Project plan & value of ESMs

DEESME 2050
Developing Energy Efficiency Projects in SMEs for European 2050 targets

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1_About DEESME 2050

Use developed DEESME multiple benefits approach to capacitate, assist and motivate companies to overcome the obstacles in energy efficiency measures uptake.

Involve, support and accompany companies in the implementation of energy efficiency measures based on their level of readiness.

Build capacities of the companies’ staff on all working levels.

Endorse sustainability through preparation of financing, standardisation and replication in cooperation with associations and policymakers.
Recast Energy Efficiency Directive (Art.11):
“Member States shall develop programmes with the aim of encouraging and providing technical support to SMEs [...] to undergo energy audits and to subsequently implement the recommendations arising from those audits.”

“Member States shall ensure that the programmes [...] include support to SMEs in quantifying the multiple benefits of energy efficiency measures”
• 02_DEESME methodology of MB approach for energy audits and EMS & results
Stage 1: Business Analysis

Step 1: Business Model Analysis
Analysis of value proposition, partner, customer segments, business procedures, partnerships according to the Business Model Canvas

Step 2: Cost Structure Analysis
Cost centers identification in all the production processes
Stage 2: Environmental Analysis

**Step 1: Energy Auditing**
- Preliminary work → Data collection → On-field inspection → Identification of energy saving opportunities → **Audit report**

**Step 2: Carbon Footprint Analysis**
- Estimation of **Energy & Non-Energy related GHG emissions** from company’s operation
Stage 3: Multiple Benefits Analysis

Step 1: MBs Identification
For each identified Benefit:
- Description
- Main MB Indicator
- Alternative Indicators
- Calculation Method

Step 2: MBs evaluation
Attribution of qualitative scores to each MB concerning:
- Significance for the company
- Contribution to the BM
Exploitation Plan is also outlined
Stage 4: BM Sustainability Advancement

The existing Business Model is renovated in its core elements or improved through the MBs having high positive impact.
Implementation of **DEESME Approach** for Energy Audits

**Results from Bulgaria**

**MB Analysis**
- Increased **productivity** (13/13)
- Introduction of **new ‘green’ products/services** (8/13)
- Improved **maintenance, quality and safety** (13/13)
- Acquisition of **new customers** (13/13)
- Increased **customer satisfaction** (11/13)

**BM Sustainability Advancement**
- **Value Proposition**: upcycling of leftovers, product complexity ↑
- **Key partners**: relationship with suppliers and customers ↑
- **Cost Structure**: energy and raw materials use ↓, maintenance costs

DEESME 2050
Results from Italy

MB Analysis

- Improved maintenance (7/12)
- Improved raw materials consumption (4/12)
- Improved supply chain relationships (5/12)
- Improved quality (1/12)
- Increased customer satisfaction (1/12)

BM Sustainability Advancement

- Cost reduction enhancing competitiveness
- Sustainable production unleashes new market opportunities
- Monitoring systems to identify and address inefficiencies
Results from **Poland**

**MB Analysis**

- Introduction of *new products/services* (4/7)
- Improved *quality* (5/7)
- Improved *raw material consumption* (4/7)
- Increased *employee and customer satisfaction* (2/7)
- Increased *utilization* (3/7)

**BM Sustainability Advancement**

- Customer Segment, Relationships, Cost structure and Key resources ↑
Results from Germany

MB Analysis
- Increased **productivity** (10/10)
- Improved **safety** (10/10)

BM Sustainability Advancement
- **Key Activities:** monitoring & control systems for heating processes
- **Cost Structure:** company’s competitiveness ↑
DEESME MB Approach: Identified Best Practices

- Relevance of complete and accurate data
- Quantification of problems
- Commitment of the Top Management
- Training of Operational and Managerial staff
- Communicate successful energy projects
03_ Non-energy benefits quantification & monetisation

The xls spreadsheet, created to analyze investments according to the MB approach, is made up of 6 parts (sheets):

• 1. Cover (illustrating the analysis main results)
• 2. Introduction
• 3. Specifications
• 4. Economic analysis
• 5. Multiple Benefits (MB)
• 6. MBs quantification
Example of the spreadsheet input:

Energy efficiency investment - Multiple Benefits approach

This spreadsheet allows the analysis of only one investment project

- Investment description in Part 3.1
- Cost centers in Part 3.2
- Investment category Part 3.3
- Production Part 3.4
- Energy (carriers) costs Part 3.5
- Energy (carriers) savings Part 3.6
- MULTIPLE BENEFITS description Part 3.7
- Expenditure Part 3.8
- RESULTS
In the meantime: More complex calculation tools (are being) developed.
Further workplan

Readiness Level

- 120 companies
- 40 companies
- 20 companies

Identification of companies

Support to companies

WTA

EMS

DEESME Tool upgrade (VALERI+ESG)

Preparation for financing

Replication, Communication, Networking, Cooperation

Support to companies' staff

DEESME approach basic training, Level 1

DEESME advanced basic training, Level 2

Management integration of business model
Challenges:

• Benchmarking of current audit/EMS and measures implementation per sector in four countries - approach and interest;

• What is out there? (advancement of the calculation tool, cooperation with other projects), needs of NAs, links with standard(s);

• Further research on possible monetisation of MBs;

• Linking CSRD to EED.
Our Partners

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Thank you!

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