

The importance of energy audits in promoting energy efficiency among SMEs Results from industry interviews

KNOWnNEBs – Rethink efficiency!

Integration of non-energy benefits into energy audit practices to accelerate the uptake of recommended measures

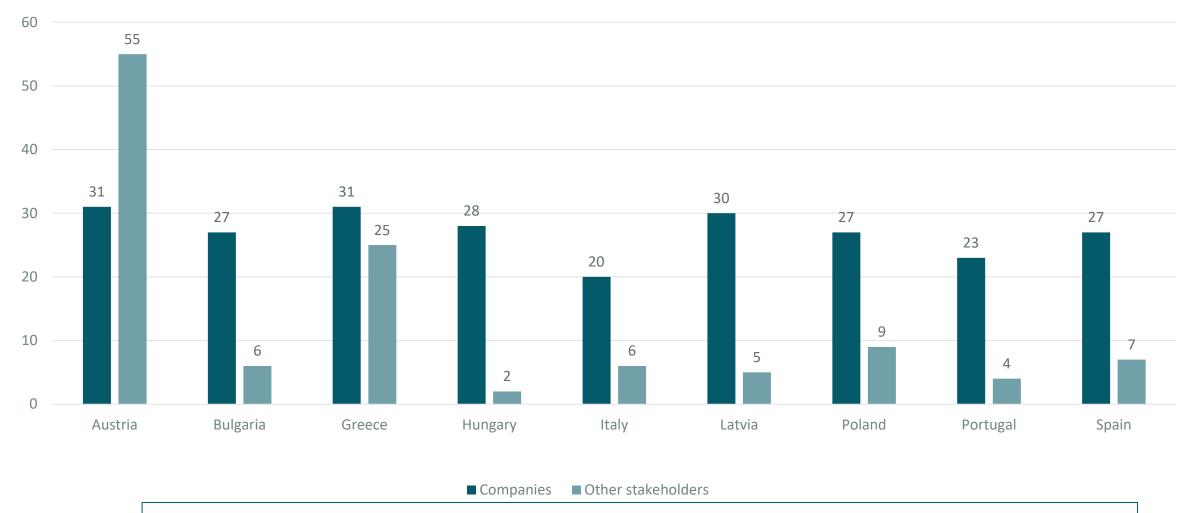
Miklos Horvath, Tamas Csoknyai, Georg Benke, Paula Fonseca, Pedro Moura, Margarita Puente, Marta Mazurkiewicz, Laura Bano, Andrea Cervato, Nina Nikolova, Mihael Deliyski, Vladimir Tsankov, Andreas Androutsopoulos, Gatis Zogla, Ricards Stivrins

Survey and interviews

- Survey on energy audits and non-energy benefits
 - 363 responses, of which 244 were from company representatives, 119 energy auditors, legislators and other stakeholders
 - Online survey
 - Surveys represent theory (what would you do if ...)
- Interviews were conducted in companies with an existing energy audit issued in the last 2-3 years
 - 47 companies interviewed (38 companies from food and bewerage sector; 40 SMEs)
 - 83 interviews in 9 countries
 - Face to face interviews
 - Interviews represent real life actions



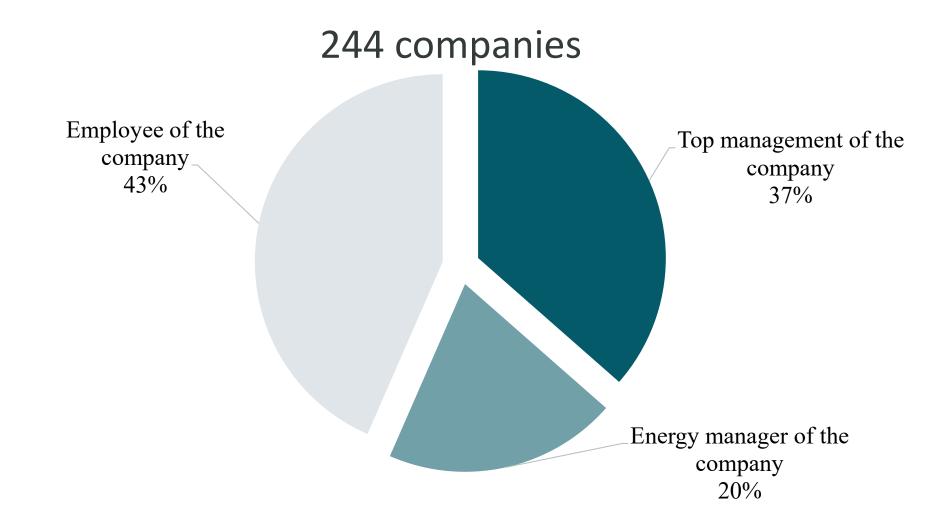
Survey summaryAmount of responses by country





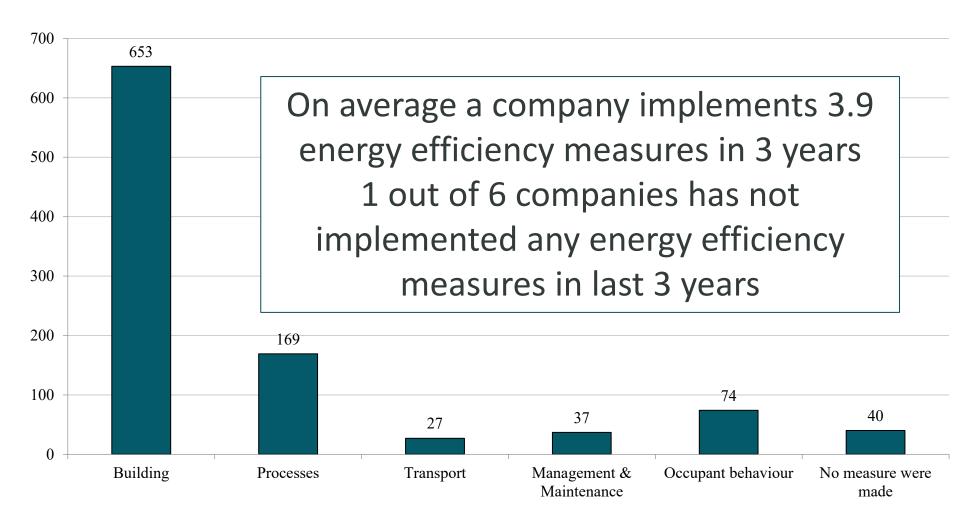
363 responses, of which 244 were from company representatives, 119 – energy auditors, legislators and other stakeholders

Survey summaryCompany stakeholder distribution



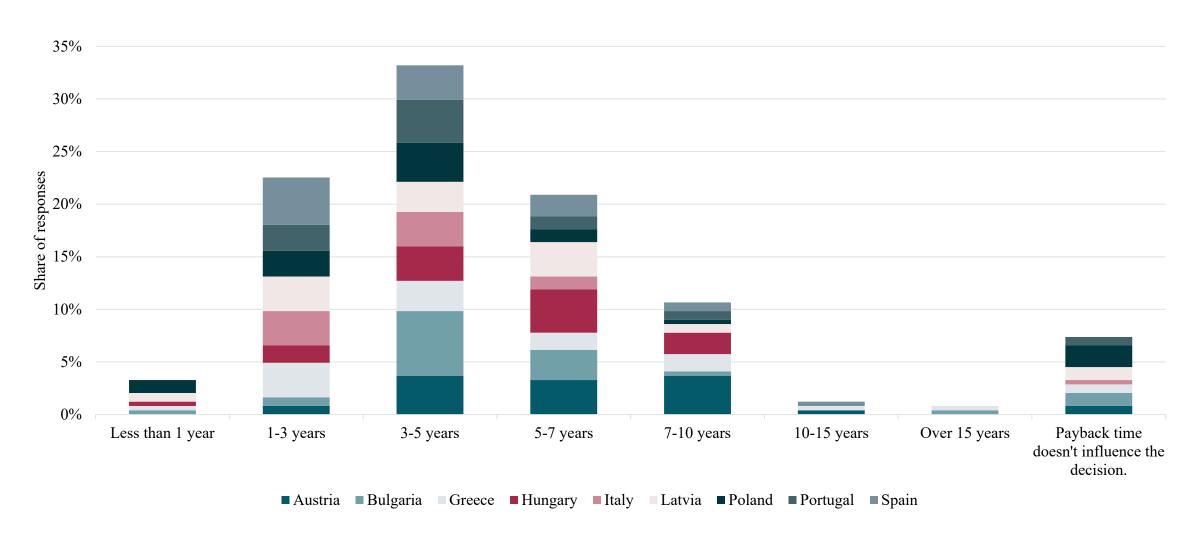


Energy efficiency measures in the past 3 years in the company by improved area



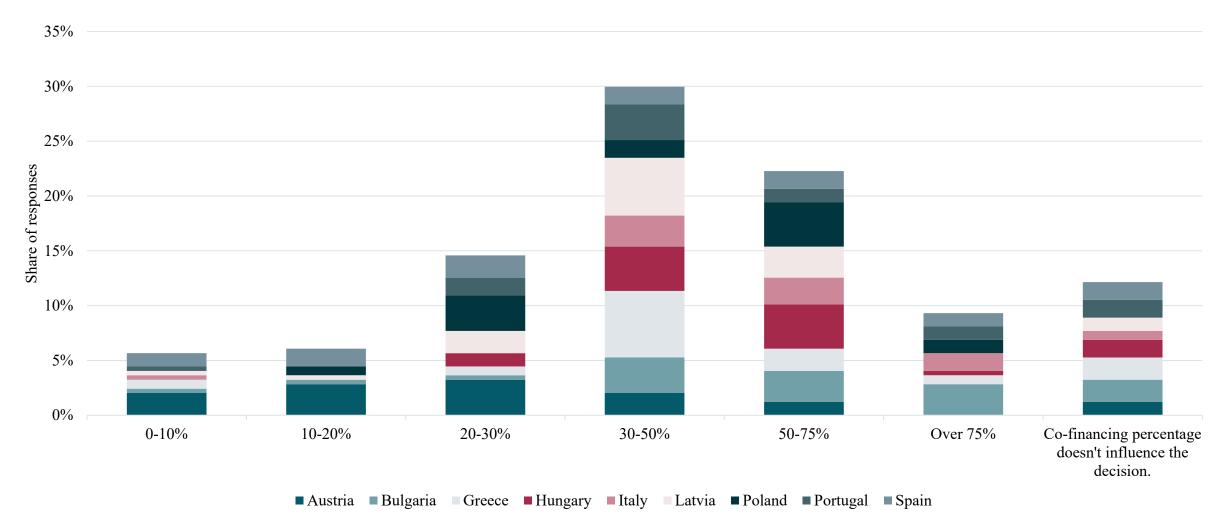


Maximum payback time for considering implementation of an EE measure



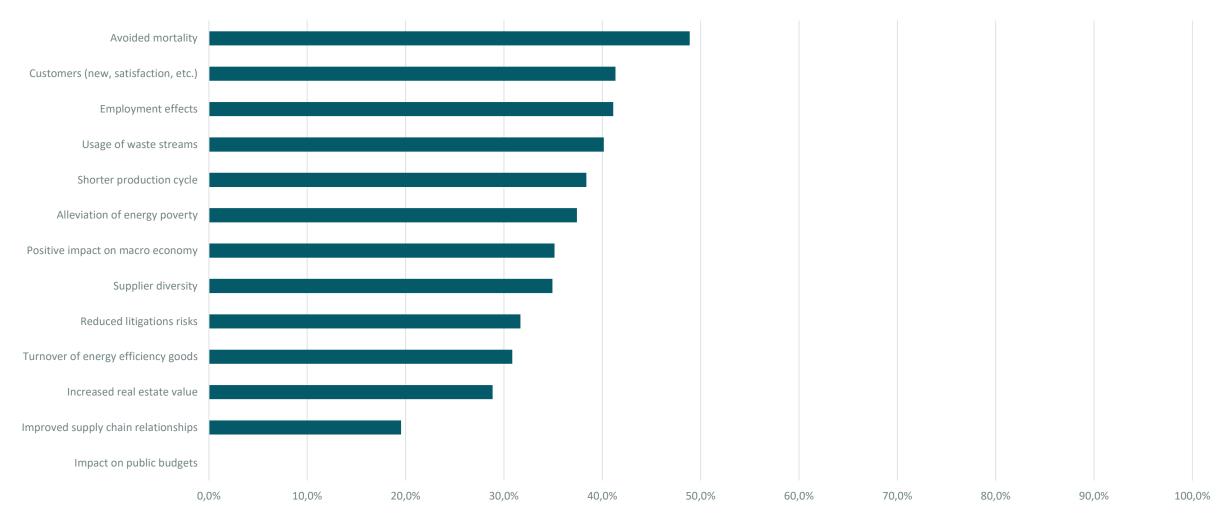


Preferable amount of co-financing for implementing EE measures



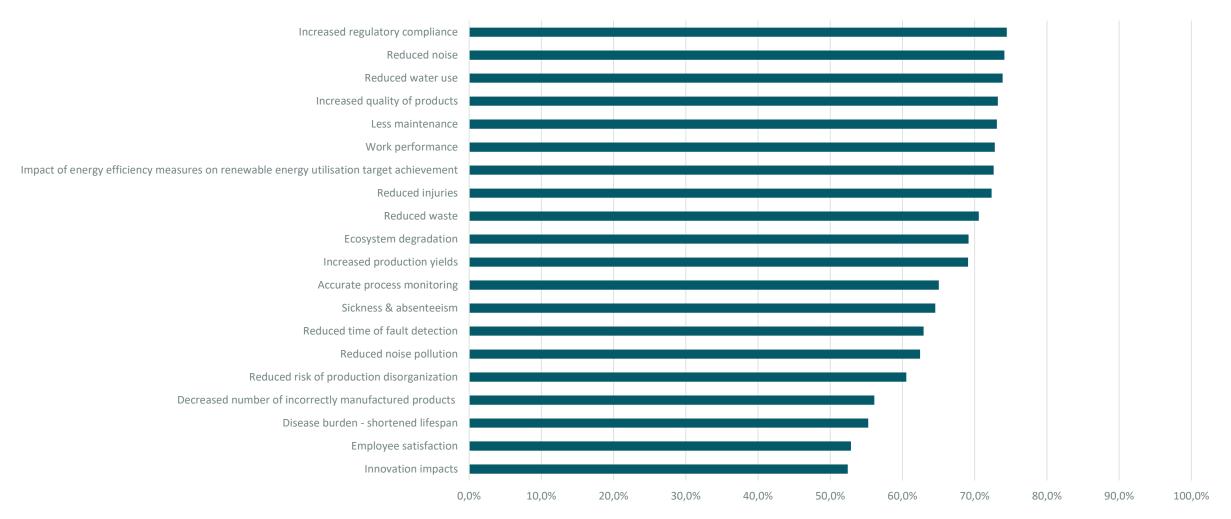


Evaluation of importance of non-energy benefits (score below 50% - low importance)



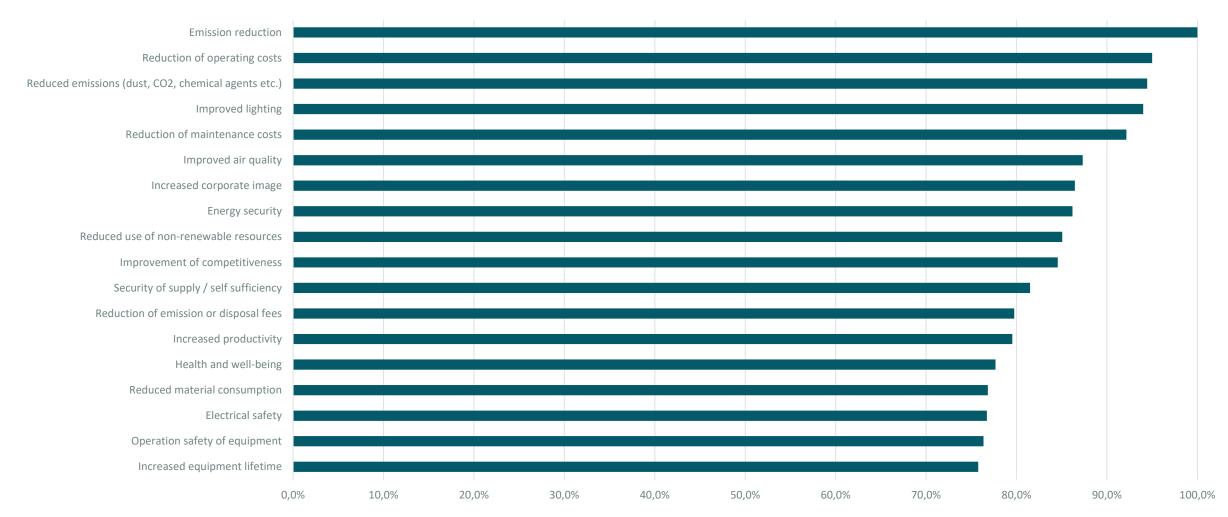


Evaluation of importance of non-energy benefits (score between 50 and 75% - medium importance)





Evaluation of importance of non-energy benefits (score above 75% - high importance)





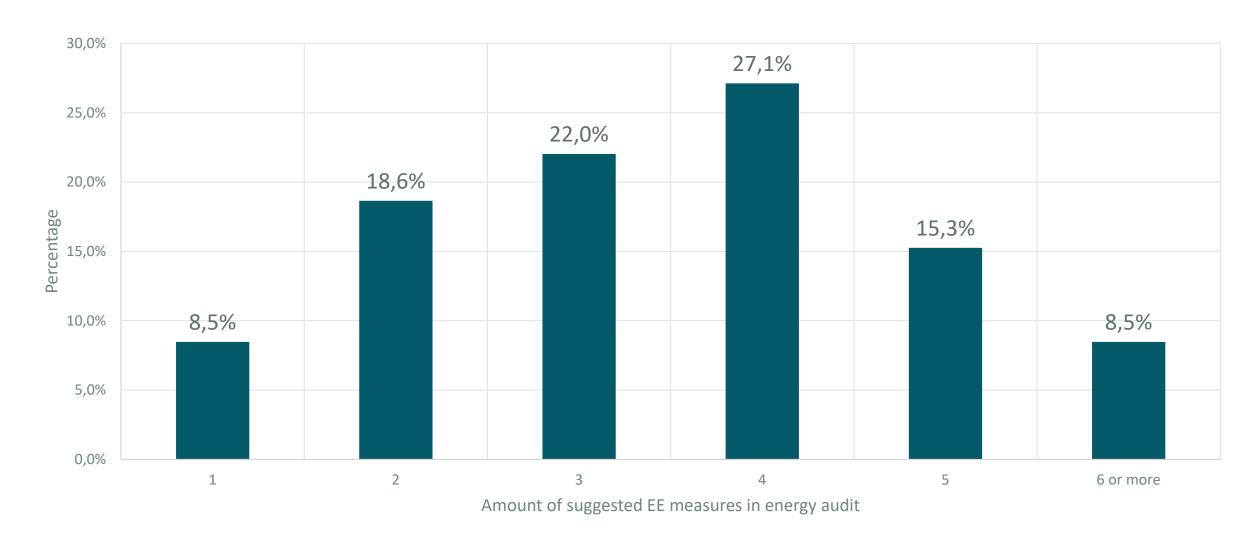
Interview results

- Interviews were conducted in companies with an existing energy audit issued in the last 2-3 years
- 47 companies interviewed (38 companies from food and bewerage sector; 40 SMEs)
- 83 interviews in 9 countries
- Face to face interviews



Interview results

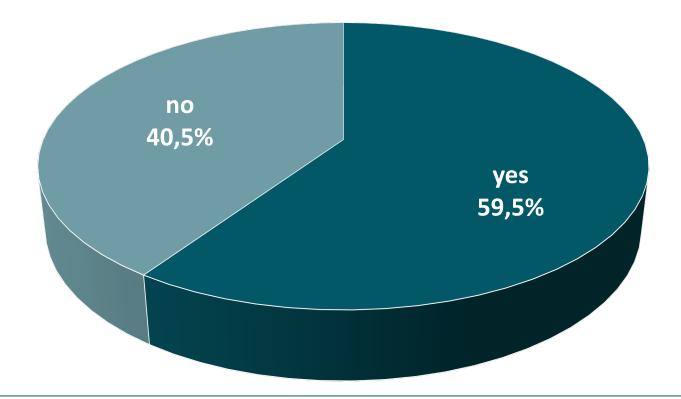
Amount of energy efficiency measures suggested in energy audits





Interview results

Energy efficiency measure implementation rate



On average 3.48 energy efficiency measures per company are suggested in energy audit On average 2.07 energy efficiency measures per company were implemented



Interview summary 1/4

- No significant differences between countries
- Reason for performing the energy audit:
 - Reduce energy costs
 - To get an EU fund
 - Legal obligation (large companies)
- Prior knowledge regarding energy efficiency measures of the person who decided that an energy audit is needed:
 - The vast majority of interviewees lack even basic energy competences
- Which results of the audit surprised you or were not expected?
 - More than half of the respondents were not surprised
 - Several respondents indicated that the audit was nevertheless useful because it strengthened their position
 - Several people indicated that the audit indicated greater savings potential than they had expected



Interview summary 2/4

- Has the attitude towards the energy audit changed due to the crisis?
 - The vast majority reported a very significant impact
 - No one said that saving energy costs was not important
 - A quarter of the respondents said that this was a very important issue for the company even before the crisis
 - Some pointed out that since the crisis, it is much easier to convince decision-makers
 - Several people pointed out that their focus was not primarily on energy efficiency, but on the production of energy from renewable energy sources, the diversification of energy sources
- Which part of the energy audit results were the most important?
 - Three-quarters of the respondents considered the processes more important
 - A quarter considered the buildings more important
 - Only one respondent voted for transport



Interview summary 3/4

- Drawbacks of implementing energy efficiency measures
 - Financial aspects can be mentioned as the very first reason
 - Almost as many indicated that there was no problem and that the proposed measures had been implemented
 - In many cases, technical or organizational reasons were pointed out (large space requirement of the new equipment, the long time required for the investment, the noise associated with the investment and other disturbing factors, or the need to interrupt the production to implement certain measures
 - Some (especially in Hungary) highlighted the lack of labor in the construction industry or its high price
- What dynamics were triggered by the energy audit?
 - Many experienced a positive effect on the employees' energy- and environment-conscious attitude
 - Similarly, some people indicate a better understanding of the processes
 - Some understood that it is worthwhile to regularly monitor the development of energy consumption



Interview summary 4/4

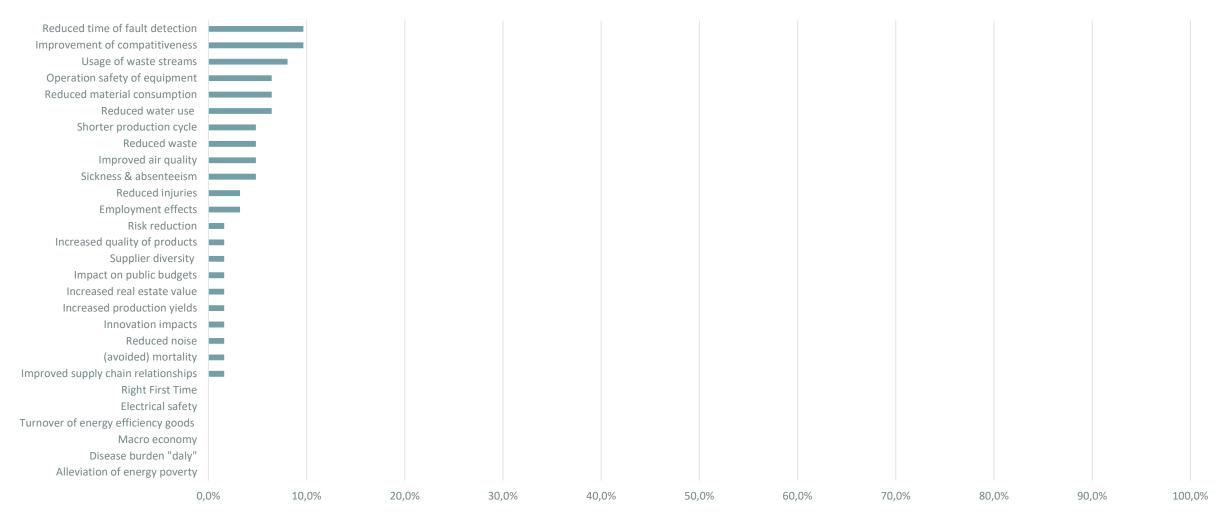
Non-energy benefits

- Most emphasized the positive effect on the company's efficiency (fewer breakdowns, better monitoring of production processes, higher profits, better productivity, more employable workers)
- Many highlighted the importance of a green image
- Several mentioned the positive effects on the work environment, such as better lighting comfort, lower noise level,
 better air quality
- Two mentioned saving water and reducing the amount of wastewater
- Someone also mentioned the improvement in product quality due to better cooling technology
- One experienced more effective cooperation with suppliers by improving the efficiency of the technological chain
- One mentioned the improvement of the staff's energy awareness as a positive
- According to one respondent getting to know new technologies is also a positive side effect



Interview summary

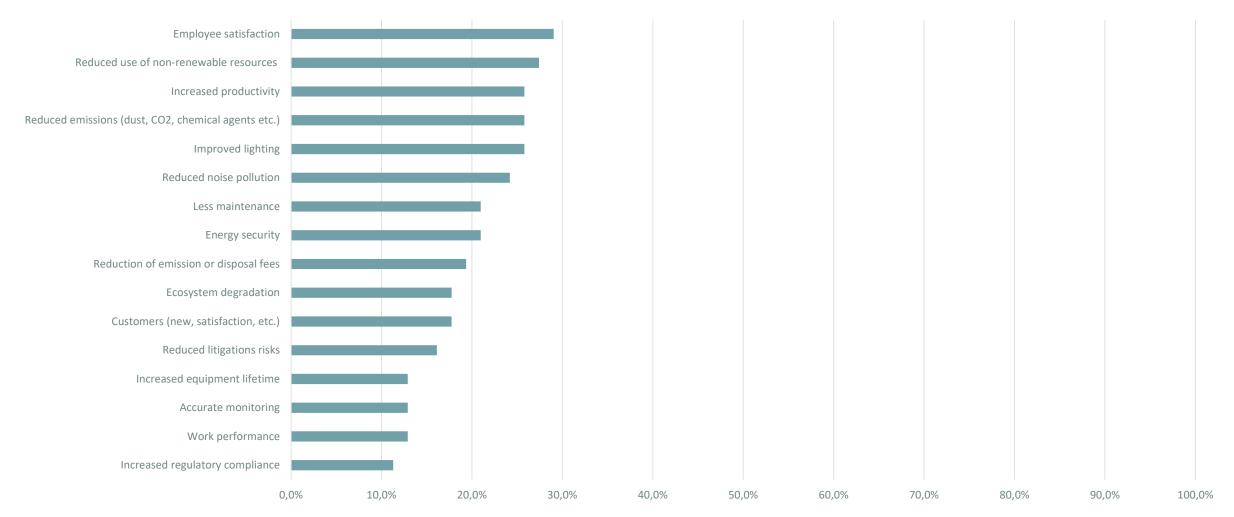
Non-energy benefits actually considerd when implementing EE measures (score less than 10% - low importance)





Interview summary

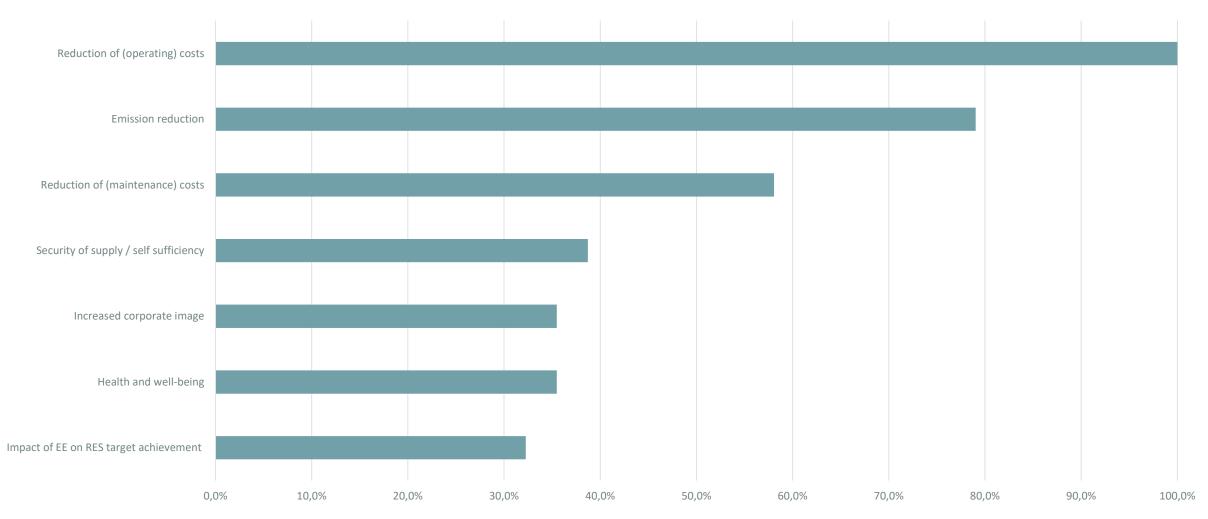
Non-energy benefits actually considered when implementing EE measures (score between 10% and 30 % - medium importance)





Interview summary

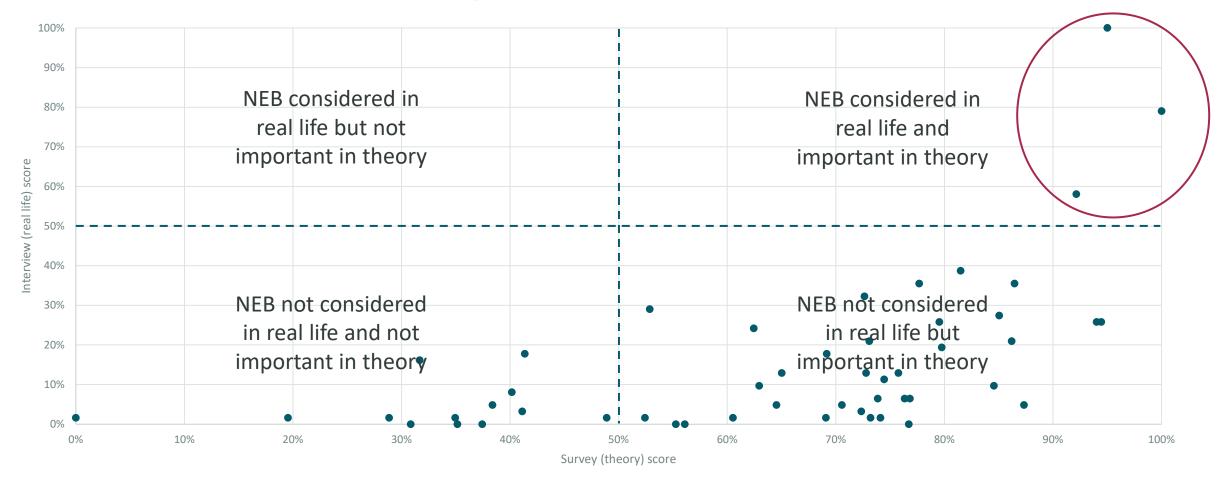
Non-energy benefits actually considered when implementing EE measures (score above 30% - high importance)





Surveys (theory) compared to interviews (real life)

Most important non-energy benefits (NEB)





Surveys (theory) compared to interviews (real life) Most important non-energy benefits

- People think that non-energy benefits are important but when it comes to real life the nonenergy benefits associated with EE measures are not taken into account so often
- Top 3 most often considered non-energy benefits (perceived important in real life and in theory)
 - Reduction of operating costs
 - Emission reduction
 - Reduction of maintenance costs





THANK YOU!

Dr. Gatis Žogla gatis@ekodoma.lv

Dr. Aiga Barisa Aiga.Barisa@ekodoma.lv



KNOWnNEBs has received funding from the European Union's LIFE21-CET-AUDITS programme under grant agreement no. 101076494.

The material presented and views expressed here are the responsibility of the author(s) only. Neither CINEA nor the European Commission is responsible for any use that may be made of the information contained herein.