

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

September 2025

-WELCOME-

to issue No.5 of the KNOWnNEBs newsletter!

In this last issue, we're excited to share highlights from our project's final phase and give you a glimpse of what's been happening. We start with project news from our last inperson consortium meeting in Vienna and a teaser for the upcoming Final European Conference. You'll also find insights into the impact and strategic value of NEBs, along with key lessons from pilot audits and practical feedback on our tools. To round it off, we showcase recent stakeholder engagement activities like trainings, seminars, and policy dialogues where our methodology is being put into practice across Europe.

KNOWnNEBs is a Life EU-funded project that aims to accelerate the uptake of energy efficiency (EE) measures thus increasing EE investments and sustainable actions. Focusing on the primary tool for identifying and evaluating barriers to energy efficiency – the energy audit - the consortium intends to improve current practices, by quantifying the value of NON-ENERGY BENEFITS (NEBs) and

integrating it into energy efficiency calculations.

Current energy audits only report on direct energy cost savings, not considering NEBs, such as improved product quality, space comfort, increased productivity, reduced maintenance-related downtime, and other significant benefits. This leads to energy audits underestimating the true value of energy efficiency indicators and neglecting impactful measures which could increase EE investments and accelerate the implementation of sustainable actions.

We encourage you to share this newsletter with colleagues who might be interested!

To keep up with the project and be part of the change in methodologies, follow us on our social media channels (<u>LinkedIn</u>, <u>Twitter</u>) and our website.

Kind regards,

The KNOWnNEBs Team

-PROJECT NEWS-

3rd Consortium Meeting in Vienna

In June, the KNOWnNEBs consortium met in Vienna for the final in-person meeting before the conclusion of the project. The Austrian partner **e7 energy innovation & engineering** welcomed participants from across Europe to the two-day session, which focused on sharing the results of the pilot energy audits conducted in the partner countries and discussing real-world

experiences with integrating non-energy benefits (NEBs) into energy audit processes.

The team also worked intensively on finalising policy recommendations based on the practical insights and lessons learned throughout the project.

As the project enters its final phase, the meeting served as a crucial step to ensure that the developed tools and methodology will have a lasting impact as well as coordinating interactions with stakeholders.



The KNOWnNEBs Consortium in Vienna

Final Project Conference

The consortium also used the opportunity to plan the final conference for KNOWnNEBs, which is scheduled to take place between mid of September and beginning of October. Instead of a single closing event, we are offering a series of targeted opportunities to explore the project's results, share insights, and connect with both established and future energy experts.

September 12th

The first session, taking place online, will introduce the project, walk participants through the KNOWnNEBs tool, and highlight key results and outputs – including our training materials and tool, available in nine languages.

Register here.

September 19th

The second session will also be held online and focus on **lessons learned from related European projects**. Together with the sister initiatives from the EU Life Call, we will reflect on experiences, policy implications, and recommendations for integrating non-energy benefits into energy efficiency practices across sectors.

October 3rd

The third and final session will be held in person in Vienna, as part of the <u>YES Annual Conference</u> – an event that brings together young professionals and thought leaders in the energy and sustainability field. Highlights will include a keynote speech, a roundtable on the future of European energy policy, and a hands-on workshop exploring the practical application of the KNOWnNEBs approach.

Register here for YES Conference

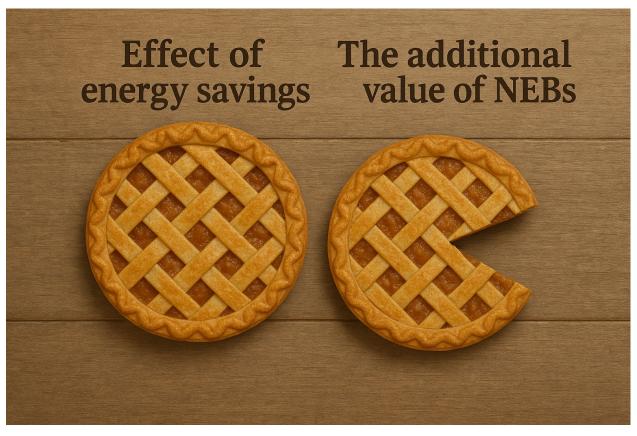


The impact of NEBs

Our study shows that Non-Energy Benefits (NEBs) act as a real game-changer in the economics of energy efficiency. By integrating monetized NEBs into evaluations, the economic attractiveness of measures effectively doubles. Without NEBs, one-third of the assessed measures showed a negative net present value (32%), but this dropped to just 16% when NEBs were included. An average **NEBs multiplier effect on NPV of 1.84** was encountered across the results of the partner countries. The median time for an energy efficiency measure to reach



positive NPV dropped from 8 to 6 years. The actual value of NEBs is even higher than described above because there are a lot of NEBs, which can't be monetized but still have positive impact on energy efficiency measure implementation. While further evidence is needed to confirm long-term effects, it is already clear that NEBs provide substantial added value and can strengthen the case for implementing efficiency measures across businesses.



Effect of including NEBs into energy efficiency measure evaluation

Strategic Value beyond energy savings

Findings from the KNOWnNEBs pilot actions show that energy efficiency is often not a top priority for companies but rather seen as part of wider growth and process improvement strategies. Large enterprises are generally more proactive, supported by dedicated staff and budgets, while SMEs invest when they enjoy stable cash flows or sustainability-minded leadership. However, firms under financial pressure usually cannot act, even when measures look profitable. Since the Russia–Ukraine war, efficiency technologies are increasingly viewed as obligations rather than opportunities, and investment decisions still largely depend on short payback times—though renewable energy solutions such as PV or heat pumps often deliver positive results even without NEBs.

This is where NEBs become strategically important: benefits such as stronger corporate image, risk reduction, and better working conditions are valued by both policymakers and financial institutions, with the latter increasingly treating them as central to ESG financing. By quantifying



these effects, the KNOWnNEBs tools provide companies—especially SMEs—with a consolidated indicator that strengthens the case for investment. At the same time, pilot actions revealed that audits are often misunderstood as mere formalities and show a discrepancy of 23% between estimates and real outcomes, though actual payback periods deviated by only around 6%. This highlights the need for more realistic, data-driven audit methodologies that reflect the true performance of measures.

Overall, preserving and communicating the value of NEBs can help shift energy efficiency from a compliance exercise to a driver of competitiveness, resilience, and sustainable growth.

Experiences From Pilots

As part of the KNOWnNEBs pilot audits, surveys were conducted to assess the usability and clarity of the tools, their effectiveness in identifying and quantifying non-energy benefits (NEBs) and efforts (NEEs), and to gather insights on how they can better support decision-making and future development. The feedback from the pilot audits confirmed that the KNOWnNEBs tools are both useful and highly relevant, particularly when it comes to evaluating nonenergy benefits (NEBs) and strengthening investment decisions. Users highlighted that the tools add credibility to energy efficiency measures, especially in cases technical savings alone would not be enough to convince decision-makers. They also praised their potential to support ESG reporting, funding applications, and even integration into national audit schemes. Many noted that the tools provide deep

insights and are valuable for justifying investments to diverse stakeholders, including SMEs, when NEBs are clearly demonstrated. At the same time, the feedback pointed to areas for improvement: clearer guidance, more intuitive user interfaces, and predefined values or default settings would make the tools more accessible and easier to navigate. Suggestions included standardised calculations, enhanced visual outputs, and the integration of the two tools into a single online platform. Importantly, participants see strong opportunities for broader applications, ranging from sector-specific examples to a future follow up project. Overall, the pilot feedback underlines that while usability can be improved, the methodological foundation of the tools is solid and their decision-making value is widely recognised.

Key Takeaways from Pilot Feedback

- Tools strengthen investment decisions by highlighting NEBs and adding credibility to efficiency measures.
- Strong potential for use in ESG reporting, funding applications, and national audit schemes.
- Clear demand for a streamlined, online version that combines both tools and expands their usability.



Methodology implementation

LATEST PROJECT EFFORTS

In the final months of the KNOWnNEBs project, partners across Europe are stepping up efforts to connect with key stakeholders, ensuring that our methods and tools for integrating NEBs into energy audits find their way into real-life practice.

National online trainings for energy experts, seminars for managers and technical staff, meetings with policy makers and industry associations, and multi-stakeholder roundtables are being rolled out across partner countries. These activities make sure the KNOWnNEBs approach is not just a research result, but a ISR Seminar in Portugal



practical resource for energy experts, businesses, and policy makers alike.

In Portugal, a seminar on "Energy Efficiency in SMEs: What if we count the non-energy benefits?" brought engineers, regulators, and businesses together to debate new perspectives on financing and implementation.



Network engagement in Italy

In Italy, our partner SOGESCA engaged with FIRE, a leading energy efficiency network, confirming the strong relevance of our NEB tools in national and EU contexts.

Austria is running an online training series "Rethinking the profitability of efficiency measures", providing auditors and consultants with hands-on experience in applying the NEB tool. Latvia will follow in September with accredited online trainings, giving professionals access to practical Excel-based tools developed through EN 17463 and KNOWnNEBs.

These are just examples of the diverse activities which show the project's real-world impact: building bridges between research and practice and ensuring that NEBs become a standard part of energy efficiency decisions across Europe.





















