The benefits of energy efficiency projects for small and medium companies
Barriers

- Lack of awareness
- Low capital
- Difficulty to access financing
- Lack of technical human resources
- Doubts around actual saving potential
Challenges from the perspective of the National Authorities

- Support mechanisms
- Available resources
- Guidance to SMEs
- Awareness on opportunities
Support mechanisms for SMEs

- Funding mechanisms (loans, grants etc.): 100%
- Dedicated tools (IT tools, best practices or case studies etc.): 73%
- Training and education: 64%
- Voluntary agreements: 45%
- Regulatory measures (i.e. requirements): 9%
- Fiscal incentives: 27%

Source: H2020 DEESME (Fraunhofer ISI)
A mission is to help companies and numerous supporting entities to decarbonise their energy footprint, by guiding them to define and then implement emissions reduction goals that are manageable, attainable and aligned with their level of ambition.

- Companies committing to the Covenant will be eligible to receive a wide range of support from the Covenant’s secretariat, including bespoke Technical Assistance and a variety of advisory services.

More information: https://covenant-of-companies.ec.europa.eu/
<table>
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<tr>
<th>Use of waste fuels, heat, gas</th>
<th>Dust emissions</th>
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<tbody>
<tr>
<td>Product waste</td>
<td>Gas emissions</td>
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<tr>
<td>Waste water and hazardous waste</td>
<td>(CO, CO2, NOx, SOx)</td>
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<tr>
<td>Materials reduction</td>
<td>(CO, CO2, NOx, SOx)</td>
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<tr>
<th>Need for engineering controls</th>
<th>Dust emissions</th>
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<tr>
<td>Cooling requirements</td>
<td>Gas emissions</td>
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<tr>
<td>Facility reliability</td>
<td>(CO, CO2, NOx, SOx)</td>
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<tr>
<td>Wear and tear</td>
<td>(CO, CO2, NOx, SOx)</td>
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<tr>
<td>Labour requirements</td>
<td>(CO, CO2, NOx, SOx)</td>
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<th>Product output/yield</th>
<th>Lighting</th>
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<tr>
<td>Performance</td>
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<tr>
<td>Reliability</td>
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<td>Product quality/purity</td>
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<td>Process cycle times</td>
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<th>Need for personal protective equipment</th>
<th>Lighting</th>
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<td>Image</td>
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<td>Liabilities</td>
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<td>Delayed or reduced capital expenditures</td>
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<td>Space requirements</td>
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<td>Worker morale</td>
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H2020 DEESME project & results

- 500 companies involved
- 50 companies undergoing an audit
- 25 companies with EMS
- 10 national policies, 5 direct solutions
H2020 DEESME results for National Authorities

Country specific guideline +
Generic guideline (18+ 93 pg.)

National policy recommendation

Direct support to five
National Authorities
H2020 DEESME results for companies

Integrated MB approach

Business model advancement
Business analysis
Multiple benefits analysis
Environmental (energy) analysis

Basic Advanced and In-practice trainings for SMEs & companies

Audits in 50 companies
EMS in 25 companies
Cost-benefit analysis
LIFE + DEESME 2050 workplan

**Identification of companies**
- **Support to companies’ staff**
- **Support to companies**

**Support to companies’ staff**
- 120 companies
- **WTA**
  - DEESME approach basic training
  - LEVEL 1

**Support to companies**
- 40 companies
- **EMS**
  - DEESME approach advanced training
  - LEVEL 2

**Support to companies**
- 20 companies
- **DEESME business model**
- **Covenant of Companies**
  - Working with management for integration of the business model

**Preparation for financing**

**Readiness level**

**Replication, Communication, Networking, Cooperation**
LIFE + DEESME 2050 methodology for uptake (financial part)

- Analyse financial market - both public, EU and private (banks, loans)
- Select investments and analyse them according to MBs
- Cost Benefit Analysis for the targeted measures with Multiple Benefits
- Matchmaking with finance
Leading business towards climate neutrality by speeding up the uptake of energy efficiency measures from the energy audits - AUDIT2MEASURE methodology

- Current auditing systems: pros and cons
- Benchmarking of energy saving measures
- Laboratory of ideas for high level management
- Replicability analysis in other MS

- Barriers to the adoption of energy efficiency
- Trainings for medium/low level management and operators
- Guidelines for auditors

- Decision making path
- Impact estimation of energy saving measures (IET)
- Workshops for industrial associations
- Guidelines for companies

- Supporting and funding mechanisms
- Validation strategy proposal and tools with companies
- Support to companies in implementing energy saving measures
- Recommendation for policy makers