



# Multiple benefits of energy efficiency

## Multiple Benefits

### Synergy report

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Publishing date: 14 June 2021

Project deliverable: D8.6



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## Project partners

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Environmental Change Institute



B ● R G ● C ●



European Council for an energy efficient economy



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## Purpose

The purpose of this report is two-fold: 1) to identify connections to and potential synergies with other European Commission funded projects and, 2) to identify opportunities for embedding the Multiple Benefits approach, tools, and outputs into EU policies, programmes or EU/international standards.

## Synergies with related EU-projects

This section highlights the connections Multiple Benefits partners made with related European Commission supported projects, and potential or realised synergies.

### ***Energy Efficiency Financial Institutions Group (EEFIG)***

EEFIG supports a platform called the De-Risking EE Platform (DEEP), which is a database of EE projects and investment returns. It is an open-source resource to provide good examples and help investors and project developers to scale up energy efficiency projects in Europe.

Several Multiple Benefits partners, including Fraunhofer ISI, are involved in EEFIG and raised the possibility of using the taxonomy of multiple benefits and evidence base as references and inputs for the DEEP database. The logic is that the multiple benefits taxonomy could serve as a de-facto “standard” to identify and organise the benefits associated with industry/tertiary sector projects. A common taxonomy with definitions would make it easier for investors to consider such benefits in project financing.

Within EEFIG, a dedicated working group on Multiple Benefits in the context of financial institutions has been established. Clemens Rohde is chairing this WG. BPIE, Oxford and FIRE are also part of the WG and are feeding in results from M-Benefits.

### ***EuremNext***

The purpose of EuremNext is to enrich the EUREM European EnergyManger training programme with 4 new modules. One of the modules has a strong focus on financial topics. Multiple Benefits partners approached partners in the EuremNext project to discuss linkages with the Multiple Benefits training. Discussions on ongoing about the M-benefits training might be embedded.

### ***Technical assistance/audits (SMEs)***

EU countries like Poland receive funding under the structural reform programme to promote and deliver technical support for energy audits and provide incentives for energy efficiency investments in small and medium-sized enterprises (SMEs). However, even though audits/technical assistance are offered for free the programmes are a hard sell (many SMEs do not respond to offers).

During one of the Final Conference panels, Multiple Benefits partners and Aneta Ciszewska (Polish Ministry of Climate and Environment), discussed the potential for multiple benefits to enhance the uptake of these programmes. Multiple benefits could be integrated in two ways:

1. Aid promotion by highlighting the competitive advantages of energy improvements for SMEs (raise the profile to the strategic level in firms)



2. Enhance audit tools and results by including and calculating multiple benefits to show the full strategic and financial benefits of identified savings measures.

## **sEEnergies**

sEEnergies is a European Commission sponsored project to consider all aspects of the Energy Efficiency (EE) First Principle. By applying it in sectors and markets, country-by-country and grid-by-grid, and by combining temporal and spatial analyses, sEEnergies will develop an innovative, holistic and research-based EE-modelling approach.

Multiple Benefits partners engaged with Brian Vad Mathiesen to discuss how private multiple benefits could be aggregated/included in the energy efficiency measures in industries, transport and buildings and inform estimates on EU country level.

## **REFEREE**

The REFEREE project is a Horizon 2020 project developing an online decision-support tool for energy efficiency measures. REFEREE will quantify the multiple benefits of energy efficiency, e.g., in terms of CO<sub>2</sub> and pollution reduction, health improvement and well-being, employment and monetary gains. The tool will be accessible to everyone: no specific software or modelling skills are required. <https://refereetool.eu/>

Multiple Benefits partners reached out to Davide Sabbadin of EEB to inform him of the Multiple Benefits project and resources, including case studies, tools, and evidence base in case these resources can inform development of the REFEREE tools.

## **Synergies with EU policy & programmes**

The Multiple Benefits approach has already benefitted individual firms - if integrated into policymaking, training and audit programmes, and industry standards/practices it has the potential to deliver broader economic, environmental, and social benefits across Europe and beyond. This section identifies potential synergies and use cases for EU- and national-level policymakers, energy efficiency programme administrators, trade/industry associations, and other leading businesses and investors championing a clean energy transition.

Informed by the project Advisory Board, project partners, and interested stakeholders, four key synergy areas emerged:

1. Motivate more ambitious energy/climate targets and investment levels in policy and programmes.
2. Strengthen the basis for compelling company-level, energy-related investments by including multiple benefits that arise.
3. Boost the efficacy of public and private-sector energy efficiency programmes and initiatives that target businesses and SMEs, including marketing and promotional campaigns.
4. Build workforce capacity and “green jobs” by integrating multiple benefits into training programmes (e.g., for energy auditors), and through continuing education for executives and key personnel within companies.

The table below summarises these opportunities and associated use cases.





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Synergy area	Description	Target group	Use cases/examples
1. Motivate greater targets and investment levels	Include multiple benefits in cost-benefit models that underlie energy and climate policy development and investment decisions	EU- and national-level policymakers	<ul style="list-style-type: none"> <li>a) National Renovation Wave programmes and investments – Open up the cost-benefit logic to multiple benefits to boost member state ambitions</li> <li>b) Industrial strategy revision under the EU Green Deal</li> <li>c) Eco-design and Sustainable Products Initiative (SPI) - embed multiple benefits when revising performance levels</li> <li>d) National recovery and resilience plans – include initiatives that stimulate the deployment of efficiency measures in companies through use of Multiple Benefits-toolbox</li> </ul>
	Include multiple benefits when setting company-level energy/climate targets	Company executives	<ul style="list-style-type: none"> <li>a) Identify and integrate value of multiple benefits to inform level of climate/energy efficiency ambition and investment levels</li> </ul>
2. Strengthen basis for compelling private investments	Use M-Benefits training, approach, tools to identify multiple benefits in energy audits; quantify non-energy benefits in cost-benefit analysis of identified measures	EU- and national-level policymakers  National-level policymakers; International governmental organisations; EE programme administrators	<ul style="list-style-type: none"> <li>a) Embed Multiple Benefits training, approach, and tools in mandatory energy audit training and audit protocols (Energy Efficiency Directive)</li> <li>b) Share cases, structured evidence on how energy saving actions lead to competitiveness benefits.</li> <li>c) Include Multiple Benefits training, approach, and tools in voluntary energy audit programmes e.g., targeting SMEs, regions with no mandatory audits</li> </ul>
	Make Multiple Benefits assessment protocols, tools, trainings standardized and readily available to industry/businesses	Industry standards bodies	<ul style="list-style-type: none"> <li>d) Consider Multiple Benefits approach as a basis for enhanced/new industry standards e.g., energy audits</li> </ul>

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Synergy area	Description	Target group	Use cases/examples
	Streamline ability of banks and investors to assess energy-saving investments as competitive and profit-generating	EEFIG/Investors/Banks	<ul style="list-style-type: none"> <li>a) EU DEEP database: Consider multiple benefits taxonomy as basis to include accrued evidence in database to underpin investment decisions</li> <li>b) Building valuation tools to capture value-add through multiple benefits</li> <li>c) Treat e-saving investments as competitive “core or profit-generating” investments (as opposed to non-core activities)</li> </ul>
3. Boost efficacy of efficiency programmes	Improve targeting, marketing, promotion, and quality of energy efficiency programmes/initiatives focused on businesses/institutions	EU- and National-level programme administrators  Public-funded programme administrators	<ul style="list-style-type: none"> <li>a) Create public resource of metrics, key indicators, examples, and evidence on realised non-energy benefits</li> <li>b) Measure non-energy benefits during audits, consultations and evaluations – feed back into public database/resource</li> <li>c) Inform policy makers what motivates SMEs and businesses to invest</li> <li>d) Promote programmes and initiatives in terms that resonate with business decision-makers</li> </ul>
4. Build workforce capacity and “green jobs”	Provide training on multiple benefits to enrich educational programmes for energy engineers and other practitioners. This should be available in-house and at accredited centres	National-level, public-funded programme administrators  Industry/trade associations	<ul style="list-style-type: none"> <li>a) Include multiple benefits logic, method, and tools in Energy Manager training and certification programmes</li> <li>b) Include multiple benefits logic, method, and tools in Energy Auditor training and certification programmes</li> <li>c) Include multiple benefits module in pre-professional and vocational training including the Serious Game (e.g., engineering)</li> </ul>

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## Conclusions

The Multiple Benefits approach can create a meaningful bridge and stimulate dialogue across disciplines or across “silos”. It is an emerging platform/forum for individuals and organisations from different fields and disciplines to identify mutual aims and collaborate e.g., for different departments to work together in firms, for academia to work with energy services, for city-level labour/finance departments to collaborate with their environmental/energy counter-parts.

While the high-level Multiple Benefits process 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.

Based on the input from stakeholder engagement and judging from the high attendance at the Final Conference (300+ attendees), we would recommend that the European Commission consider sponsoring/allocating resources to establish a Multiple Benefits Community of Practice. We envision that, if formed, this Community/Forum would be able to further develop the following areas:

- **Establish a clear taxonomy of multiple benefits** including definitions, metrics, and a database to organise and capture the growing evidence base. This work should define and clarify the content including the level/recipient of the benefits (e.g., micro versus macro-level benefits, how micro-level benefits may relate to or aggregate up to the macro). Potential integration with the EEFIG DEEP database (for investors) should be explored further.
- **Explore further how Multiple Benefits methods, tools, and evidence integrate with policymaking or public programmes.** Energy audit and training programmes (e.g., for SMEs) are clear linkages and a good starting point. Energy auditors will require training on the method and tools and there needs to be a business driver/case since applying the method requires more time (and hence cost).
- **Expand the Multiple Benefits approach** to address the public sector especially in the public housing area, considering e.g., better comfort, healthier homes and workplaces, and reduced energy poverty. Promoting/marketing energy-saving programmes under the banner of healthier homes/buildings is clearly needed to stimulate demand.