

THE STREAMSAVE AND DEESME FINAL EVENT

FROM POTENTIALS TO ACHIEVEMENTS UNLOCKING THE POWER OF ENERGY SAVINGS

Assessing energy savings is crucial to the energy transition. Join us to discover the different methods to use and how they contribute to achieving greater energy savings!

Key Discussions & Insights

- ✓ Accurately estimating energy savings through deemed savings
- ✓ Improving energy audits in SMEs with insights on multiple benefits
- ✓ Measuring and verifying energy savings of policies, jointly organised with ENSMOV Plus

 **6 JUNE 2023**
9:00 - 15:30

 **COMET MEETINGS**
BRUSSELS, BELGIUM



The streamSAVE project received funding from the H2020 Programme under grant agreement N° 890147.
The DEESME project received funding from the H2020 Programme under grant agreement N° 892235.

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WELCOME TO OUR FINAL EVENT

WELCOME AND INTRODUCTION



NELE RENDERS
VITO / ENERGYVILLE
streamSAVE COORDINATOR



IVANA ROGULJ
IEECP
DEESME COORDINATOR

What did we achieve?

Nele Renders, VITO/EnergyVille, coordinator
streamSAVE

Final event - Unlocking the Power of
Energy Savings



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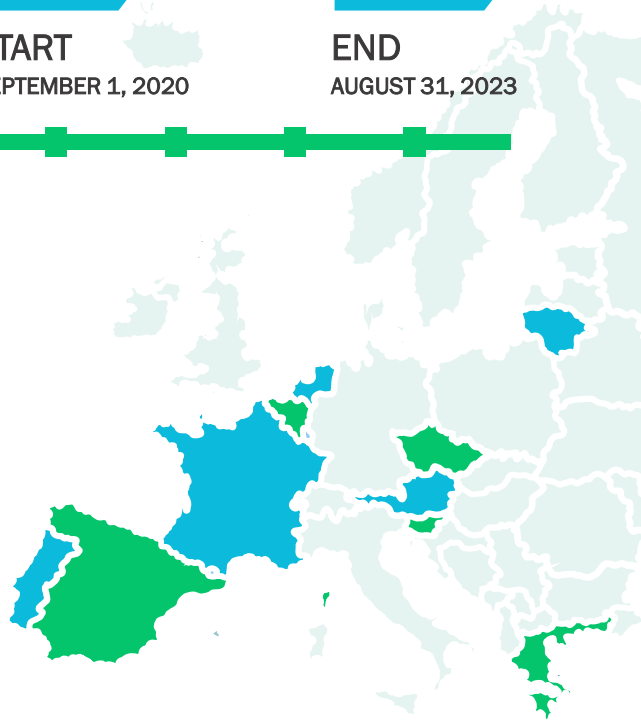
Who are we?

2020

START
SEPTEMBER 1, 2020

2023

END
AUGUST 31, 2023



COORDINATOR



12 PARTNERS
10 COUNTRIES

RESEARCH & POLICY INSTITUTIONS



ENERGY AGENCIES OR RELATED



AUSTRIAN ENERGY AGENCY

ADEME



Agence de l'Environnement
et de la Maîtrise de l'Énergie



KAPÉ
CRES

LIETUVOS
ENERGETIKOS
AGENTŪRA



CONNECTORS TO MARKET & TECHNOLOGY ACTORS



Copper Alliance

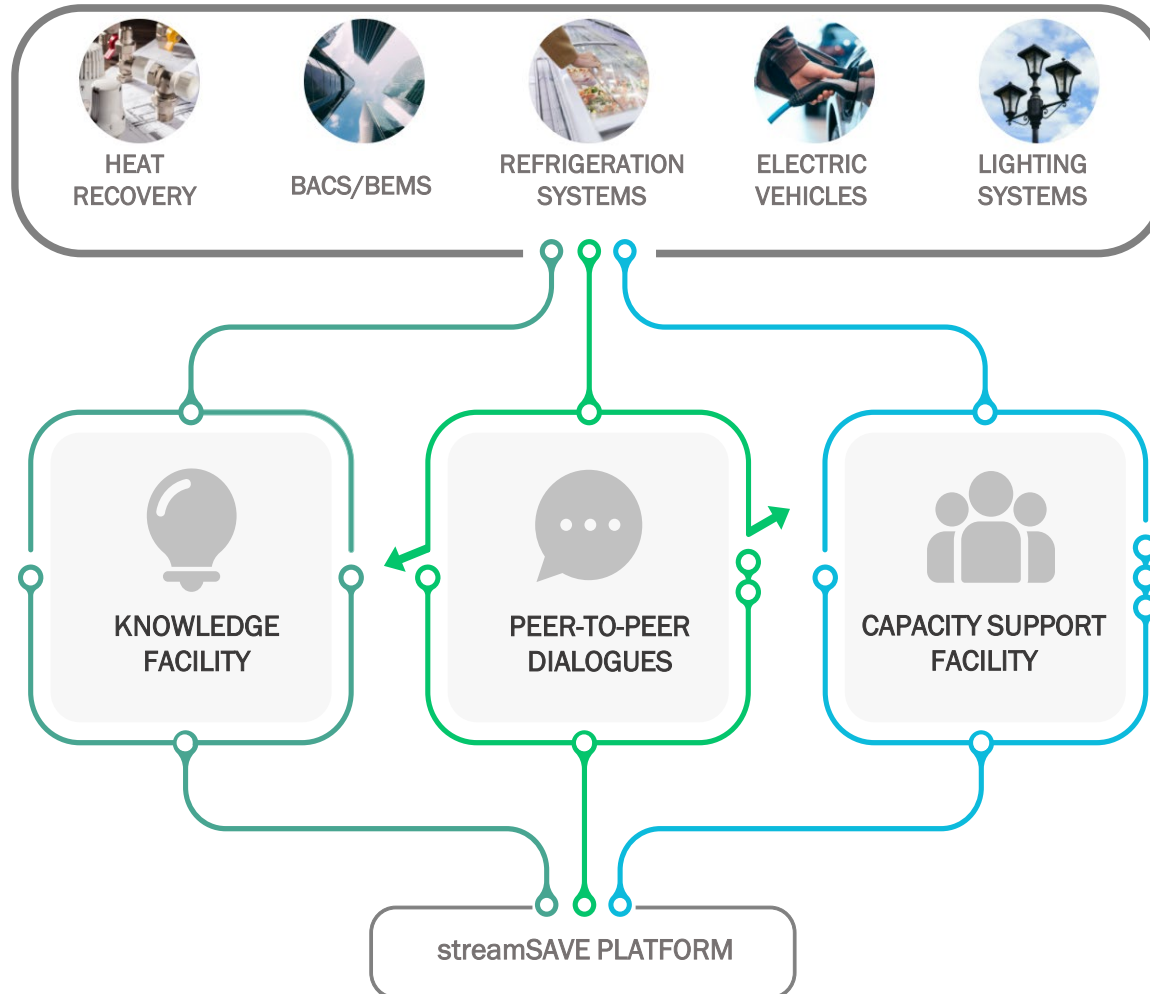


sustainable innovation



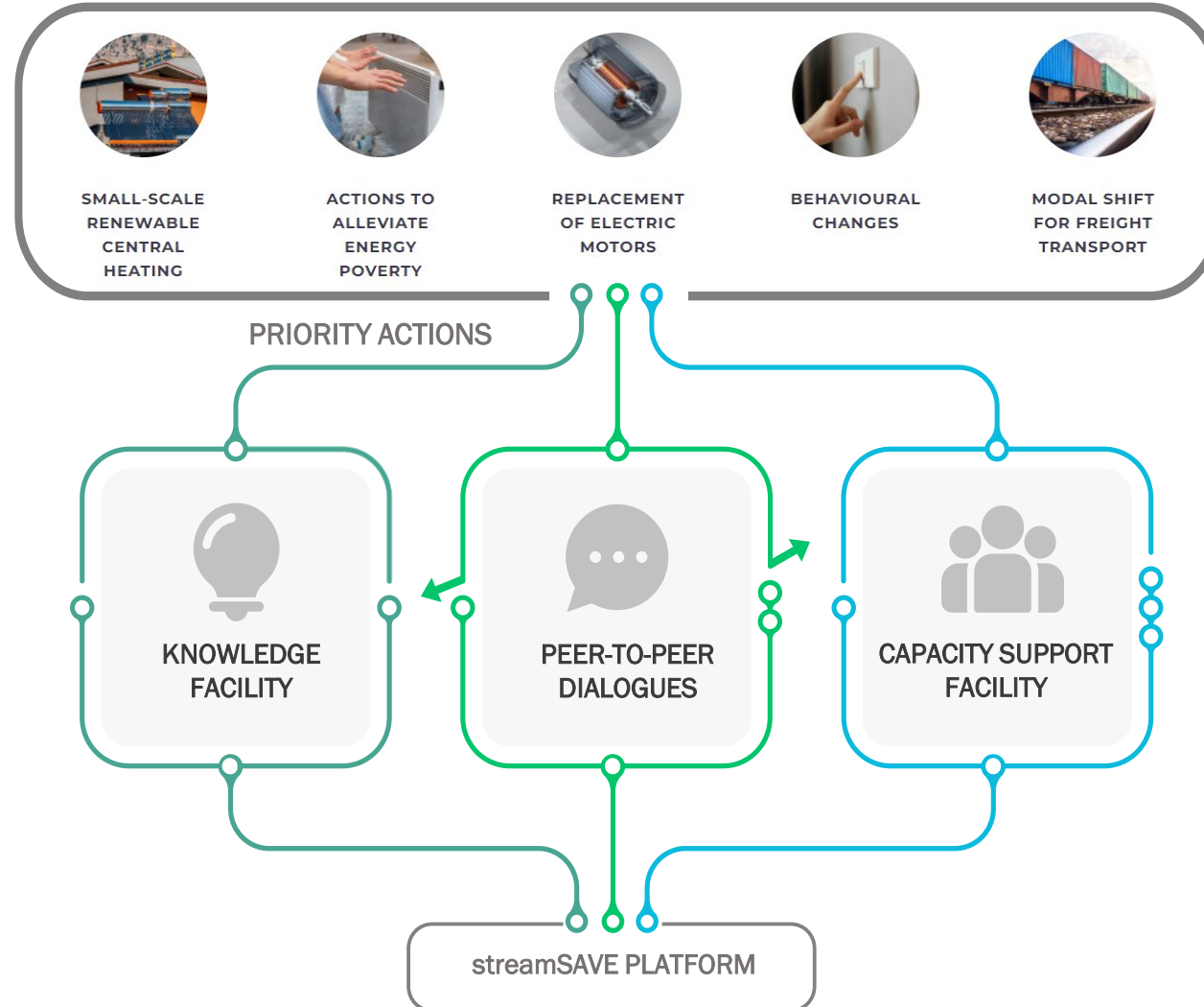
How did we realize these objectives?

PRIORITY ACTIONS





How did we realize these objectives?





streamSAVE guidance & platform

streamSAVE COLLABORATIVE PLATFORM Knowledge and support facility Training Forum Give feedback More

Electric Vehicles

This methodology targets the fuel switching between conventional and electric vehicles. The conventional options include vehicles using diesel, petrol and LNG, as well as hybrid options. The more efficient options include electric vehicles. Therefore, the savings are not only ensured with higher conversion efficiency but also with the ensured fuel switching between the use of fossil fuels and electricity, which is increasingly generated based on renewable resources. Therefore, such fuel switching is able to ensure a reduction of fossil fuel consumption, with the associated primary energy savings and reduction of GHG emissions.

This methodology can be used both for newly purchased vehicles as well as the replacement of another, "conventional" vehicle. Even though the purchase of a new vehicle leads to increased energy consumption, it is assumed that otherwise, a "conventional" vehicle with even higher energy consumption would have been purchased.

[Practical Guidance](#) [Empty excel template](#)

Article 7 | Total final energy savings (TFES)

$$TFES = (sFEC_{ref} - sFEC_{eff}) * \frac{DT}{100} * n * f_{BEH}$$

Article 3 | Total final energy savings (TFES)

$$TFES = (sFEC_{ref} - sFEC_{eff}) * \frac{DT}{100} * n * f_{BEH}$$

Article 3 | Effect on primary energy consumption (EPEC)

$$EPEC = FEC_{Baseline} * \sum_{ec} (share_{ec,Baseline} * f_{PE,ec}) - FEC_{Action} * \sum_{ec} (share_{ec,Action} * f_{PE,ec})$$

GHG | Greenhouse gas savings (GHGsav)

$$GHGSav = \left[FEC_{ref} * \sum_{ec} (share_{ec,ref} * f_{GHG,ec}) - FEC_{eff} * \sum_{ec} (share_{ec,eff} * f_{GHG,ec}) \right] * 10^{-6}$$

Data Input

Conversion factors **i** Implementation year **i** Reference vehicle **i**

streamSAVE
Coordination and Support Action
H2020-LC-SC3-EE-2019

Standardized saving methodologies

Energy, CO₂ savings and costs

Deliverable D2.2

Version N°2

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Challenges & data needs differ per Priority Action which is reflected in our guidance (Example, public lighting vs. behavioural measures vs. heat recovery in industry)



Community of experts in dialogue

The 16 dialogue meetings and 4 dialogue workshops were only possible...

- 🌿 Thanks to the **30 external speakers** who shared their knowledge and experience
- 🌿 Thanks to the **300+ single participants** who joined the dialogue meetings or workshops and contributed to the discussions

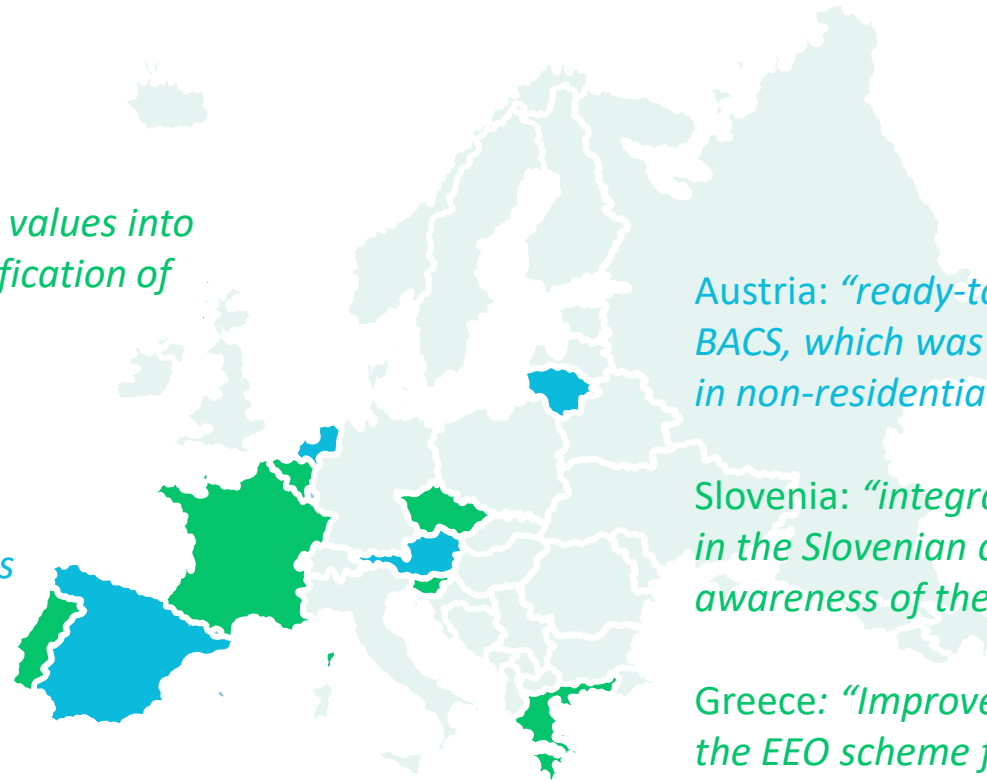


Improvements of policies 10 (+3) countries

- Support covered almost all 10 Priority Actions
- Concrete outcomes of this support:
 - Suggestion for improvements on calculation methodologies and/or national indicative values
 - Examples of improved policy implementations, already realized during the project



Improvements of policies 10 (+3) countries



Belgium: *“publication deemed method & values into the revised Circular 307 septies for electrification of federal car fleet”*

Spain: *“More realistic savings estimations for heat pumps in buildings”*

Austria: *“ready-to use methodology & indicative values for BACS, which was applied to a new subsidy program for BACS in non-residential buildings to estimate savings potential ”*

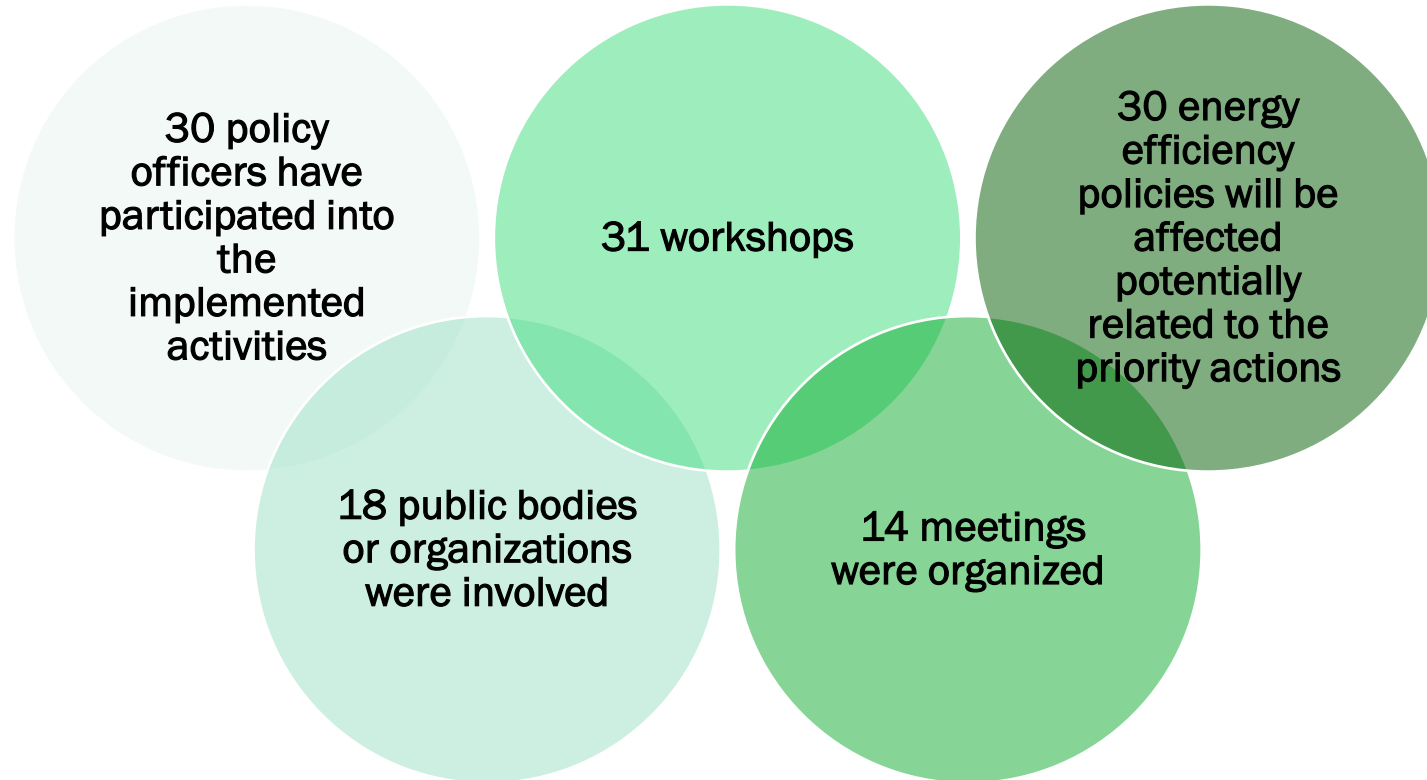
Slovenia: *“integration of the developed BACS methodology in the Slovenian catalogue” “improving the existing awareness of the obligated parties on BACS”*

Greece: *“Improvement of the existing Greek catalogue of the EEO scheme for heat recovery from industry”.*

“BU calculation methodologies support the coordination of monitoring, reporting and verification procedures between different bodies responsible for monitoring of the savings measures”.



Realized impacts in 10 countries





Project Partners



Thank you

Get in touch for more information!



Project coordinator - Nele Renders, VITO



All project reports will be available for download on the streamSAVE website www.streamsave.eu



Email the project at contact@streamsave.eu



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WELCOME AND INTRODUCTION



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DEESME

National schemes for energy efficiency in SMEs



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Developing National Schemes for Energy Efficiency in SMEs (DEESME) - achievements



Ivana Rogulj, IEECP

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Meet the DEESME partners



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Barriers to energy audits, EMS and energy efficiency investments

from the side of the companies



Lack of awareness



Low capital (small companies)



Difficulty with accessing financing



Lack of technical human resources



Doubts around actual savings potential

from the side of the National Authorities



Limited resources dedicated to companies



Quality of audits and data availability



Lack of support mechanisms (one stop shops)

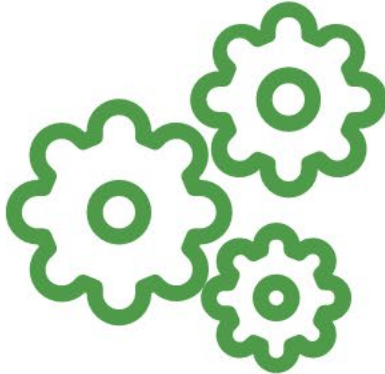


Guiding of the companies towards action?



Not looking at the benefits for the whole society

DEESME intervention logic



Working with NAs

We investigate what national authorities do & need in audits obligation and promotion.
With the view on multiple benefits

We develop the **Guideline on best practices for NAs** version 1 based on the research on the topic and the knowledge transfer

Recommendation and the direct support for the National Authorities.

Working with companies

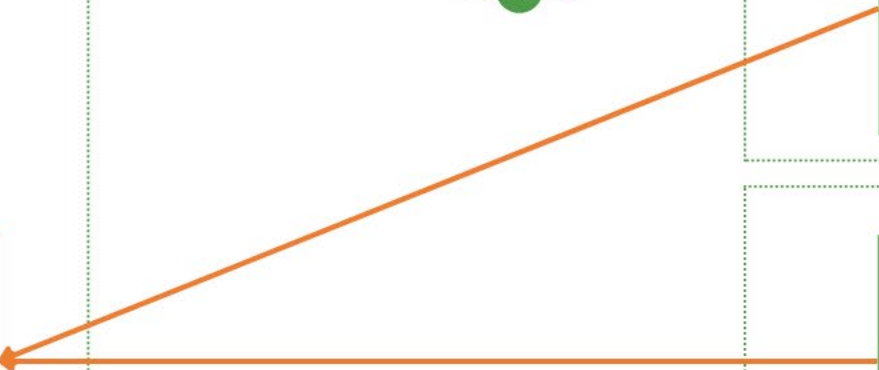
The **Multiple benefits approach** for energy auditing to connect energy concerns to managerial

Trainings in companies and DEESME **multiple benefits tool**

Implementation of the **audits** and the **EMS**

and stakeholders

Workshops, campaigns and feedback collection from the **key stakeholder community**



In the work with NA:

- inventory of needs and requirements of NAs;
- report on best-practice for policies on energy audits, energy management and multiple-benefits;
- identify and share best practices from national schemes, EU projects and other initiatives with NA;
- generic guideline on best-practice;
- **National guidance documents for targeted national authorities .**



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DEESME

National schemes for energy efficiency in SMEs

Guidance for national authorities on
overcoming challenges in the
implementation of Article 8 EED



Challenge overview

Eleven generalized challenges with regard to the implementation of energy audits and energy management systems based on the requirements of Article 8 of the EED were identified. These challenges were derived from a literature review, a survey and interviews conducted with NAs and their implementing bodies in the 27 Member States (MS) of the EU. Six challenges target non-SMEs, four challenges are targeted at SMEs, and one challenge deals explicitly with NEBs across both company types.



Objectives of the work with companies:

1

To obtain at least 50 audits, 25 energy management system based on ISO 50001 and multiple benefits approach during the project, energy efficiency low costs and management solutions

2

To show to companies how to take profit of energy efficiency by assessing and managing the integrated aspects according to multiple benefits approach

3

To develop several working models such case histories, template, methods, EMS procedures to allow the involvement of as many companies as possible in national schemes after the project

4

To raise awareness among companies of direct relations between energy efficiency and its multiple benefits



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Mobilising companies: training activities and energy auditing

Encourage energy investments in the involved companies based on the analysis made using the multiple benefits approach with priority given to low-cost energy organizational and procedural/behavioural solutions

Selection of 500 companies to be involved

Performing 50 energy audits & 25 EMS in IT,GE, BG & PL

Conduction of training activities in IT,GE, BG and PL

Selection criteria and guidelines along with a company register template

Energy audit report template

Training session guidelines along with reporting templates



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Multiple benefits – why?

Standards (CEN/CENELEC) serve for understanding among the financial sector, businesses and policy makers as they measure the benefits from the investments.

Therefore, it is important that in development there is a standard that includes ALL benefits of energy efficiency.

Source: With modifications from Worrell et al. (2003)

Waste	Emissions	Operation / maintenance
<ul style="list-style-type: none"> ↑ Use of waste fuels, heat, gas ↓ Product waste ↓ Waste water and hazardous waste ↓ Materials reduction 	<ul style="list-style-type: none"> ↓ Dust emissions ↓ Gas emissions (CO, CO₂, NO_x, SO_x) 	<ul style="list-style-type: none"> ↓ Need for engineering controls ↓ Cooling requirements ↑ Facility reliability ↓ Wear and tear ↓ Labour requirements
Production	Working environment	Other
<ul style="list-style-type: none"> ↑ Product output/yield ↑ Performance ↑ Reliability ↑ Product quality/purity ↓ Process cycle times 	<ul style="list-style-type: none"> ↑ Lighting ↑ Temperature control ↑ Air quality ↓ Noise levels ↓ Need for personal protective equipment 	<ul style="list-style-type: none"> ↑ Image ↑ Liabilities ↓ Delayed or reduced capital expenditures ↓ Space requirements ↑ Worker morale

Implementing the DEESME campaign for energy efficiency

- ✓ Tested the attractiveness of the solutions adopted by DEESME to encourage companies towards energy efficiency
- ✓ Involved more than 500 companies in each country by the end of the project
- ✓ Involved national trade associations and other key actors in each country
- ✓ Provided the Institutionalisation process with working documents based on real scale and key actors' points of view



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Institutionalisation process – in progress

- ✓ Policy proposals for the National Authorities (NAs) and with activities to ensure their implementation. *Preparation of 10 policy proposals for the NAs*
- ✓ Involvement of NAs and relevant national stakeholders from 10 countries
- ✓ Providing direct tailored support to 5 NAs
- ✓ Obtaining the adoption of DEESME proposals and/or to introduce improvements in the existing policies in at least 5 NAs



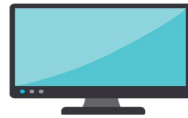
Depending on the country circumstances, NAs will receive support in implementing new policies dealing with energy audits and the promotion of energy efficiency measures or in improving the existing ones.



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Turning policy into action – LIFE- CET outlook

Filippo GASPARIN – Project Advisor

Ulrike NUSCHELER – Senior Project Advisor

CINEA - D1 LIFE Energy and LIFE Climate