



# D7.4 Final report on the engagement strategy

**Authors:**

Senta Schmatzberger, Vivian Dorizas, BPIE

**Contributors:**

Katharina Wohlfarth (Fraunhofer ISI), Jason Erwin (Borg & Co), Reinhard Ungerböck (Grazer Energieagentur), Jasmin Henrich & Felipe Andres Toro (IREES), Christina Hatzilau (NTUA), Livio De Chicchis (FIRE), Piotr Nowakowski & Ryszard Wnuk (KAPE), Joao Fong (ISR University of Coimbra), Ingo Schneider (HSLU), Catherine Cooremans (UNIL)

**Reviewers:**

Clemens Rohde, Fraunhofer ISI

**Proofreading and layout:**

Barney Jeffries, Margaux Barrett

**Revision of the report:**

June 2021

**Work package:**

WP7

**Brussels, June 2021**

© The Multiple Benefits of Energy Efficiency project and its partners

Document number: Version 1.0

Publishing date: 31 June 2021

Project deliverable: D7.4





# Multiple benefits of energy efficiency



Environmental Change Institute



B ● R G ● C ●



European Council for an energy efficient economy



[www.mbenefits.eu](http://www.mbenefits.eu)



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 785131. This document only reflects the authors' views and EASME is not responsible for any use that may be made of the information it contains.

## Briefing

M-Benefits – *Valuing & Communicating the Multiple Benefits of Energy Efficiency* is an EU-funded project that aims to increase the volume of energy saving actions implemented by private companies. Using a five-step method and toolkit, energy managers and other stakeholders identify and include multiple benefits, such as improvements in worker health, productivity or product quality, to show how energy efficiency contributes to a company’s competitive advantage. This briefing is a collection of findings and results from the consultation processes in seven implementing countries: Austria, Germany, Greece, Italy, Poland, Portugal and Switzerland.

## Consultation processes and methodology

The main objectives of the stakeholder consultation were:

- To capture *views and perceptions* of people with an interest in the methodology
- To *validate* the methodology as a basis to capture the multiple benefits of energy efficiency
- To enhance *trust and acceptance* of the M-Benefits methodology among stakeholders.

The main stakeholder consultation processes of M-Benefits involved data collection through:

- *Questionnaires*: aimed at assessing the awareness of companies on multiple benefits of energy efficiency measures and the level at which these measures are applied and implemented. A further aim was to gain insights on the perception of multiple benefits in companies and their role in decision-making processes.
- *Training activities and workshops*: giving the rationale behind the methodology and engaging with it through an interactive game.
- *Pilot projects*: applying the methodology in real business cases.

Figure 1 visualises the stakeholder engagement strategy and consultation processes.

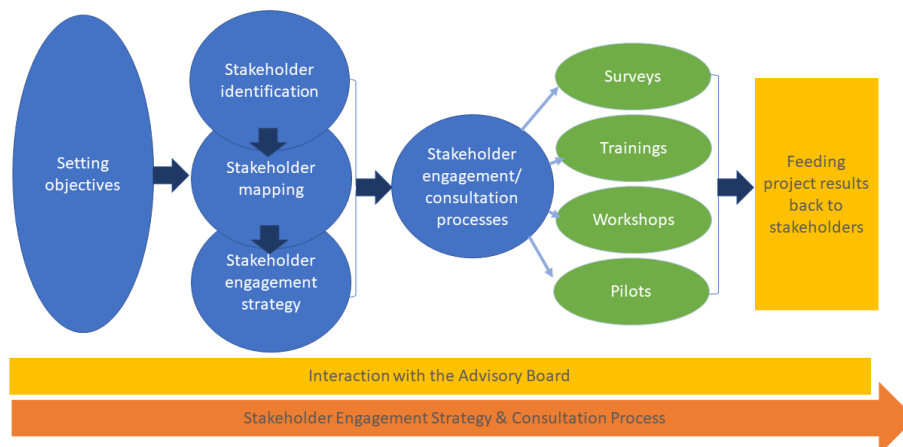


Figure 1: Stakeholder engagement strategy and consultation process

### Questionnaire survey

In total, 107 companies completed the survey. Most of the participating companies are located in Italy (63%), followed by Germany (13%), Greece (9%) and Portugal (7.5%). Around two in five (38%) stated they were “large companies” with over 500 employees, mainly from the industrial sector, energy-related companies (like energy suppliers, energy service companies (ESCOs) or energy consultants) or offices.

Many of the participating companies were well qualified to report on experiences with multiple benefits as they had an energy manager and were already engaged in energy

efficiency measures. Nine out of ten companies had implemented some kind of energy efficiency measure; over 80% had conducted an energy audit, and over half of those had implemented measures as a result of the audit. Most of the measures were related to lighting, metering or monitoring, compressed air, HVAC and process heating/cooling. Of the companies that already implement measures, *energy saving potential* is the most common decision-making criterion, followed by *costs of measures*, *profitability* and *level of organisational effort*.

Four main categories of non-energy benefits associated with cross-cutting energy efficiency measures in companies were identified:

1. Improvements to working processes (e.g., increased productivity or product quality)
2. Positive impacts on equipment operations (e.g., reduced maintenance costs or malfunctions)
3. Benefits to employees and working conditions (e.g., improved safety, health or comfort)
4. Reductions in (material) use, waste and emissions.

### ***Training activities<sup>1</sup>***

The training sessions introduced the methodology and an interactive tool known as the serious game.<sup>2</sup> There were 24 trainings organised with over 300 participants in total in the 7 countries. The training activities aimed to enable experts to prepare decision memos that include assessments of the multiple benefits as well as to communicate the added value and long-term impact efficiently. They were also used as an enabling tool to engage experts from companies involved in the topic and thereby reach out to potential pilot projects. The training programme covered the following aspects: Business model analysis, Identification and quantification of the multiple benefits of energy efficiency projects in the design phase, Application of the communication toolkit, Playing the serious game.

### **Stakeholder recruiting for trainings**

The process of finding participants for trainings, webinars and workshops was very time-consuming; it was not possible to reach the required number of participants by email only. Participant acquisition worked better through individual contacts, existing networks and follow-up calls, while social media and mass mailings did not get much response. Initial face-to-face meetings and the support of associations and energy agencies proved useful in bringing people on board.

### **Structure of trainings**

An icebreaker question, e.g. on their biggest challenges in the decision-making for energy efficiency projects, served as a good kick-off to the discussion. Equally, the early introduction into the serious game ensured that participants had an active role in the training. The process of getting to know the mechanism of the game was also an opportunity for interaction and communication among the participants. The participants worked in teams in a way designed to help them apply and understand the tools as if in a real company environment.

Some groups were made up of participants from different companies, while others worked in different functions for the same company. The diverse groups allowed a more stimulating discussion, as they could share different experiences and have more of an exchange.

After the end of the training a continuous exchange with participants was established, to keep them involved in the topic of multiple benefits and the M-Benefits methodology.

---

<sup>1</sup> A separate, more detailed report on the training courses and their evaluation based on the participants' feedback can be found in Deliverable D5.3.

<sup>2</sup> The serious game was developed as one of the main project tools. It is based on a mix of virtual activities (simulations) and real activities (presentations) that develop participants' capacity to take on a complex problem in a global and systemic manner.

## **Lessons learned from the trainings**

Companies are reluctant to invest their employees' time in the trainings (especially when suggested by external providers), and even when they do, they only allow a few personnel to join for a limited time. The fact that the training was free helped recruit staff. In addition, customised trainings had a very positive impact and resulted in faster identification of multiple benefits. The post-training evaluation showed that once participants were on board they found the training interesting and engaging.

## ***Pilot projects***

A total of 27 pilot projects (some covering several projects) representing companies and industries in seven countries were selected to implement and validate the M-Benefits methodology.

### **Pilot projects acquisition**

Recruiting pilot companies was challenging and time-consuming, especially among those who didn't attend a training. Contact with the prospective pilots was based on implementing partners' established relationships with companies. A majority of implemented pilot projects were a result of the trainings. However, it is difficult to convince potential pilots of the advantages of the methodology without good practical examples.

During the pilots, it was difficult for the responsible employees to give sufficient attention to the project, because of their day-to-day business responsibilities and internal decision-making routines. Allocating a budget and personnel resources specifically for the pilot project and the analysis of the multiple benefits of energy efficiency would positively affect the execution. Unfortunately, companies did not have the budget to do this in most pilots. In addition, very frequently companies did not provide the necessary figures for the financial assessments, possibly because this is sensitive data.

### **Investment decisions**

Investment decisions in enterprises are taken after deep consideration and not very frequently, usually once or twice a year. Due to the high competition between investment projects, it is tough to convince the selection committee to implement energy efficiency measures. The inclusion of non-energy benefits in an energy efficiency investment proposal can raise the chances of the project significantly. However, enterprises are often hesitant on many services and measures offered by external providers due to lack of trust.

In addition, participating companies made investment decisions without waiting for the results of the pilots. An early and rapid execution of the multiple benefits analysis would therefore have a greater impact in the decision-making process.

Stakeholders were particularly interested in positive financial returns and the added for final users/customers, such as increased product or service quality. Employee health and safety was also an important aspect. Overall, there was strong interest in the potential of quantifying the multiple benefits of energy efficiency measures.

The management team's commitment was found to be key for the adoption of the M-Benefits methodology. Without it, involving all different departments and putting together the necessary data for the analysis proves difficult.

### **Energy audits: a supporting tool for the M-Benefits methodology**

For all companies that require an energy audit, incorporating multiple benefits into these regular audits can be a game changer. In order to do this, the M-Benefits methodology and tools would be need to be simplified and the costs of the calculation accredited to a specific source. The possibilities for including non-energy benefits in energy audits need to be assessed and streamlined along the entire value chain of companies.

## Obstacles

- Energy managers and experts tend to focus on technical thinking and have limited knowledge of multiple benefits.
- Calculations on multiple benefits are often based on assumptions, which cannot easily be communicated to the management team.
- Costs for the assessment in the energy audit are high, and the company needs to come up with these before employing the M-Benefits methodology.
- Obtaining information required for the estimation of multiple benefits of energy efficiency from different departments of a company is very time-consuming. It needs a lot of persistence, considering that employees are very busy.
- Companies were reluctant to go ahead when they realised the amount of data that was needed to carry out the pilot. Amid the Covid pandemic and with staff being laid off, companies just could not keep their commitments.
- Companies are interested in a tool supporting the automatised identification of multiple benefits of energy efficiency without additional efforts. In most cases, a quantification of multiple benefits was possible, but very time-consuming. Some companies therefore did not find the effort/value ratio convincing enough to continue using the M-Benefits methodology.
- The M-Benefits toolkit does not budget for the time and resources needed for the identification and quantification of the benefits of an investment – these would be important numbers for the decision-making process (e.g. payback time).<sup>3</sup>

## Lessons learnt from the pilots and changes due to Covid-19

The pilot projects through the M-Benefits methodology have enabled companies to put *energy efficiency first*, by transferring a policy recommendation to an operational level in some countries. However, energy efficiency was not a priority for most enterprises in other countries. Although stakeholders were initially receptive to the project concept and were willing to collaborate, as time went on and they realised the need for their staff to spend time on M-Benefits and get involved with the serious game, their enthusiasm decreased.

The arrival of the pandemic further aggravated this situation. Although companies were interested in energy efficiency in a broad sense and recognised that multiple benefits such as air renewal were even more relevant during the Covid pandemic, concerns about the economic situation overtook all other agendas. Collaborating companies were temporarily shutting down or working at only partial capacity. Some companies even ceased their cooperation due to the impact of the pandemic. The time to dedicate to the pilot project (e.g. for the collection of data and completion of spreadsheets) was very limited and it was difficult to schedule meetings, which were sometimes postponed due to the emergence of more pressing issues. Even when a simple energy audit based on measurements in the installations was offered as an incentive, it became very difficult for the project implementing partners (experts) to maintain collaboration with some pilots. Even companies that had shown their interest with a letter of support failed to collaborate in due time.

Companies that were not familiar with the evaluation of multiple benefits needed more support from the implementing partner (corresponding project expert) in multiple ways, including involvement in internal meetings throughout the pilot. Companies which were already aware of the evaluation of multiple benefits were more familiar with the methodology.

The M-Benefits methodology was very much appreciated overall since it enables energy efficiency investments to be evaluated in a different way. By giving companies the opportunity to have an integrated view of all the possible benefits, it further allows them to improve the economics of the intervention. In addition to the financial benefits, companies

---

<sup>3</sup> Considering that this is a high-risk research project aiming at pursuing novel and original results, potential failures may occur. In addition, taking into account that this is a summary of qualitative findings, subjectivity can also influence the way outputs are translated and understood.

that have started to adopt such multiple-benefits analysis witnessed an improved collaboration process among different departments, with several positive impacts on core and strategic activities.

## Final conference

The final conference took place on 11 May 2021 with more than 300 participants. Partners as well as representatives from the advisory board and pilot projects presented the results and discussed the outcomes on a panel. Due to the pandemic the conference was conducted online, which made it possible for more people to attend from different countries.

The following additional lessons learned could be derived from the conference:

- In firms, the M-Benefits approach and tools can promote collaboration and communication across business units/departments that may not interact often. It is a platform that helps promote common cause between e.g., finance, operations, HR, sustainability/energy and upper management.
- Multiple benefits help firms think creatively and generate insights.
- By opening communication channels across departments the approach can even lead companies to extend/relax the financial return criteria to allow for more projects to receive funding.
- The approach is not a “copy and paste”. It is a tool that can be applied to many different types of organisations; however, the process and analysis requires time, commitment, and practice. The types of benefits and how to quantify them will vary across firms.
- While the process at a high level can be applied to all types of companies and organisations, companies are not homogenous, so the benefits differ and are not always obvious. Structured tools and practical examples (from the project) can contribute to better understanding of these benefits.
- The focus on non-energy benefits, especially better comfort, healthier homes and workplaces, and reduced energy poverty, can help stimulate demand for a host of programmes including building renovation efforts.

## Key highlights of the stakeholder process

The following gives the main takeaways from the stakeholder process:

- The majority of stakeholders were interested in the methodology developed by the project. However, companies’ responsible parties were hesitant to have their staff attend the training or agree to participate as a pilot project without a clear picture of what they would gain, especially financially.
- The interest in the methodology and the serious game was high, although including multiple benefits in the decision-making process is not high on the companies’ agenda.
- Various stakeholders recommended using the expression *non-energy benefits*, as it is more easily understandable by companies not familiar with the topic of multiple benefits.
- The acquisition of pilot partners was challenging and time-consuming; webinars and trainings played an important role in introducing actors to the methodology and acted as a door-opener.
- Trainings helped in showing the stakeholders possible extra benefits of efficiency measures (e.g. shorter payback periods when considering multiple benefits), which they valued highly.
- A strong commitment from the management team of the company as well as the responsible staff is needed to ensure a successful implementation.