EED - Energy Efficiency Directive
What you need to know in 2018

Prepare for the next phase of energy audit obligations with advice from the experts.

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How it affects you

The European Union (EU) has set an ambitious goal of improving energy efficiency at least 30 percent by 2030. That target is the driving force behind various legislation, starting with the Energy Efficiency Directive (EED), a set of binding measures to help the EU reach its efficiency and broader sustainability objectives. It has also cascaded to country-level policy.

Organisations that qualify under EED obligation must carry out energy audits every four years, with the 5 December 2015 as first qualification date. Many organisations under the EED obligation are now entering the second cycle of mandatory audits.

EED in figures

30% for 2030 EU's energy efficiency target

28 EU member states part of the regulation

100,000+ businesses impacted across Europe

250 employees / **€50m** turnover / **€43** balance sheet to qualify*

Up to **€ 200,000** in penalties for non-compliance

5th December 2019 next compliance date*

130 clients benefited from Schneider Electric's EED services

350+ energy audits successfully completed

*country-specific rules may vary

EED's transposition into 28 national rules was finished in 2017.

Who needs to comply

Per definition of EED Article 8, the energy audit obligation affects enterprises that are not small or medium-sized enterprises (SMEs). **The European Union definition describes these Non-SMEs as follows:**

Organisations that employ at least 250 people

and / or

Have an annual turnover in excess of €50m and / or a balance sheet in excess of €43m

Most public-sector bodies are excluded from EED, but other organisations that receive some public funding, such as universities, may qualify. However, national transposition has added country-specific rules, with some countries adapting to significantly different qualification principles beyond EU requirements, such as the site-based qualification in Belgium, or the volumetric threshold in Portugal. For multinational companies with operations across various European countries, this adds a layer of complexity. Consider for example, an UK-based corporate group where at least on members fits the above criteria must comply entirely with EED/ESOS.

In most of the member states, qualification needs to be reviewed on annual basis. In case the organisation meets the criteria, participation in the scheme is obligatory. Qualifying organisations are required to measure total energy consumption across a reference period, including the qualification date in some countries. It is important to recognize that since Phase 1, there have been significant changes to EED local regulations. To get prepared for Phase 2, companies need not only to review organisational changes or update energy consumption data, but also have to assess these fundamental changes.

Anastasiia Gehre

Product Application Specialist
and former master student
Energy & Sustainability Services

The Researcher's View:

"When I started my research on internal quality insurance for energy audits in 2016, Schneider Electric had already supported over 130 clients across Europe with 350 site audits. My work was dedicated to identifying the main roadblocks and improving the process. Our market research showed that most companies struggled to fulfill the obligation in due time. By 2015, businesses were undoubtedly not prepared for EED and often frustrated with the additional burden. Consequently, our tip for Phase 2 is to start early, as it will take longer than you think to comply. Just gathering data can take 4-6 weeks. And get help if you don't have enough time or experience, thus avoiding any bottlenecks."

Gathering data for EED audits can take up to 4-6 weeks.

How to comply

EED Article 8 requires all qualifying organisations to provide comprehensive assessments of their total energy consumption and associated energy efficiency opportunities at least once every four years. 'Total energy consumption' refers to all energy use across an organisation's entire portfolio of sites.

Compliance to EED obligation includes a number of steps including (but not limited to):

1. Determining whether you meet the qualification criteria.
2. Measuring your total energy consumption, including rented buildings and transport (scope varies per country).
3. Determining the areas with most significant efficiency opportunities, i.e. based on share on total energy consumption.
4. Ensuring that these areas are then targeted by a suitable audit to identify cost-effective energy saving measures.
5. Following specific accreditation, board-level review and sign off processes as required to get formal notification of compliance.

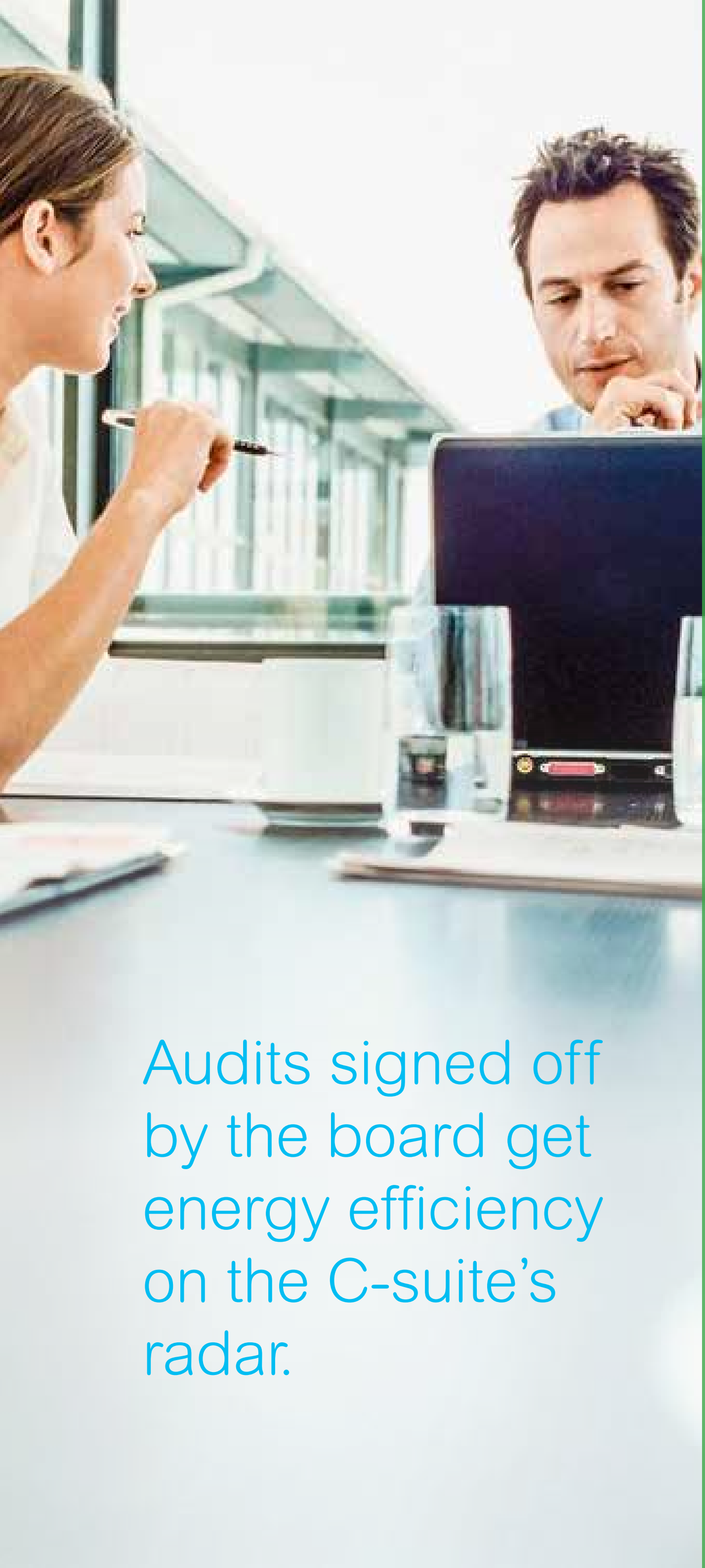
While these general steps apply to almost all 28 EU member states, the details of qualification, audit process and sign off can be unique from country to country.

Maureen Bray

International Consultancy Manager
Energy & Sustainability Services

The Compliance Consultant View:

"EU Regulatory compliance obligations are rising in numbers; from the Energy Efficiency Directive to the Non-Financial Reporting directive. The complex nature of local law transpositions can be difficult to track. In addition, there is also the complexity of monitoring and applying EU laws and country-specific laws. With EED Phase 1, we learned that managing compliance went far beyond simply identifying which sites were required to get an audit. We also learned that connecting and tracking all relevant compliance schemes under one strategy yielded significant benefits for our clients. We also considered voluntary schemes to better meet today's demand from stakeholders and customers for greater transparency. One other piece of practical advice is to consider ISO 50001 as an alternative route to EED compliance. By being proactive about compliance in a holistic way, companies can not only stay on the right side of the law, but also increase awareness of its commitment to sustainability, which can set you apart from competitors."



Audits signed off by the board get energy efficiency on the C-suite's radar.

Prepare for 2018

EED Phase 1 went into effect with very short-term deadlines, leaving affected businesses almost no time to coordinate the necessary resources and budgets to take action on opportunities identified. The late rush in demand for EED audits impacted the availability of external support, which left a substantial share of companies in non-compliance.

Lesson learned from EED Phase 1: Prepare for Phase 2 now and take action early.

1. Start research now about how EED Phase 2 will impact your business and what facilities will be included, especially if there have been changes to your business since the last phase. Be sure you understand country-specific requirements, as this may actually decrease the number of audits you'll need to implement.

2. It is very likely that the data that you are required to collect for EED could be re-purposed to satisfy other reporting schemes, programs or initiatives. Consider this early on in the process to avoid redundant efforts in time and resources.

3. If you're considering ISO 50001, the more 'sustainable' route to compliance, bear in mind that gaining certification for the energy management standard can take a long time (often 12-to-24 months) – so factor this in when planning.

4. For larger organisations, a combination of external expertise and internal capacity building will provide the necessary business case to fund EED efforts in the long-term. This will require dedicated resources in due time.

5. By starting early, you now have the time to prepare strategies, resources and budgets to act on the energy efficiency recommendations uncovered by the EED audits, thus saving you money well into the future.

Paul Wrighton

Director, North West Europe & Nordics
Energy & Sustainability Services

The Efficiency Expert View:

“The good news is that there is a strong business cases for efficiency as a strategy that supports not only compliance, but also business profitability and performance. From the evaluation of client audits conducted under EED/ESOS Phase 1, we not only identified average savings of about 20%, but also showed that 60% of those energy conservation measures (ECMs) had pay backs of under two years. However, without actions to implement those ECMs, the vast majority of those savings remain untapped today. We believe that the main barriers to success are often organisational, not technical. Without a shared corporate vision, a clear financial plan and a consistent method to track and verify savings, many companies fail to act on savings. This is why EED Phase 2 presents such a good opportunity. Those companies that act early and think long-term will be able to embed compliance into larger energy efficiency and sustainability strategies to ensure they unlock real business opportunities”.

ISO 50001 certification is increasing in Europe with over 80% per year.

ISO 50001: Understand the alternative

The ISO 50001 energy management standard is a proven framework for industrial and commercial facilities, or entire organisations to manage energy efficiently. As of September 2017, over 12,000 sites worldwide had achieved ISO 50001 certification. ISO 50001 aims to establishes structures to implement technical and management strategies that significantly cut energy costs and greenhouse gas emissions – and sustain those savings over time. This is the main difference to a single energy audit, as the standard requires an organisation and facility to demonstrate continual energy performance improvement.

Why should a company consider ISO 50001 for EED compliance:

1 ISO 50001 is a valid alternative route for EED compliance in all EU member states and provides a more consistent approach than the country-specific audit schemes.

2 ISO 50001 compliance enables an ongoing strategy for reducing energy consumption – which makes continuous improvements and board-level support easier to secure.

3 Although the ISO certification itself can be more expensive than an energy audit, ISO certified organisations can achieve significantly more energy savings which translate directly to a healthier bottom line over the long-term.

4 ISO 50001 is based on the Plan-Do-Check-Act structure held in common with other established industry standards, e.g. ISO 9001 (quality management), ISO 14001 (environmental management), so there are significant synergies when combining these management systems.

5 ISO 50001 certification helps demonstrate an organisation's commitment to corporate responsibility and could result in supply chain advantages. It will also help you reduce greenhouse gas emissions to meet EU Emission Trade or other sustainability commitments.

Anticipating these advantages, many organisations are considering ISO 50001 in place of EED Phase 2 and integrating compliance efforts with corporate sustainability strategies and supplier requirements in order to maximize returns of their investments.

Get ready

Learn more about Schneider Electric's Energy & Sustainability Services.

Client Stories

Hub

UK ESOS Phase 2 Guide

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