LIFE: EE4SMEs

EnergyEfficiency4SMEs

WP8: Evaluation:
First Intermediate Report

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WP8 – Evaluation - Intermediate Report

1. Executive summary
2. Objectives of the work package
3. Project evaluation methodology
4. Companies surveyed
5. Energy efficiency
6. Investment
7. Obstacle and monitoring
8. Conclusion

1. Executive Summary

WP8 – Intermediate Report - Executive Summary

Methodology: Project evaluation adopts a comprehensive approach based on OECD criteria, focusing on six key areas including efficiency, effectiveness, and sustainability. It emphasizes the importance of accurate data collection and analysis for assessing energy performance.

Objectives: Evaluation, and more largely EE4SMES project, aim to significantly improve energy efficiency in SMEs and reduce carbon emissions. They highlight the need to capitalize on these improvements for sustainable business practices and environmental benefits.

Evaluation Process: Detailed assessment through tailored questionnaires, evaluating SMEs' energy consumption, CO2 emissions, and energy management practices. Prioritizes gathering robust data for informed decision-making.

Findings and Challenges: Reports findings from 123 firms, indicate a 60% implementation rate of energy efficiency measures. It identifies critical barriers such as funding shortages, time constraints, and lack of expertise. It also highlights investments in areas like lighting, staff training, and energy management systems.

LIFE: EE4SMEs Dashboard link

2. Objectives of the work package

1. Objectives of the WP8

Recap of the ambition

"The EU Green Deal aims to make Europe the first climate neutral continent by 2050.
One of the main objectives is to initiate, support and accelerate the transition of European companies to a sustainable growth model. »

In this context, the dedicated WP8 aims to

- *Measure the level of improvement in the energy performance of the beneficiary SMEs*
- *Evaluate other relevant changes in the participating SMEs to become more efficient in energy consumption and reduction of CO2 emissions*
- *Capitalization of results in the participating countries.*

The evaluation scheme should take into account the OECD key evaluation criteria and highlight the following points:

- **EFFICIENCY: How well are the EU resources being used?**
- **EFFECTIVENESS: Is the intervention achieving its objectives?**
- **COHERENCE: How well does the intervention?**
- **RELEVANCE: Is the EU intervention doing important and adequate things for beneficiaries?**
- **SUSTAINABILITY: Will the benefits last?**
- **IMPACT: What difference does the intervention make?**

3. Project evaluation methodology

3.1. Project evaluation – Methodology – Questionnaire and data collection

Co-design of the questionnaire

Why?

- The questionnaire initially aims to ascertain each company's baseline in terms of energy consumption, costs, and CO2 emissions. It will then monitor these aspects over the subsequent two years to assess the impact of project interventions.
- Furthermore, the questionnaire will explore the company's practices and customs and will assess consumption levels and CO2 emissions related to specific equipment types.

How?

- WP8, in collaboration with local energy efficiency and energy sector specialists, created a preliminary version of the questionnaire.
- Upon completion, the questionnaire was shared with work package leaders and partners for feedback.
- Ultimately, the questionnaire was made available as a fillable PDF and through Microsoft Forms.

Data collection

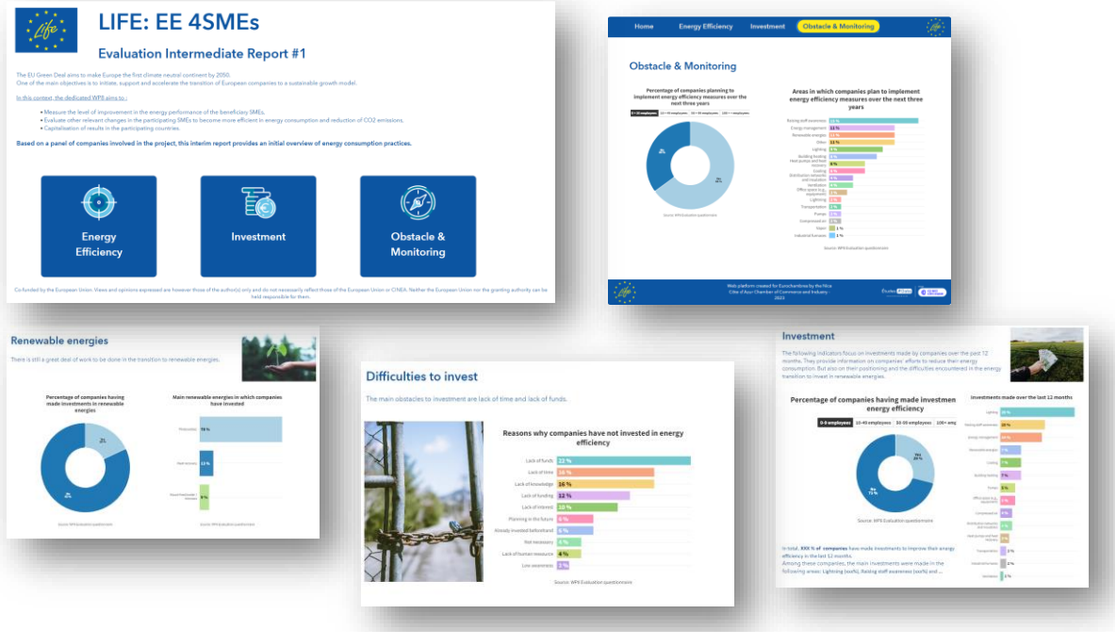
How?

- The questionnaire was distributed to the country partners and therefore participating companies in September 2023.
- These companies comprise those engaged in the exploration of energy collaborations, capacity building and audits.
- Partners from Austria, Bulgaria, Cyprus, Estonia, France, Germany, Italy, Malta, Spain ensured that the data collected was comprehensive and accurately integrated.
- The questionnaire was dispatched to the local beneficiaries, who then circulated it among their respective firms and oversaw the data collection process.

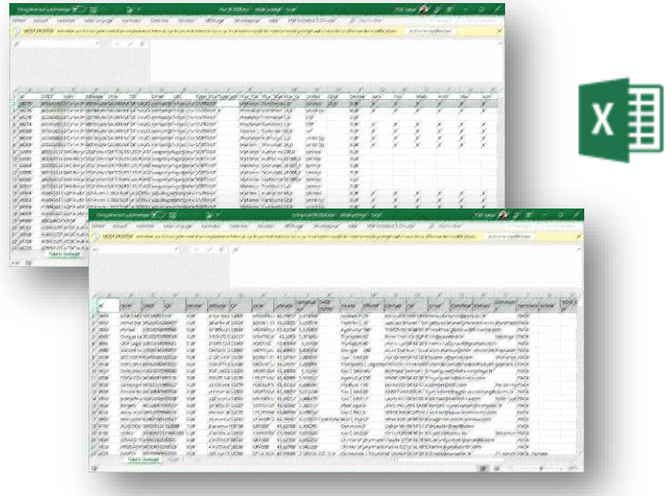
3.2. Project evaluation – Methodology – Data visualisation and evaluation report

The data collected has undergone advanced processing to derive valuable information for informed decision-making and to integrate the evaluation system into an ongoing improvement process. The following deliverables are available to relevant stakeholders:

A data visualisation tool accessible online



Excel files of the collected data

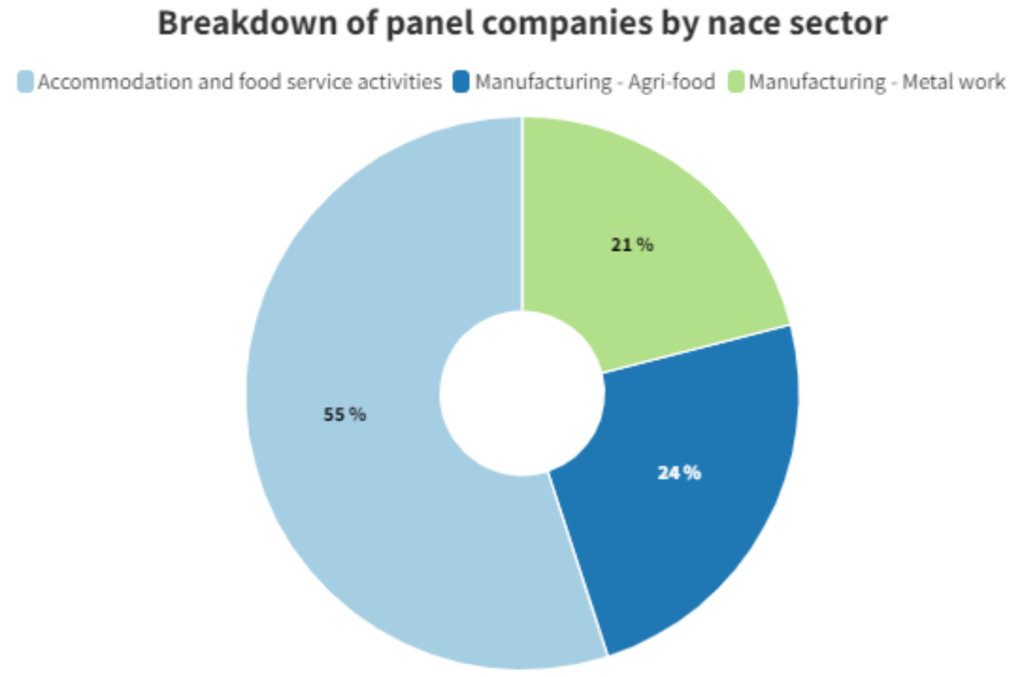


4. Companies surveyed

4. Companies surveyed

In total, **123 companies** were surveyed through this first data collection campaign.

21% of them belonged to the **Manufacturing Metal Work** sector, **24%** to the **Manufacturing Agri-Food** sector and **55%** to the **Accomodation and food service activities**.



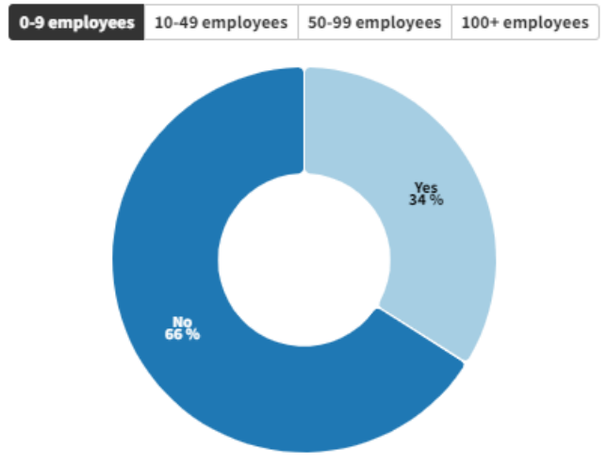
Source: WP8 Evaluation questionnaire

5. Energy Efficiency

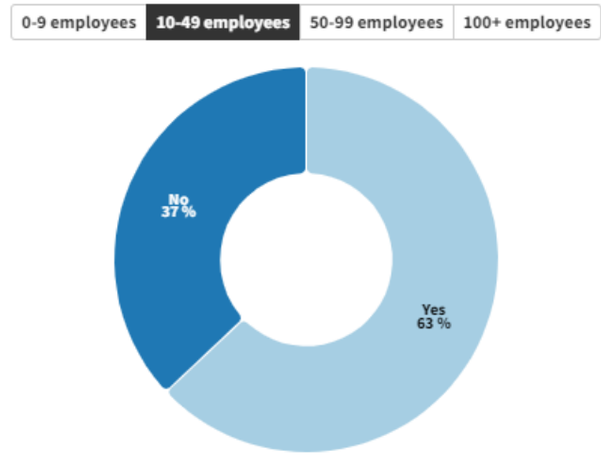
5.1. Energy efficiency measures implemented by company size

In total, **60% of companies** have implemented energy efficiency measures in the last 12 months.

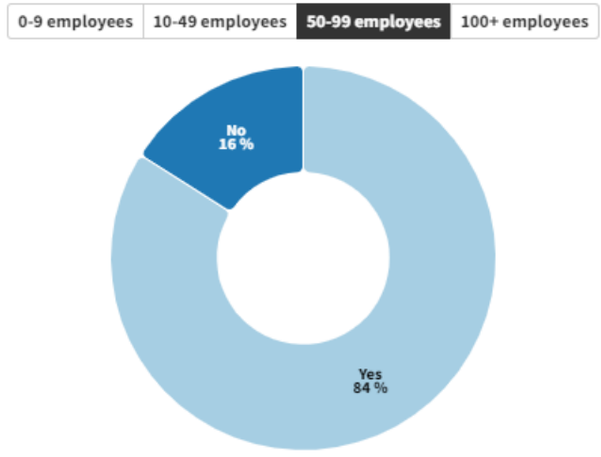
The graphs show that **the implementation of energy measures is proportional to the size of the company.**



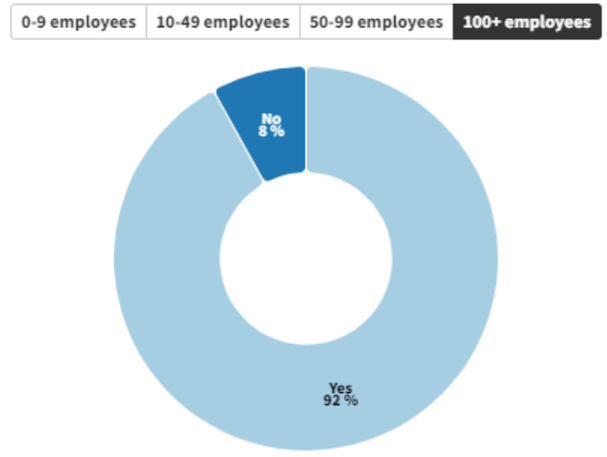
Source: WP8 Evaluation questionnaire



Source: WP8 Evaluation questionnaire



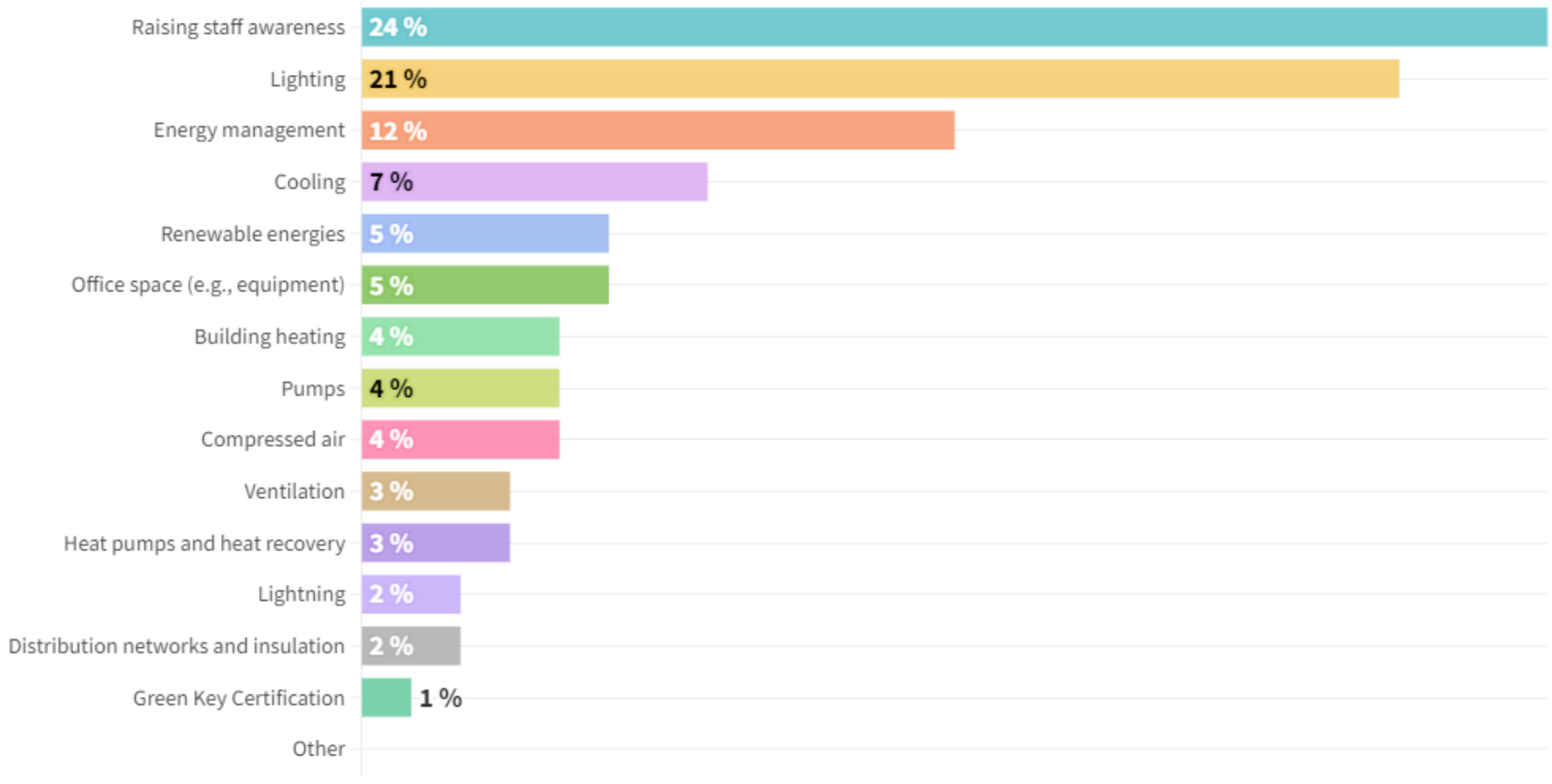
Source: WP8 Evaluation questionnaire



Source: WP8 Evaluation questionnaire

5.2. Energy efficiency measures implemented over the past 12 months

Among these companies, the main energy efficiency measures that have been implemented are: Raising staff awareness (**24%** of all answers), Lighting (**21%**), Energy management (**12%**).

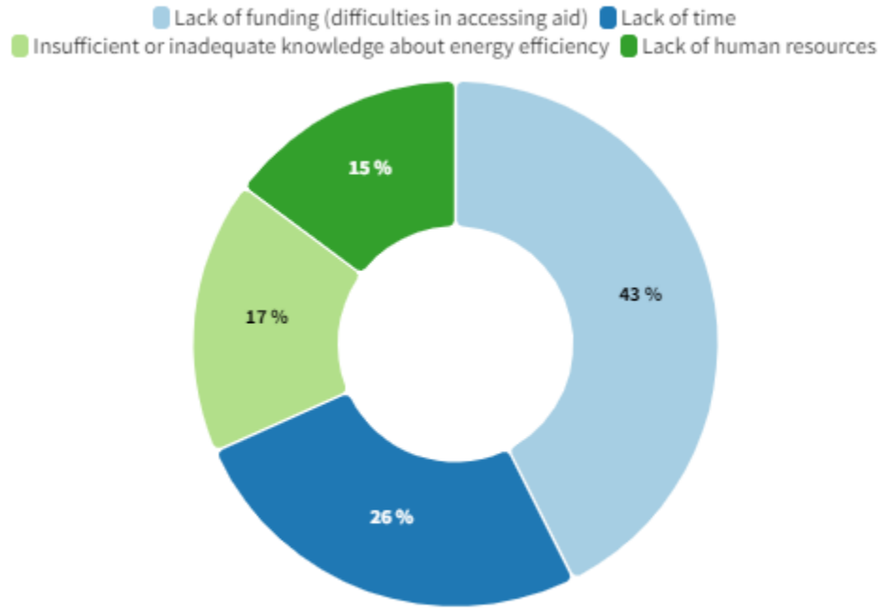


Source: WP8 Evaluation questionnaire

5.3. Energy efficiency measures – Reasons as to why no energy efficiency measures were implemented

For the ones having not implemented efficiency measures, the main reasons justifying these choices are:

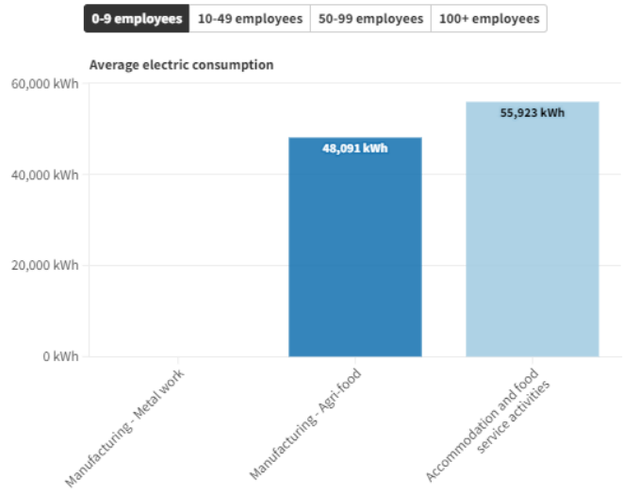
- Lack of funding (difficulties in accessing aid) (**43%**),
- Lack of time (**26%**),
- Insufficient or inadequate knwoledge about energy efficiency (**17%**),
- Lack of human resources (**15%**).



Source: WP8 Evaluation questionnaire

5.4. Energy efficiency – Average electricity consumption by company size

Results show that, on average, 10 to 49 employees companies have a bigger electricity consumption thant VSEs



Source: WP8 Evaluation questionnaire

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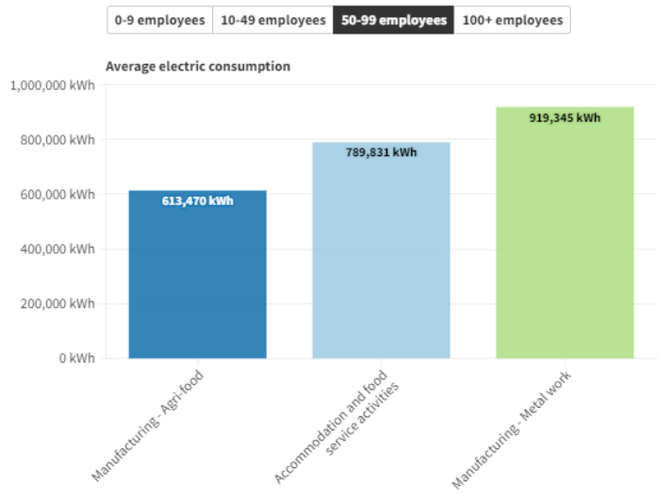

Source: WP8 Evaluation questionnaire

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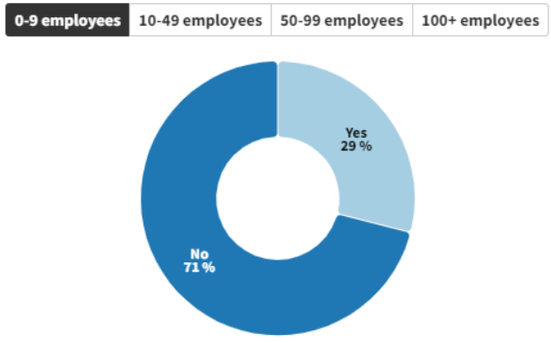
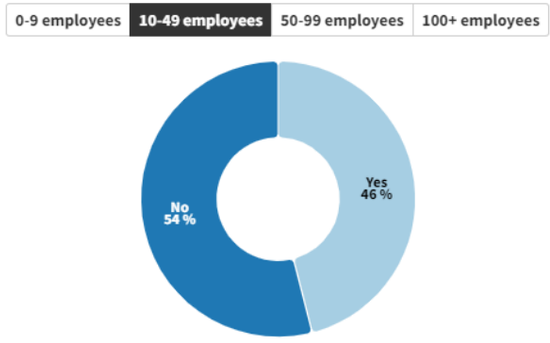
6. Investment

6.1. Investment made regarding energy efficiency by company size

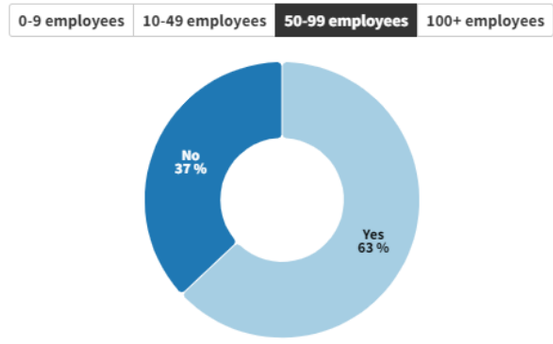
Overall, **48% of companies** of all sizes have invested in improving their energy efficiency over the last 12 months.



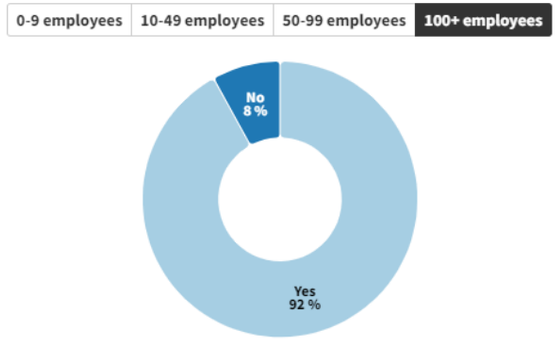
Source: WP8 Evaluation questionnaire



Source: WP8 Evaluation questionnaire



Source: WP8 Evaluation questionnaire



Source: WP8 Evaluation questionnaire

Very Small Enterprises (VSEs) have invested less in energy efficiency over the past year than companies with between 10 and 49 employees: while less than a third of VSEs have made investments, 46% of 10-49 companies have done so.

6.2. Investment made over the last 12 months by areas

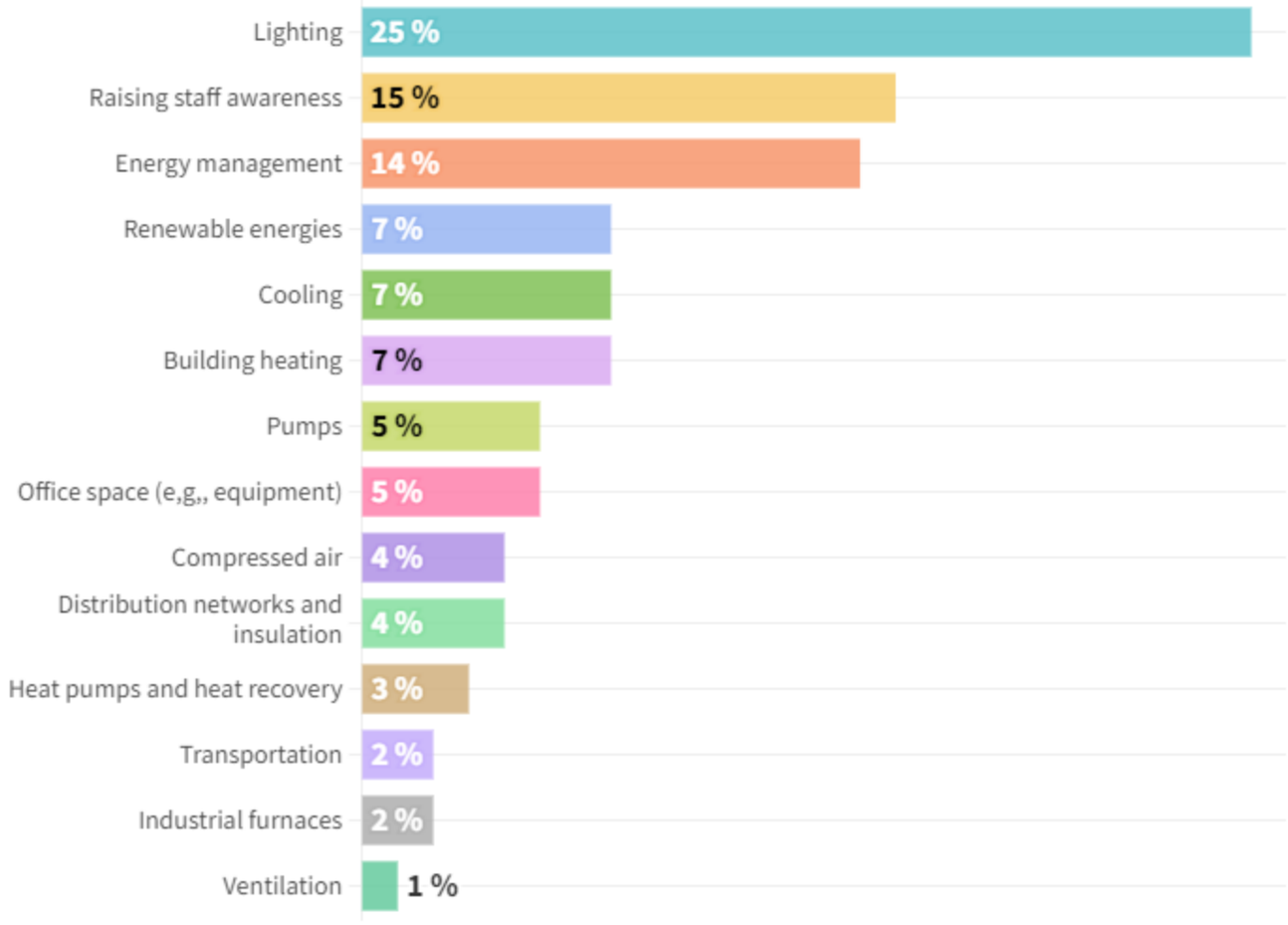
Among the companies having made investment in the last 12 months, the amounts were allocated to :

- Lighting (**25%**),
- Raising staff awareness (**15%**),
- Energy management (**14%**).

The maximum amounts that were invested in each of the main categories are :

- **Lighting : 70 000 €**
- **Raising Staff awareness : 3 500€**
- **Energy Management : 60 000 €**

7 countries among the partners registered companies that have made investments regarding energy efficiency over the past 12 months (Bulgaria, Estonia, France, Germany, Italy, Malta, Spain).



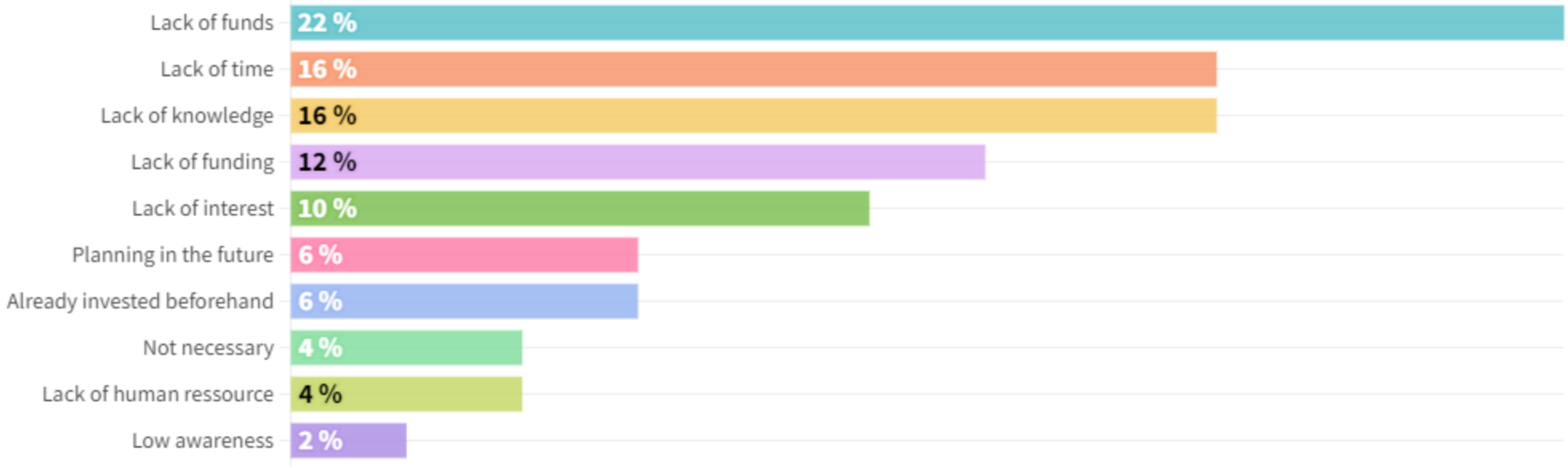
Source: WP8 Evaluation questionnaire

6.3. Investment – Reasons why companies have not invested in energy efficiency

The main reasons given by companies for not investing in energy efficiency measures are **:**

- Lack of funds (22%),
- Lack of time (16%),
- Lack of knowledge (16%).

These companies have on average almost 40 employees and belong to the the Accommodation and food service activities (**58%**).



Source: WP8 Evaluation questionnaire

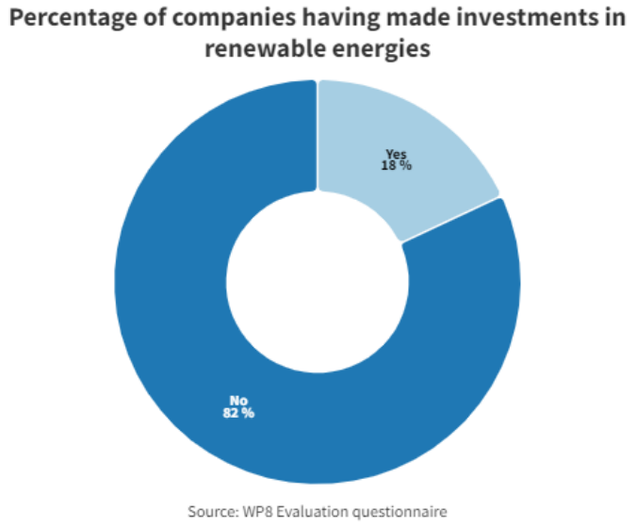
6.4. Investment – Renewable energies

In total, **18 % of companies** have invested in renewable energies in the past year.

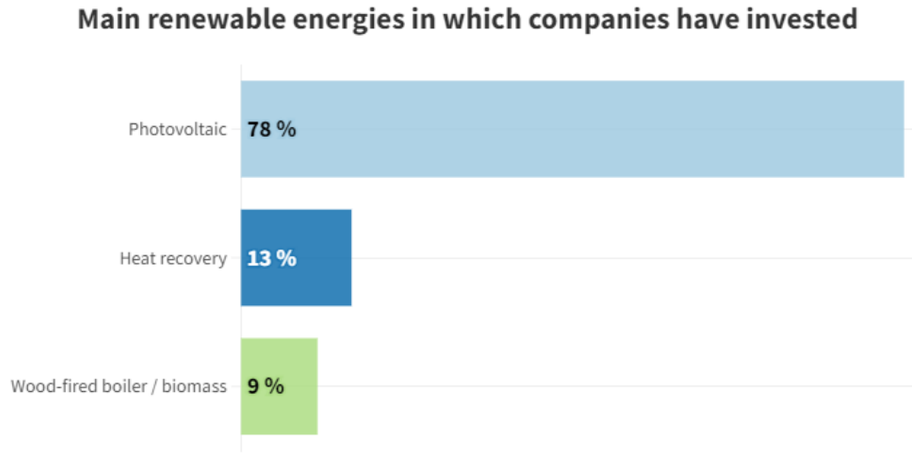
On average, the companies that have invested in renewable energies have **19 employees**.

Main NACE sector which have registered investment among the companies is the Accomodations and Food Servicies one.

A combination of financial, logistical, regulatory, and market-related challenges contributes to the hesitation or difficulty that businesses face in investing in renewable energy.



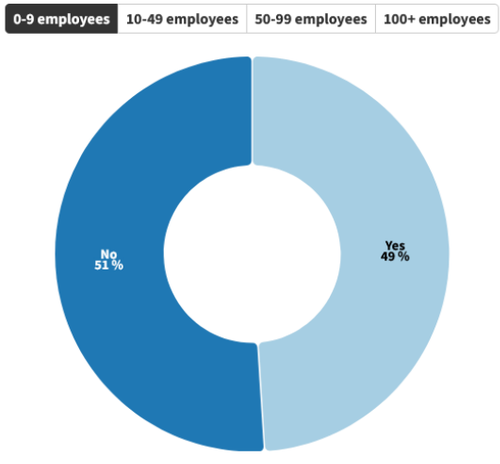
Source: WP8 Evaluation questionnaire



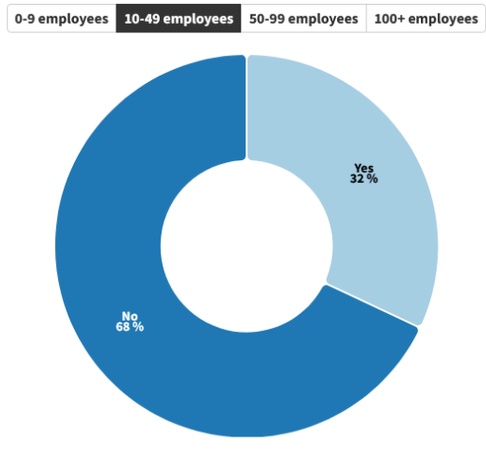
Source: WP8 Evaluation questionnaire

6.5. Investment – Percentage of companies having received EU or public funding in the last 3 years

33 % of the firms have received EU or public funding related to energy efficiency in the last 3 years.



Source: WP8 Evaluation questionnaire



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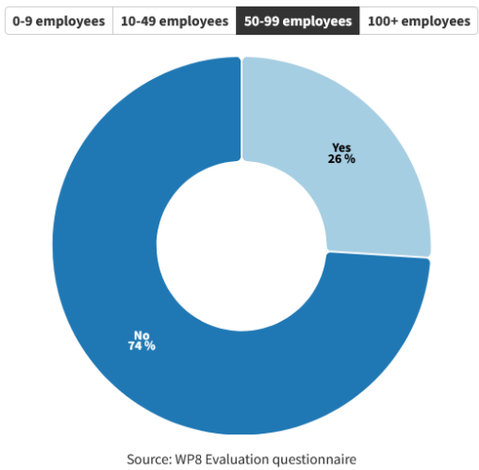
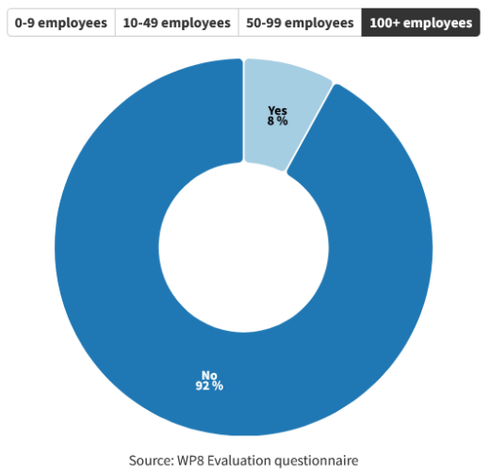


Source: WP8 Evaluation questionnaire



Source: WP8 Evaluation questionnaire

As for some of the programs mentioned by the firms:

Förderung des Klima- und Energiefonds (Austria)

Operational Programme Innovations and Competitiveness (Bulgaria)

CEE - Certificat Économies Énergies (France)

PERF' (Programme CCI BFC) (France)

GUEST Projects - Energy Audit (Malta)

Incentive from the Andalusian regional Energy Agency (Spain)

Next Generation (Spain)

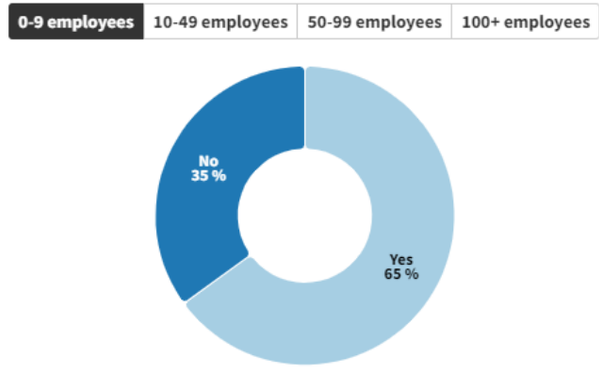
7. Obstacle and monitoring

7. Obstacle and monitoring – Percentage of companies planning to invest in energy efficiency measures by company size

In total, **9 out of 10 companies** plan on continuing to implement measures in the field of energy efficiency in the next 3 years.

On average, the companies that will implement these kind of measures employ **40** people.

Companies **may hesitate** to implement energy efficiency measures due to a lack of funding, limited understanding of economic possibilities, current priorities focused on other investments, the absence of a concrete answer, not being part of the long-term strategy, lack of time, and the cumbersome process of obtaining financial assistance.



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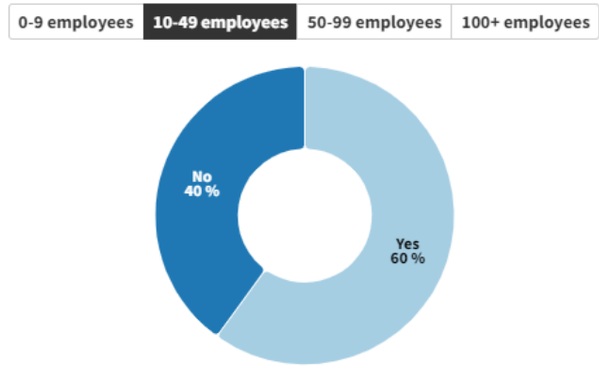

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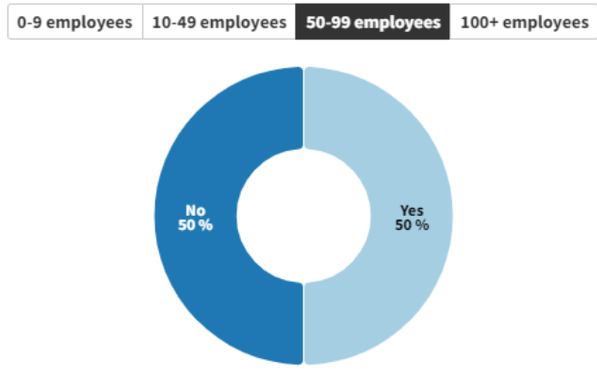

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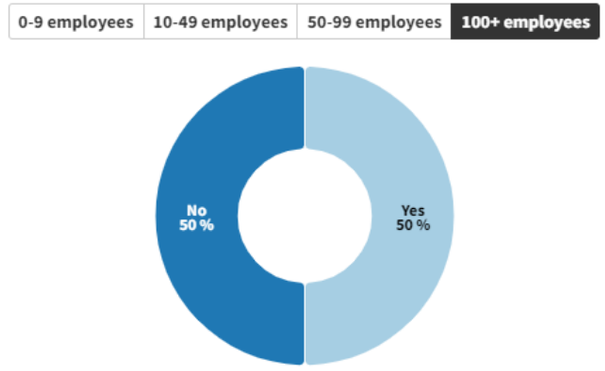


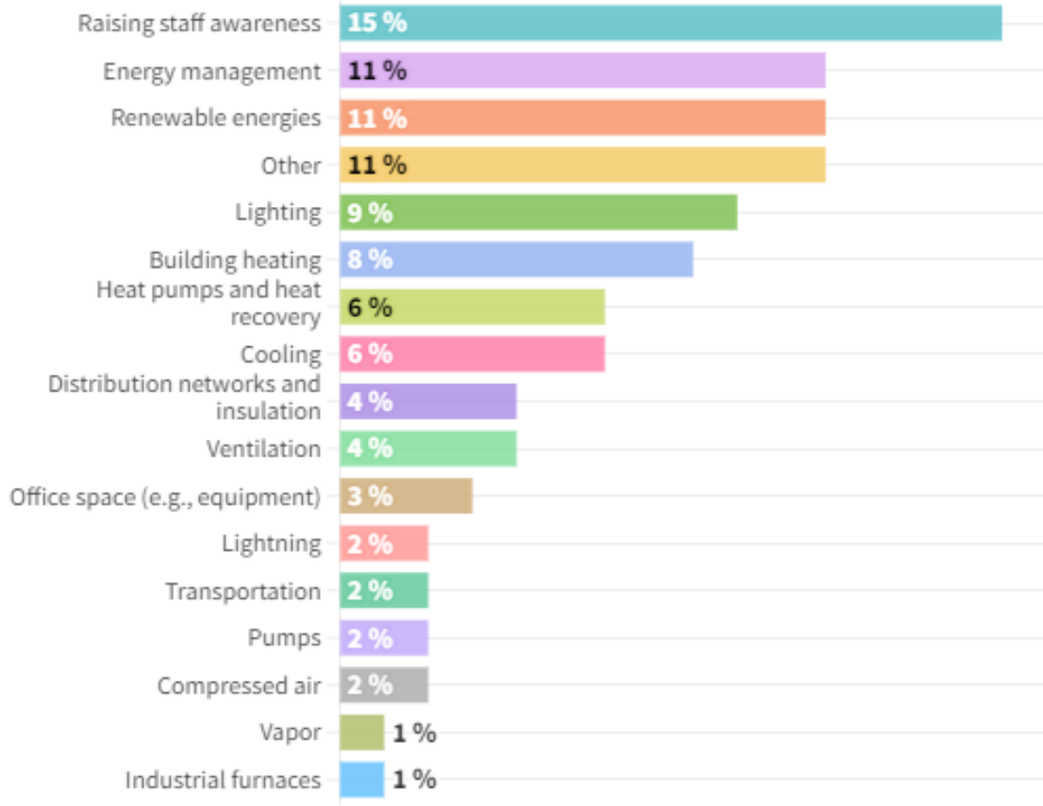
Source: WP8 Evaluation questionnaire

7. Obstacle and monitoring – Main Areas in which companies plan on continuing investing

The main areas that are privileged by these companies are:

- Raising staff awareness (**15%**),
- Energy management (**11%**),
- Renewable energies (**11%**),

On the contrary, Industrial furnaces (1%), Vapor (1%) are the type of energy efficiency measures that are less favoured by companies for investments.



Source: WP8 Evaluation questionnaire

8. Conclusion

WP8 – Conclusion

The "WP8 Intermediate Report" for LIFE EE4SMEs demonstrates the growing trend of energy efficiency in European SMEs. While 60% have adopted measures, challenges like funding, time, and expertise persist. To enhance this momentum, it's crucial to provide targeted support, increase funding, and facilitate knowledge exchange. These steps will help overcome barriers and solidify energy-efficient practices, aligning SMEs with EU environmental goals and ensuring long-term environmental and economic benefits.