

The benefits of energy efficiency projects for small and medium companies



DEESME 2050



DEESME 2050

Barriers



Lack of awareness



Low capital



Difficulty to access financing



Lack of technical human resources



Doubts around actual saving potential

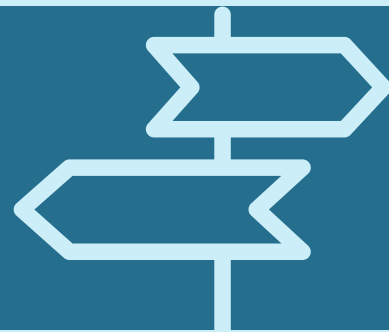
Challenges from the perspective of the National Authorities



Support mechanisms



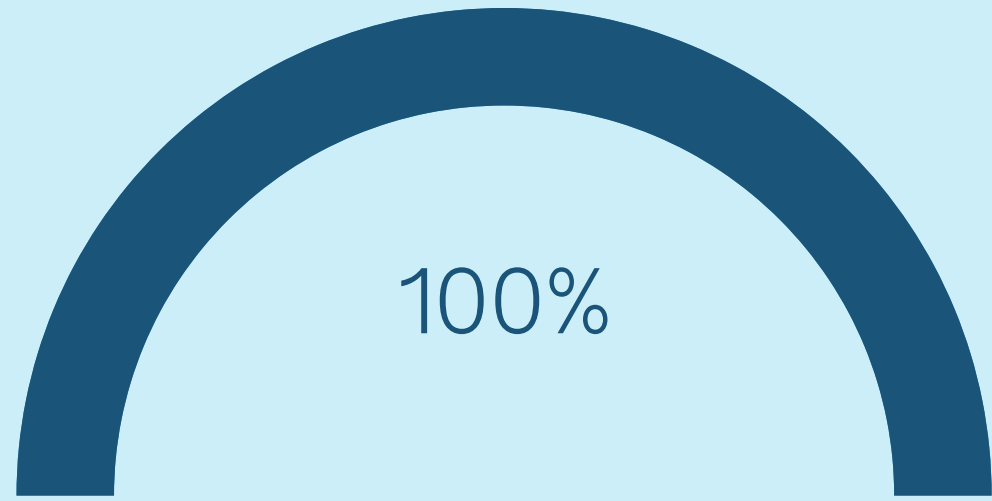
Available resources



Guidance to SMEs

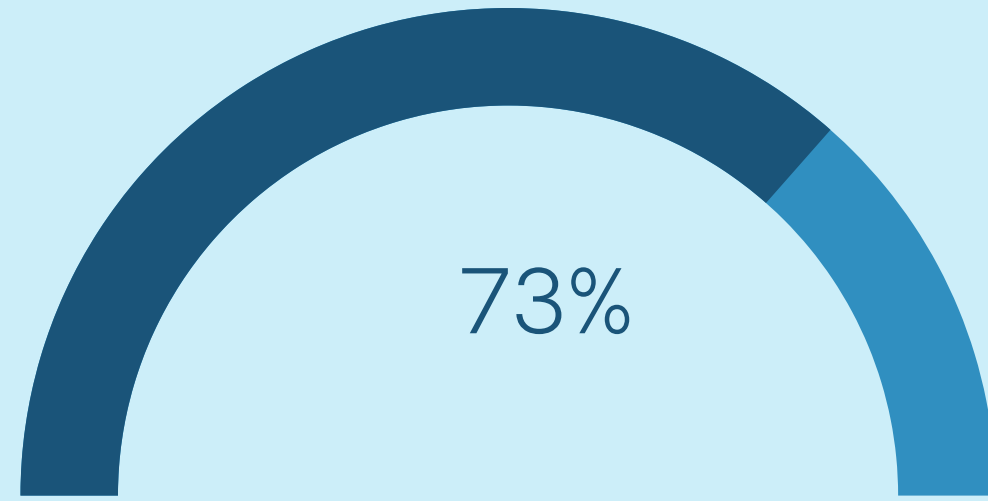


Awareness on opportunities



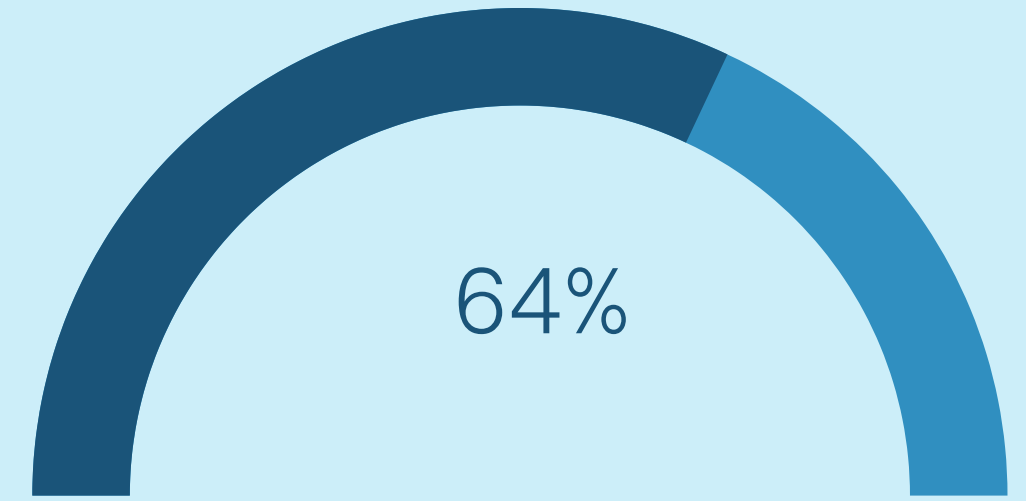
100%

Funding mechanisms (loans, grants etc.)



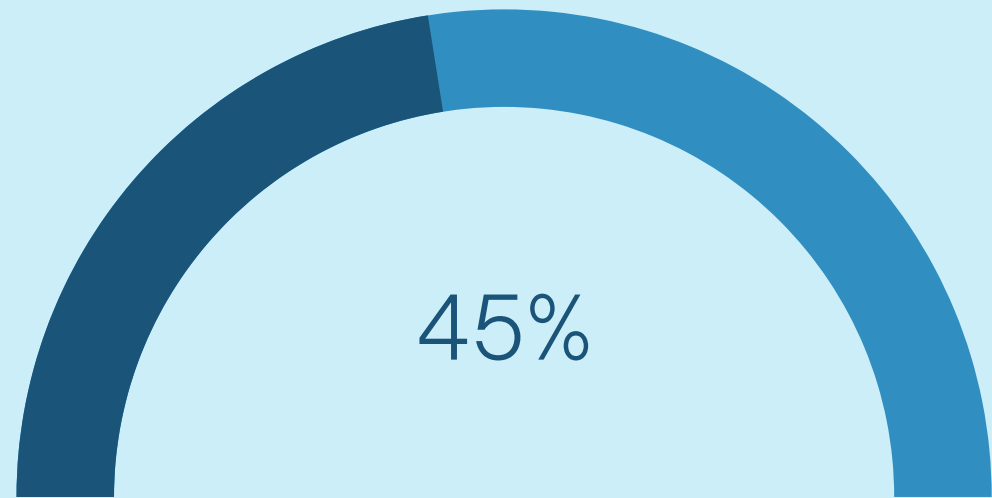
73%

Dedicated tools (IT tools,
best practices or case studies etc.)



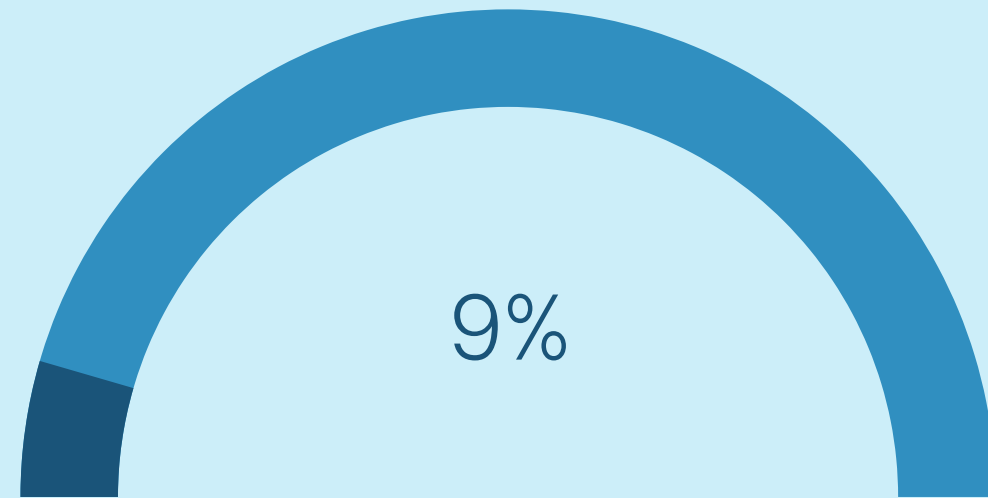
64%

Training and education



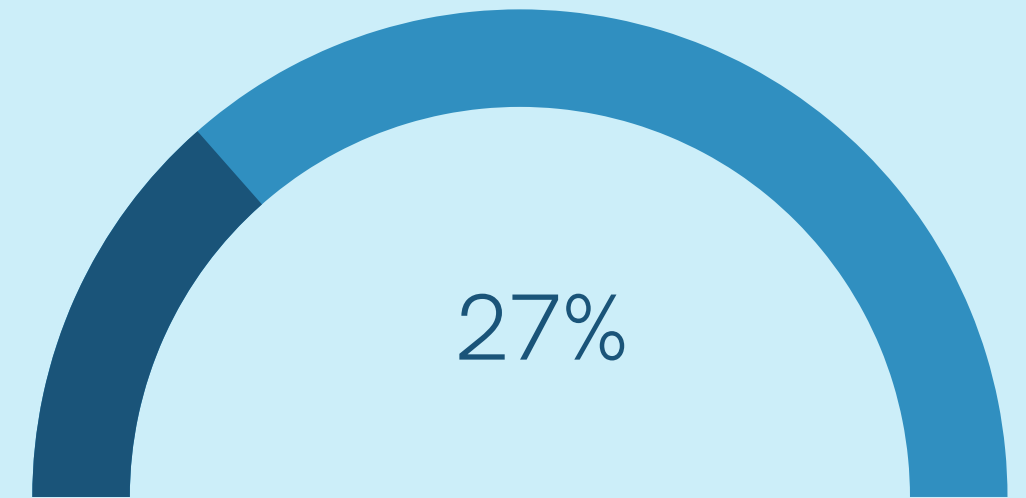
45%

Voluntary agreements



9%

Regulatory measures
(i.e. requirements)



27%

Fiscal incentives

Support mechanisms for SMEs

Source: H2020 DEESME (Fraunhofer ISI)

EUROPEAN
**COVENANT
OF COMPANIES**
FOR CLIMATE AND ENERGY

#CovenantOfCompanies



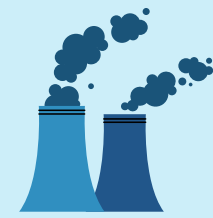
A new pilot initiative from the European Commission, to help companies to transition to the net zero economy.

- 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.

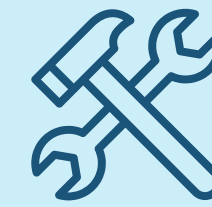
More information: <https://covenant-of-companies.ec.europa.eu/>



- ↑ Use of waste fuels, heat, gas
- ↓ Product waste
- ↓ Waste water and hazardous waste
- ↓ Materials reduction

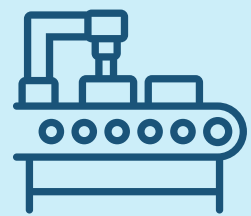


- ↓ Dust emissions
- ↓ Gas emissions
(CO, CO₂, NO_x, SO_x)



- ↓ Need for engineering controls
- ↓ Cooling requirements
- ↑ Facility reliability
- ↓ Wear and tear
- ↓ Labour requirements

Worrell et al. (2003): Productivity benefits of industrial energy efficiency measures.



- ↑ Product output/yield
- ↑ Performance
- ↑ Reliability
- ↑ Product quality/purity
- ↓ Process cycle times



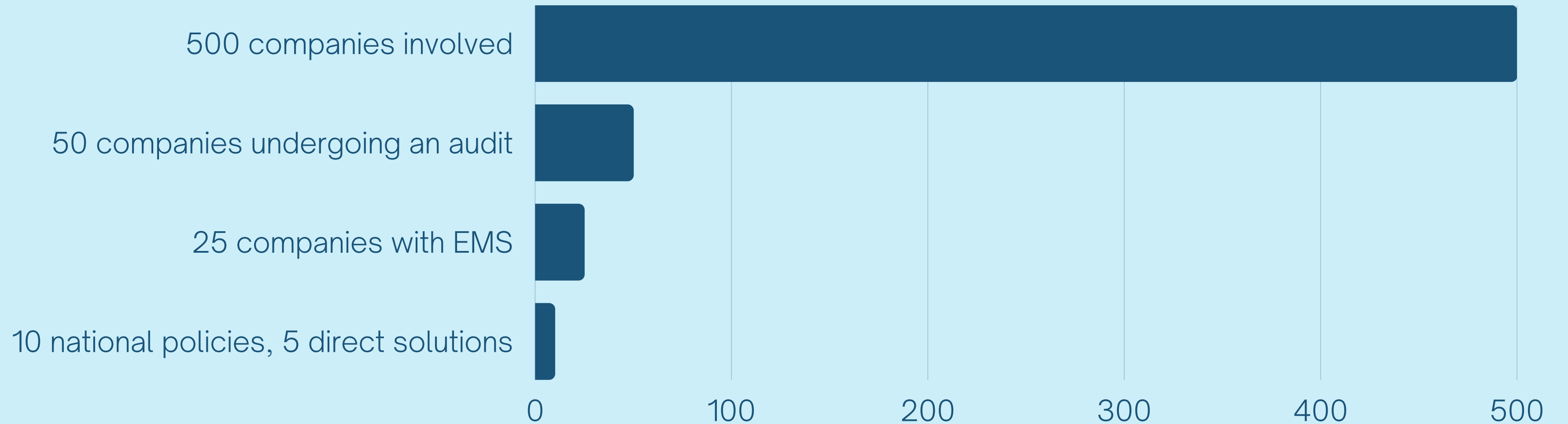
- ↑ Lighting
- ↑ Temperature control
- ↑ Air quality
- ↓ Noise levels
- ↓ Need for personal protective equipment



- ↑ Image
- ↑ Liabilities
- ↑ Delayed or reduced capital expenditures
- ↓ Space requirements
- ↑ Worker morale



H2020 DEESME project & results



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

MB approach



Business
model
advancement

Business
analysis

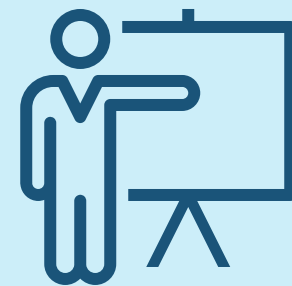
Integrated
MB approach

Multiple
benefits
analysis

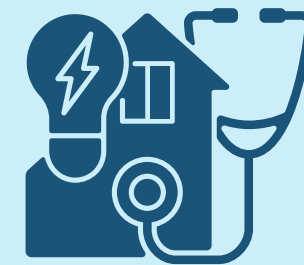
Environmental
(energy)
analysis



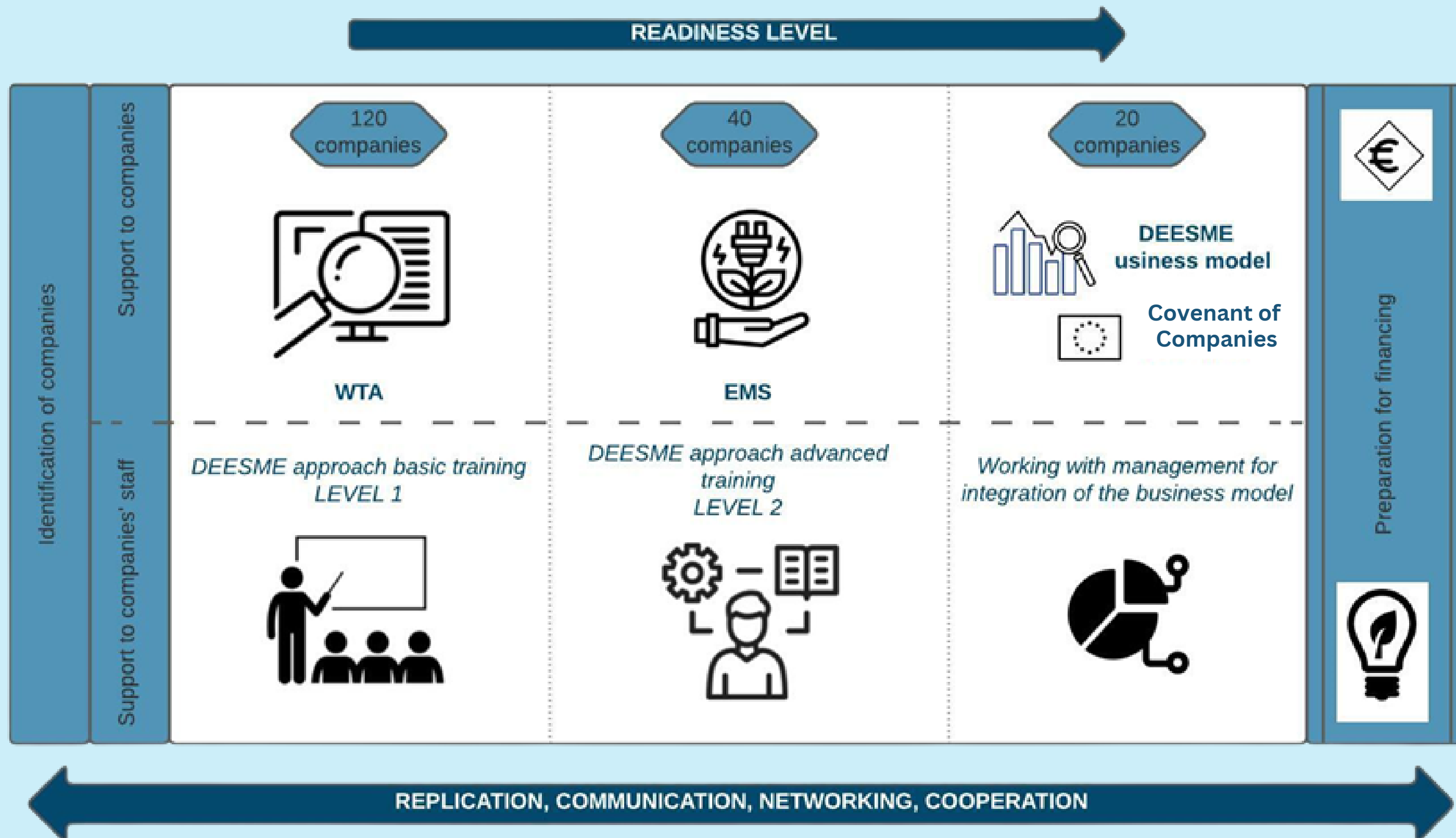
Basic
Advanced
and
In- practice
trainings for SMEs
& companies



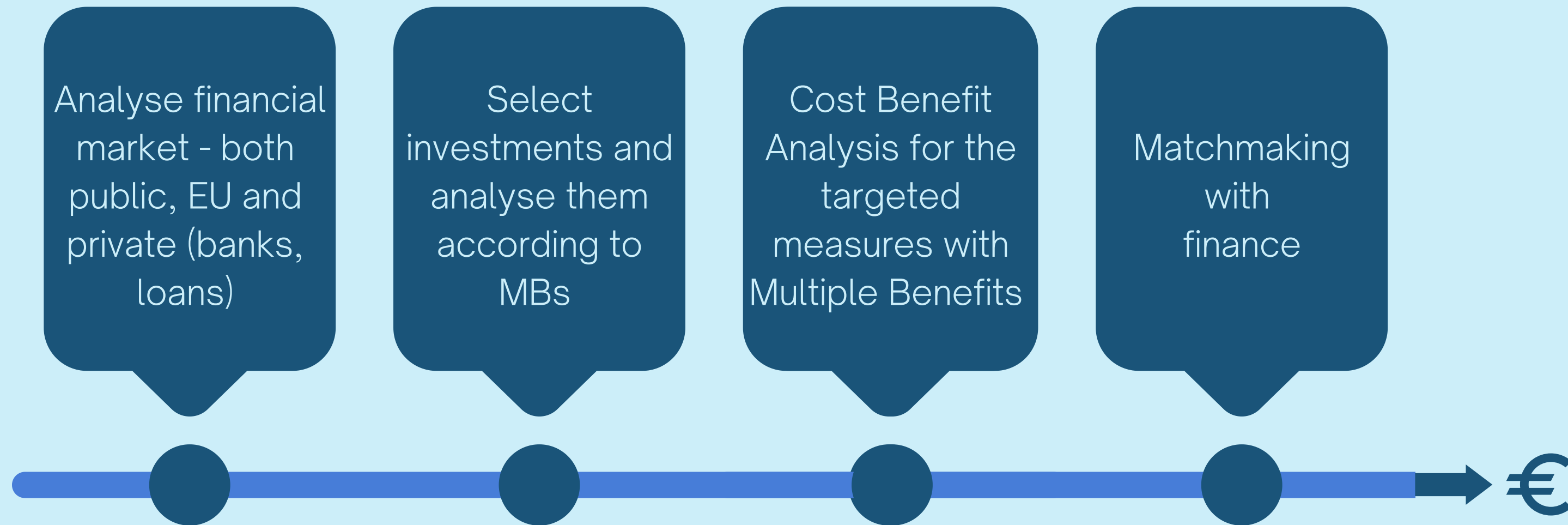
Audits in 50
companies
EMS in 25
companies
Cost - benefit
analysis



LIFE + DEESME 2050 workplan



LIFE + DEESME 2050 methodology for uptake (financial part)



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

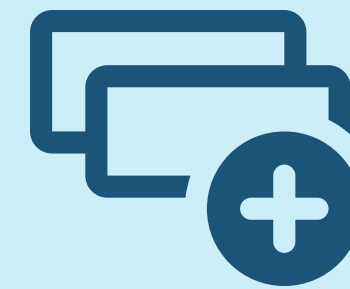
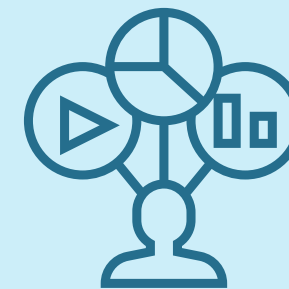
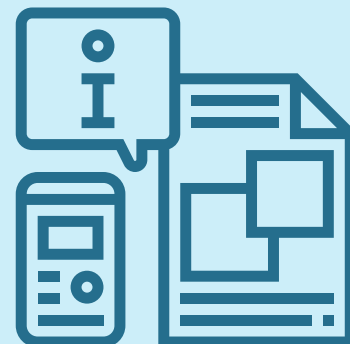
Laboratory of ideas for high level management

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