

MBENEFITS Workshop

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Goal and program of the MBENEFITS workshop¹

The general purpose of the MBENEFITS workshop is to enable participants to understand and apply the MBENEFITS method for analyzing in a cross-cutting way energy and decarbonisation investment projects and present them in a convincing way to companies' decision-makers.

Whatever your position in the company, whether you are a consultant, an investor, a public policy maker, or involved in any way in the energy transition, this workshop will provide you with solutions and concrete examples and will allow you to learn while having fun, thanks to the MBENEFITS Serious Game.

The purpose of the workshop is not to communicate the importance of energy savings, but the need to take into account operational, strategic, financial, organizational and human factors in order for energy and decarbonisation projects to be approved by top management. Thus, the workshop trains participants to take a systemic and cross-cultural view in order to gain high-level support for energy and decarbonisation projects.

At the end of the MBENEFITS workshop, participants will be able to:

- Understand the MBENEFITS method of analysis.
- Identify, and evaluate in operational, financial and strategic terms, the full benefits (i.e., energy & non-energy benefits) of energy & decarbonisation projects.
- Present their projects in a more convincing way.

The workshop is built around two key activities: interactive teaching of the key concepts of the MBENEFITS method with presentation of documented examples; serious game playing to apply the method to a real case.

The workshop takes place (physically or virtually) over two half-days of 4 hours each, spaced one week apart, with 1-2 hours of work per team between the two sessions. An optional third session of 4 hours is dedicated to energy management and how MBENEFITS contributes to the energy management system. The detailed program and schedule of the workshop will be provided to the people registered.

This workshop is a continuation of the training programme designed in the framework of the project M-BENEFITS Valuing and communicating the multiple benefits of energy-efficiency projects (a deliverable of WP4). The project M-BENEFITS has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 785131.



The Serious Game MBFNFFITS

The serious game MBENEFITS² is an educational tool, used for training purposes during workshops, webinars or online courses. It is a deliverable of the EU project M-BENEFITS³.

The serious game MBENEFITS is a simulation game, i.e., a game which produces a simplified, but realistic representation of a real-world complex system. Participants can thus "live" situations. As they play in a virtual environment, they have the opportunity to manage complex problems, make mistakes and learn from these experiences. Serious games allow players to directly apply any theoretical framework in a fun and unconstrained way.

² A serious game is a game designed for a primary purpose other than pure entertainment, e.g. awareness-building, learning, health promotion, advertising, applied training, etc. It is a training tool that uses game mechanics for achieving the training purpose. It is based on a mix of virtual and real activities (teamwork and oral presentations).

³ Task 4.4 of Work Package 4 Toolkit Development. Haute Ecole d'Ingénierie et de Gestion du canton de Vaud (HEIG-VD, a university of applied sciences of the Swiss HES-SO network) was responsible for the Serious Game content integration and gamification, in collaboration with Unil. The Serious Game is developed with the open-source environment Wegas.

The development of the game was guided by a search for consistency between the MBENEFITS method and the activities within the serious game. On the other hand, the mechanisms and interfaces of the Serious Game have been developed taking into account its future use by multiple trainers in different countries.

The serious game MBENEFITS has been used many times for the past two years, in the class room or in virtual sessions, in several European countries and in the US and Canada, to the satisfaction of the participants.

The University of Lausanne (Unil) provided the content of the serious game: a description of the company, its managers, management system and business model; texts of the interactions between the managers and the player (questions and tasks to perform); stages of the game; all documents provided to the player, including an energy audit. The content is based on the MBENEFITS analytical framework and on the information given – on condition of anonymity – by a real industrial company⁴.

The real case study was adapted to best serve the training objectives of the serious game, which are to get the participants to:

- understand the importance of the non-energy benefits approach to increase the attractiveness of energy & decarbonisation projects for business leaders;
- apply the MBENEFITS methodology to identify, value and communicate these benefits.

"As an engineer in the energy field, I tend to look for the bottom-line cost information when evaluating energy efficiency measures. Playing the serious game required me to think outside of my comfort zone...in that the answers to the questions we asked the Pickles Plant staff were interesting, helpful, and sometimes surprisingly unhelpful in my quest for cost information. Upon reading the Energy Audit report, my team selected energy measures [..] and [..]. And after hearing the Pickles Plant staff describe their issues/goals/priorities, we ended up replacing measure [..] with measure [..], as noted in our final presentation ... I enjoyed the game as the Q&A offered the opportunity for us to feel like we were actually speaking to plant personnel. "

Patti Garland, U.S. Department of Energy (Energy Efficiency & Renewable Energy, Advanced Manufacturing Office, CHP Team USDOE Workshop, 16-17 June, 2021

"It was very interesting and useful for me to test myself in the serious game. Even though I have a solid engineering background, the serious game seemed to me an excellent opportunity to test the importance of the multidisciplinary approach in a virtual training environment in order to analyse and communicate energy efficiency measures focusing on the vision of key actors. Thank you very much."

Alessandro Tallini Italian National Agency for New Technologies, Energy and Sustainable Economic Development Energy Efficiency Unit Department

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⁴ This information concerned the company's business model and management systems, production processes and figures, and included an in-depth energy audit.