

Learnings from technical assistance in climate and energy

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EUROPEAN COVENANT OF COMPANIES FOR CLIMATE AND ENERGY (CCCE) TECHNICAL ASSISTANCE LEARNING ROUNDTABLE

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LEAP4SME Energy Audit policies to drive Energy Efficiency

Main goals and Consortium

- Mapping and understanding the complex context of national and local support to SMEs
 Proposing effective and realistic solutions to policy makers and policy implementers
 in terms of policy schemes, cross-cutting policy solutions embracing both energy and
 non-energy benefits, policy recommendations
- **Contributing**, through LEAP4SME research, analysis, and stakeholders involvement, to help the Institutions finding solutions to fill the gap of data
- Knowledge sharing (successes, barriers and failures) on national policies



LEAP4SME is supported by:

2 International associations of national Energy Agencies (EnR and Medener)

- 9 Ministries
- 4 Further National Agencies

18 National SMEs associations, Chambers of Commerce, Regional and local Authorities

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CH.	Full Name: Restellande Adensam Organization: Directorate Energy Efficiency and Building	At the same time, we express our interest to provide to with information related to the project results.	
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Example of support programme for Energy audits in SMEs: MT

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Country	Malta
Programme/policy/initiative name in its original language	Promotion of Energy Audits in Small and Medium Enterprises
Area of Application	National
Developed in the framework of article 8 EED	Yes
Energy savings accounted in article 7 EED	No
Туроlоду	Voluntary programme including a financial incentive on the energy audit
Requirement to implement energy efficiency measure recommended in the audit	No
Programme description	Through this scheme, SMEs are invited to submit an application (through a certified energy auditor) for an energy audit, to the level and detail as outlined in the Schedule Section of Government Notice. After reviewing the application, the Agency will inform the enterprise that it can proceed with the audit. Once the energy audit is complete and submitted to the Energy and Water Agency, the latter will ensure that the report meets the minimum requirements as detailed in the previously mentioned Schedule. If the report meets the minimum requirements set out, the enterprise will receive the amount invoiced by the certified energy auditor capped up to the amount indicated in the same Government Notice.





Performance







Example of support programme for Energy audits in SMEs: MT

	Promotion of Energy Audits in Small and Medium Enterprises
Results Barriers Lessons learned	Results A budget of €150,000 was allocated for the 'Promotion of Energy Audits in Small and Medium Enterprises' scheme and thanks to an information campaign, around 30 enterprises have expressed their intent to benefit from this scheme to date. Furthermore, enterprises who benefitted from this scheme were also encouraged to use the energy audit report as a basis to apply for the 'Investment Aid for Energy Efficiency Projects' scheme to implement the recommended energy efficiency measures.
	 Lessons Learnt Initially, the eligibility criteria for small enterprises were based on the enterprise's electricity consumption. In view of reduced activity due to the COVID-19 pandemic, this clause was removed so that all small enterprises are eligible for this scheme. There were instances where for some reason successful applicants would not submit an energy audit (which is a requirement to benefit from the grant scheme) as this would not have been carried out. The Agency noticed that having a link (e.g., energy auditor) supporting the company, proved to be beneficial as it reduced this occurrence.
	Barriers The amount of subsidy received depends on the size and NACE of the enterprise hence, this is sometimes not sufficient to cover and/or outweigh the cost of the energy audit. Another barrier for SMEs is that enterprises have to first pay the energy audit themselves and then get refunded. In the case of very small companies, this practice may be considered as a sizable hurdle.







Profitability Rationalisation of energy use

Productivity Optimisation of energy expenditure

Performance Optimisation of equipment and processes

Example of support through data analysis and stakeholders involvement: IT









Example of support through data analysis and stakeholders involvement: IT



- 1. Energy final use vs Production
- Data cleaning and homogenization
- Linear regression $En[MJ] = a \cdot Prod[FU] + b$

 ~ 300 ISIC-4 sectors (4 energy carriers)

• Statistical analysis (α, p-value, R²...)

2. Energy Performance Index

- Analytical physical model $EPI_{model} (MJ/FU) = a + \frac{b}{\Pr od[FU]}$
- Normal distribution (CI = 95%)

3. Simplified EPIs

- EPI [MJ/FU] =mean value ± standard deviation
- EPI = *f* (tecnologies, production range,...)

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High	σ ≤ 20%
Medium	$20 < \sigma \le 60\%$
Low	60 < σ ≤ 100%
N/A	σ >100%

CEMENT	
IRON & STEEL	

Guidelines for stakeholders





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Ongoing analysis on policies and programmes (EAs in SMEs)

A total number of 43 good practices have been selected, presented and analysed according to the following three categories:

LEAP4SME countries: 21 policies and programmes (49% of total) from
 countries that correspond to good practices in the countries involved in
 the project. These good practices have been analysed in detail.

2) EU countries: 12 good practices (28% of total) from 9 Countries corresponding to good practices in Member States of European Union out of LEAP4SME consortium. These practices have been described without assessing them.

3) Non-EU countries: 10 good practices (23% of total) from 9 countries presented schematically to provide some insights of different approaches.







Ongoing analysis: preliminary results



- Generally, the quality of energy audits is higher in the obligation policies than in the voluntary programmes, and the quality required increases if the implementation of EPIAs is mandatory.
- The programmes that only fund the implementation of EPIAs seem to be not very restrictive with the quality of the audits.
- The use of EU funds and the replicability of the policies present a good evaluation in all the categories.
- The analysis of co-benefits presents a high dispersion.
- The use of EPC is only included in the obligation policies.





- Obligation and includes a financial incentive both on the audit and on the energy efficiency measures implemented
- ----Obligation with no financial support or incentive schemes in the programme itself
- Voluntary programme and includes a financial incentive both on the audit and on the energy efficiency measures implemented
- Voluntary programme and includes a financial incentive only on the energy efficiency measures implemented
- ----Voluntary programme including a financial incentive on the energy audit
- ----Voluntary programme with no financial support

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Thanks for your attention

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