages of a compliant SI 426 audit, and the commercial output from each stage.
- The exact data you'll be asked for, and how much of your team's time it takes.
- What you receive at the end: the Action Plan, per-measure cards for the Energy Conservation Opportunities (ECOs), life-cycle cost analysis (LCCA), and the SEAI notification.
- Two anonymised client cases: an audit at scale (over 100 sites) and an audit over time (before/after, five years apart).

The trigger for a mandatory audit should move from company size to energy consumption **on implementation**. Once in scope, the audit is required every **four years** thereafter.

THE NEW SCOPE TEST



Applied per trading company (its Company Registration Number, or CRN), not the parent group. Charities, non-profits and sole traders are included. Public bodies sit on a separate regime pending definition by SEAI.

THE AUDIT JOURNEY · PART 1

Scoping, Data, and the Site Visit

The first four weeks. What we ask you for, and how long each step takes.

01. Scoping & kickoff

Two weeks. One fixed fee for the whole audit, agreed at scoping. We confirm which trading entity is in scope (usually a single company registered with one CRN, not the parent group), which sites fall within the audit boundary, and the data window (typically the most recent 12 calendar months). For multi-site clients, we set the sample size using SEAI's $\sqrt{N}$ rule.

02. Data collection

Two to five days of your team's time, spread over three to four weeks. We build a complete picture of every fuel you use. That means 12 months of electricity bills and MPRN 15-minute data; gas bills and GPRN half-hourly data; LPG and oil delivery invoices; fleet fuel-card records; sub-metering exports where they exist; PV inverter feeds if you have on-site generation; and nameplate data for major plant. We write to your suppliers with your authorisation and pull the granular data ourselves.

03. Site visit

One day per sampled site. Minimal operational disruption. A walk-down with your Facilities or Production lead, a short interview on operating patterns and shutdown cycles, nameplate confirmation of significant equipment, and photographs of the plant. For multi-site clients, sites are grouped into homogeneous clusters and the sample is drawn per SEAI guidance, not a token visit to your flagship site.

"The audit doesn't ask you to install anything before it starts. It works with the data you already have and tells you where the gaps are."

Multi-site clients see a specific version of this stage: sample size set by SEAI's $\sqrt{N}$ rule, sites grouped into homogeneous clusters, interval electricity data pulled for the whole network with your authorisation, benchmarks extrapolated from the audited sample. See **Case study · at scale** on page 5 for what this looks like in practice.

2–5 days

Of your team's time over the data-collection window

1 day / site

Site visit, minimal operational disruption

2 wks

Scoping and kickoff window

3–4 wks

Data-collection window

$\sqrt{N}$

Multi-site sample-size rule (SEAI)

10–12 wks

Kickoff to signed report

THE AUDIT JOURNEY · PART 2

Analysis, Opportunities, and the Action Plan

Weeks five to twelve. This is where the audit stops being a data exercise and informs decisions.

04. Analysis

Two to three weeks in our office. No further ask on your team. We build the full energy balance: fuel by fuel, month by month, load profile by load profile. We segment by Significant Energy User, or SEU (anything above 5 % of total or with material improvement potential; SEUs must together cover at least 85 % of consumption). Baseload is isolated from active load using the 15-minute data. Where sub-metering doesn't exist, the balance is reconstructed from nameplate capacity, operating hours and load factor, documented per line item so the numbers are defensible.

05. Opportunity long-list → priority shortlist

One client-review workshop, typically half a day. The long-list is usually 15–25 candidate Energy Conservation Opportunities. We take you through each one with capex, energy saving, cost saving, LCCA/NPV, IRR, avoided CO₂ and asset life. You short-list to the measures you'll take to detailed assessment, typically five.

06. The Action Plan

Report and Action Plan delivered ten to twelve weeks after kickoff. The Action Plan is the client-facing deliverable that goes to your management team. It is now also a mandatory submission to SEAI's notification portal under the Recast Directive. The audit report is signed by the Registered Energy Auditor and by a Director of the obligated entity. Data is retained for four years on cloud with SSL and 2FA, ready for the next audit cycle.

What management actually gets

- Executive summary with headline savings and portfolio IRR.
- SEU league table and per-fuel energy balance.
- Per-ECO card: capex, savings, payback, NPV, IRR, CO₂, risks, asset life.
- Prioritisation matrix by capex, payback, disruption and strategic fit.
- Full compliance evidence trail: Annex VI criteria mapped, coverage stated, sign-off block.

10–12 wks

Kickoff to signed report

5Priority shortlist size (typical),
taken to detailed assessment**15–25**ECOs identified in a typical
audit**≥85%**Of delivered energy covered
(regulatory minimum)**LCCA / NPV**Default financial test; simple
payback with justification**Every 4 yrs**Re-audit cycle for continued
obligation

CASE STUDY · AT SCALE

Scaling Across a National Network

One anonymised client. Over a hundred sites. What an audit looks like at network scale.

A recent Exemplar client: a large multi-site operator with a national network of well over 100 sites plus a head office. Four fuels in scope: electricity, natural gas, LPG and transport fuel. The compliance test is not whether any single site is transformed; it is whether the same measure, replicated across the network, adds up to a group-level number the board can defend.

THE CHALLENGE · A NATIONAL NETWORK

One CRN, over a hundred sites

Baseline energy: **~34 GWh/yr** across four fuels. Coverage of at least **85 %** of delivered energy needed to satisfy the compliant-audit test. Every site had to be represented in the analysis, one way or another; a token visit to the largest location would not have met the regulatory bar.

WHAT EXEMPLAR DID · SAMPLING AT SCALE

SEAI $\sqrt{N}$, stratified

Ten sites visited, grouped into homogeneous clusters by size and operating profile. Interval electricity data pulled for the full network with the client's authorisation. A network-level energy balance built from bills for every site. Site-level benchmarks derived from the audited sample and extrapolated across the rest. **Twelve weeks** kickoff to signed report.

THE IMPACT · SMALL PER SITE, MATERIAL AT GROUP

A network-wide number

Five priority measures identified across the shortlist. Per site the savings look modest; aggregated across the network they are strategic. **~7.3 GWh/yr** identified (roughly **20 %** of the network baseline), **~€1.7m/yr** avoided energy spend, **~1,700 tCO₂/yr** avoided emissions. Blended simple payback of **2.8 years** across the portfolio.

~7.3 GWh/yr

Identified savings (~20 % of network baseline)

~€1.7m/yr

Avoided energy spend

~1,700 tCO₂/yr

Avoided emissions

2.8 years

Blended simple payback

"A one-per-cent improvement per site is a rounding error. Across a hundred of them, it is a line in the annual accounts."

This is where a multi-site audit earns its keep. The value is not in what any one site can deliver on its own; it is in what the same well-chosen measure delivers when it is rolled out across the estate. The audit does the accounting so that the roll-out is not a hunch.

CASE STUDY · OVER TIME

What Actually Changed, Five Years On

One anonymised client. Two Exemplar audits. What the second measured of what the first identified.

Another Exemplar client: a large multi-site industrial energy user in scope of SI 426 under the old size-based test. We audited the two highest-consuming sites in detail in the first cycle, produced an Action Plan with a priority shortlist, and returned three to four years later for the mandatory re-audit. Below is what the second audit measured of what the first recommended.

AUDIT #1 · WHAT WE FOUND

The starting position

Baseline energy: **~7.7 GWh/yr** across electricity, gas, transport fuel and heating oil. The two highest-consuming sites audited in detail (~33 % of group energy); the remainder covered at group level via bill and fleet data.

19 opportunities identified across the two audited sites. Portfolio potential: **~3.2 GWh/yr** savings identified, **~€460k/yr** avoided spend, **~1,050 tCO₂/yr** avoidable. Priority shortlist optimised at payback ≤ 8 years and IRR ≥ 10 %.



BETWEEN AUDITS · WHAT GOT IMPLEMENTED

Three to four years of action

Across the intervening cycle the client delivered **three shortlist measures**: **on-site rooftop solar PV** commissioned at the largest site; **roof-void insulation** retrofit completed; and a **process-envelope improvement** delivered on the highest-load area. Three further measures were re-shaped by operational change and re-scoped for the next capital cycle; three carried forward unchanged to Audit #2.



AUDIT #2 · WHAT WE MEASURED

The second cycle

The three delivered measures were independently verified against the Audit #1 baseline: **~70 MWh/yr** midday electricity offset from the PV, quantified via 15-minute interval data; **~12 MWh/yr** thermal saving from the insulation retrofit, tracked via delivered-fuel volumes. Baseload for the improved area was measurably lower than the pre-audit profile. Data methodology upgraded across the group: 15-minute interval data now covering the majority of sites, up from monthly billing. New opportunities surfaced: fleet electrification pathway, plant renewal, sub-metering programme.

"This is what an SI 426 audit looks like when it isn't a tick-box. The first cycle finds the opportunities; the second cycle proves they were real."

The point of the four-year re-audit cycle is not compliance for compliance's sake. It is measurement. In this case, the second audit confirmed a real, durable reduction in the client's energy footprint *and* surfaced a new set of opportunities shaped by the changes the first audit set in motion. That progression is what the recast Directive is trying to enable across businesses newly brought into scope, and it is what Exemplar builds its audits to deliver.

LOOKING AHEAD

Start Sooner Than the Deadline Suggests

A compliant audit under the recast Directive expects **measured 15-minute data**, **life-cycle NPV analysis**, coverage of **every fuel your business uses**, and a **mandatory Action Plan submitted to SEAI's portal**. Businesses without existing sub-metering need months to build the data profile. Starting the conversation now means your first audit cycle **proves value**, instead of scrambling to prove compliance.

The window of expected implementation and the first-cycle deadline (**11 October 2026** for newly-obligated firms; **11 October 2027** for enterprises above 85 TJ/yr to have a certified EnMS in place) is the window to do this well. Ten to twelve weeks of audit, four years of implementation, one re-audit that measures what you did. Then repeat, every four years. That is the cycle. It works.

FIRST STEPS

- The last 12 months of electricity, gas, oil and LPG bills. Supplier PDFs are fine.
- Your MPRN(s) for electricity and GPRN(s) for gas. We'll pull the granular data ourselves once you authorise.
- Fleet fuel-card records if company vehicles are in scope.
- A quick sense of which processes or sites use the most energy. No precise breakdown needed.
- Whether you already have ISO 50001 (in whole or in part). This changes the audit-vs-EnMS route.
- Your first-cycle deadline if you know it, or the year of your last audit.

Send us 12 months of energy bills.

Within 5 working days we'll confirm scope and outline an audit built around your business, not a checklist.

**Request a five-
working-day scope
check →**

Or book a 30-minute call.

I'll walk you through what an audit at your site would look like, using anonymised examples from our past work. Useful if you've read this far and want to talk it through.

Book a call
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