



Energy Auditor Mutual Recognition Survey Results

Responses collected July to 26th September 2023

Circulated to representative bodies across EU e.g. EENE, AEE, etc.

This is a summary of survey responses for circulation to respondents, it does not contain any other content or contact details.



With thanks to 128 respondents from 21 member states + UK and other.

- EENE
 - <u>https://www.energyefficiencynetwork.eu/</u>
- Association of Energy Engineers
 - Ireland Chapter
 - <u>https://aee.ie/</u>
 - Spain Chapter
 - <u>https://www.aeespain.org/</u>
 - France Chapter
 - <u>http://www.aeefrance.fr/</u>
- SEAI https://www.seai.ie/
- Author & contact for more detailed data;
 - Conor Molloy
 - team@aems.ie phone +35312305018 https://aems.ie/
 - Book on transport energy auditing for savings (May 2023)
 - https://www.riverpublishers.com/book_details.php?book_id=1032













Energy Auditor Mutual Recognition Survey

- This short survey aimed to **understand the capacity for energy audits and energy management systems** (EnMS) in the EU. It was in response to the recently agreed recast Energy Efficiency Directive.
- Under Article 11 of the recast directive (previously Article 8), there are lower thresholds for enterprises to undertake mandatory comprehensive energy audits, and to become certified to a formal energy management system (EnMS) such as ISO50001. Comprehensive energy audits are audits compliant to a minimum standard set under the directive.
 - Mandatory comprehensive energy audits for organisations consuming >10Tj per annum (estimated to be approximately 2.8GWh / 280,000L diesel equiv. per year)
 - Mandatory EnMS for organisations consuming >85Tj / annum (estimated to be approximately 24GWh / 2.4m L diesel equiv. per year)
 - For context, in one member state they estimated the recast EED would increase the obligation to undertake ISO50001 certifications from approximately 60 enterprises (local MS obligation) to 450 enterprises. The energy audit requirement may lead to an 8 to 9 fold increase in obligated enterprises to undertake audits or EnMS.
- Who is undertaking this survey and what will be the outputs This survey is being undertaken by an independent network of EU energy auditors https://www.energyefficiencynetwork.eu/. It was for facilitating discussion only, helping to build awareness and understanding of the upcoming directive, facilitating discussion and sense checking preparedness for the new additions.
- **79% of respondents requested a copy of the survey results**, this document is a summary of the survey results, full spreadsheet for further analysis by country available on request (sans personal details email addresses etc.).

Which country are you responding for or from?

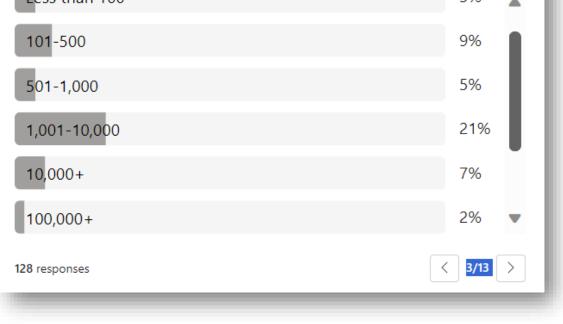
- 128 responses
 - 1. Ireland 52
 - 2. Spain 34
 - 3. France 12
- Responses received from 21 MS
 - 2 from UK, 2 other
- 52% are commercial operators.
 - 16% internal auditors
 - 9% = 'Other'

2. Your role / who are you? Pick one.		
Policy Maker	5%	
National Energy Authority	11%	
Internal Energy Auditor (employed in an enterprise)	16%	L.
External Energy Auditor (commercial operator)	52%	L
Certification Body / EnMS Certification Services	2%	
Enterprise / organisation obligated to do audits or im- plement EnMS	5%	•
128 responses	< 2/13	>

How many organisations in your member state

- How many organisations in your member state are currently obligated to undertake mandatory energy audits now?
 - You can add a don't know or short comment in Other.
- 21% selected 1,001-10,000
 - 2% selected 100,000+ (!)
- 45% answered Don't know

3. How many organisations in your member state are currently obligated to undertake mandatory energy... Less than 100 5%



Audit vs EnMS

How many of **these currently obligated organisations** have chosen the **EnMS / ISO50001** route to compliance (this is allowed under the current directive) ?

4. How many of these currently obligated organisations have chosen the EnMS / ISO50001 rout...

128 responses	< 4/13 >
20% of more	1070
20% or more	10%
11-20%	11%
Less than 10%	30%
Don't know	49%

Growth after 10Tj obligation implemented

5. How many organisations in your member state will be obligated to undertake mandatory energy audits...

Less than 100	6%	
101-500	2%	
501-1,000	4%	L
1,001-10,000	13%	L
10,000+	9%	
Don't know	58%	•
128 responses	5/13	>

- How many organisations in your member state will be obligated to undertake mandatory energy audits after the threshold drops to >10Tj of energy use per annum?
- 58% answered 'Don't know'
- Other comments below
- 10TJ threshold is not currently a UK consideration at this time. Although our Government change with the winds of populism.
- Current National legislation (in force since 2017) obligates for mandatory energy audit at least once every 4 years industrial enterprises with annual energy consumption more than 3 000 MWh (10,8 TJ). The new threshold is quite close to this so we do not expect major change in the number of obligated companies.
- It depends on how the threshold has to be interpreted, in particular which energy carriers have to be included in the 10 TJ threshold and if it is referred to final energy consumption
- In some member states there is no relevant legislation that obliges enterprises to declare their annual energy consumption. This is likely to be the case for other MS. When the obligatory declaration is sorted out, the competent authorities should have to rely entirely on the enterprises statements (declarations) for their energy consumption. In addition, the situation will be further complicated in cases where there are Partner Enterprises and Linked Enterprises as defined in Commission Recommendation 2003/361 / EC.comment for point 4 above- There is nothing under the current directive that allows EnMS (like ISO50001) to replace energy audits. The minimum requirements of annex V of the current directive differ of those of the energy review of the ISO 50001.
- Not sure but it will need to be widely advertised as this level of organisation will have much less focus on energy than the current levels

How many auditors

How many auditors are registered and **are actively conducting** audits in your Member state now?

You can add a don't know or short comment in Other – see below.

6. How many auditors are registered and are actively conducting audits in your Member state now? You...

Less than 100	20% 🔺
101-500	30%
501-1000	4%
1,000+	8%
Don't know	31%
Other	6%
128 responses	< <mark>6/13</mark> >

Capacity / adequacy

In your opinion **is the number of energy auditors adequate** to meet the increased demand for audits implementation after the introduction of EU EED 2024?

14% Don't know

40% see constraints or definitely not.

Comments from Other option below.

7. In your opinion is the number of energy auditors adequate to meet the increased demand for audits			
Yes. We have been preparing / increasing capacity for some time now	20%		
Maybe. We are still planning our response	20%	L	
No. We see capacity constraints.	21%	L	
Definitely not, there will be significant shortfall in quali- fied resources	19%		
Don't Know	14%		

• There are many energy auditors as any engineer or architect can do them. But most of them have not the necessary knowledge

- If the c 1,100 UK auditors were ALL qualified and competent to do the job, then yes. Sadly, perhaps only c 350 are actually suitably competent.
- The answer to the question can be defined when we are in a position to estimate the number of obligated enterprises according to the energy thresholds of article 11 of the recast.
- It depends on enforcement if enforcement is as light touch as it currently is re SI426 then there is plenty of capacity as compliance will be very low
- I suspect that there will be shortfall but not in a position to know
- Many of the auditors who are registered are not interested in this work

Mutual recognition a benefit?

Registration requirements for energy auditors differ across member states; in your opinion would mutual recognition of energy auditors across member states help to increase energy audit and energy management services capacity to meet the requirements under the recast EED 2023? Use 'Other' option to comment if needed.

8. Registration requirements for energy auditors differ across member states; in your opinion would mutual...

Yes. As many auditors are needed as possible.	38%
No.	11%
Don't know. Not interested in mutual recognition	5%
Don't know. But interested in mutual recognition / free- dom of services.	- 31%
Other	15% 🛡
128 responses	< 8/13 >

Author's summary of In your opinion responses

14

5

2

- Policy needed to increase quality of auditors (for results/action) 24
- Standardise / Minimum Qualifications across borders
 22
 - Mutually recognise energy auditors across MS to increase capacity
- Adjust auditor qualifications for smaller enterprises
- Data / information exchange
- Spread workload more evenly over the 4 years (reduce peaks) 4
- Extend industry audit schemes to include energy requirements. 2
- No intervention; market will fix supply issues.

Anonymised detailed responses available in Excel format on request to <u>team@aems.ie</u>

Alignment between NZEB and Auditors

Do you see any **alignment** with the skillset to undertake comprehensive energy audits, and the specific skillset to assess buildings & determine technical pathways to NZEB or ZEB (Zero Emission Building)?

10% selected 'Don't know'

10. Do you see any alignment with the skillset to
undertake comprehensive energy audits, and the...
Yes, its nappening already in my Member State, energy
auditors are also designing solution pathways to NZEB22%or ZEB when undertaking energy audits on buildings22%

Yes, I do believe potentially there is a role for energy auditors to also undertake building NZEB / ZEB pathway analysis

No, they are completely separate skillsets, that need different areas of expertise, experience and

128 responses



23%

45%

Comment (on skillset alignment)

Comment – do you have any ideas on how there could be alignment of skillsets, or specifically why they don't align ?

Diverse responses. Author's Summary of answers >>>

In no particular order!

- Authors' summary of 70 open text responses:
- Align <u>if</u> outcomes standardised
- Buildings are simpler than industrial (individual vs team)
- Technology / sectoral experience vs construction (new build v NZEB)
- More training & standardisation
- Auditors will upskill if they can see a market / income
- More nZEB training / skills

Summary of survey findings

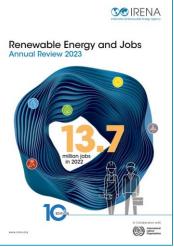
- Respondents want increased quality, results/action, cross border standardisation
 - (author's summary of comments).
 - Poor uptake of EnMS vs Audits to date at 10-20% but 49% don't know
- Many see an increased need for auditors
 - 40% see capacity constraints or a significant shortfall
 - 19% see capacity as adequate (or have been working to increase)
- Percentage in favour of more work to standardise / mutual recognition
 - 33% As many auditors as possible
 - 32% Don't know but interested in mutual recognition / freedom of services
- 45% believe there is potential for alignment across Directives (EED/RED/EPB)
- 79+% interested in a copy of survey results / follow-up (this document)

Further reading

- See also AEE Global EnMS skills survey due out late 2023
 - Past survey
 - https://www.aeecenter.org/2021 -2022-energy-jobs-and-markettrends-report/
- IRENA annual survey on **renewable** energy skills
 - <u>https://www.irena.org/Publicati</u> <u>ons/2023/Sep/Renewable-</u> <u>energy-and-jobs-Annual-</u> <u>review-2023</u>







Thank you for your time and participation

Please support your local representative body (e.g. AEE) and keep in touch with your member state national energy agency to improve the effectiveness of our energy audits and energy management systems.

