



DEESME

National schemes for energy efficiency in SMEs

Guidance for national authorities

on overcoming challenges in the implementation

of Article 11 of the Energy Efficiency Directive



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About DEESME

Unlike the EU Emissions Trading Scheme and large companies, SMEs have fewer technical, human, and financial resources to improve their energy efficiency. Barriers for SMEs have been deeply investigated, including lack of awareness, low capital, difficulty accessing financing, doubts around actual saving potential and the lack of technical and human resources. National schemes are in place to provide SMEs with technical resources such as methodologies, best practices, technology inventories and subsidies. Some schemes introduce mandatory actions (energy analysis) to obtain such subsidies. Nevertheless, national policy schemes have failed to some extent to convince SMEs that the energy audit is something more than a “bureaucratic fulfilment” to obtain a contribution and to push large companies to take the step from the analysis to the investment. To overcome that, DEESME aims at:

- a) Enabling companies to manage the energy transition by taking profit of multiple benefits and energy management approaches.
- b) Supporting the development and implementation of energy efficiency EU policies in the framework of article 8 of the Energy Efficiency Directive, beyond the project, by providing national authorities with guidelines and recommendations on how to strengthen the national schemes.
- c) Enhancing the adoption of the DEESME approach by National Authorities beyond the project timeline through the implementation of institutionalization activities.

The project will identify and share best practices from national schemes, EU projects and other initiatives with national authorities and support them in developing more effective schemes dealing with energy audits and energy management systems. It will assist SMEs to develop and test the technical DEESME solutions by organizing information and training initiatives, realizing energy audits and implementing energy management systems based on international standards and include the multiple benefits energy efficiency approach.

The project is built on a very strong consortium of academics, research organisations, consultancies and government offices from Belgium, Bulgaria, Germany, Italy, the Netherlands and Poland, namely: IEECP (NL, coordinator), FIRE (IT), SOGESCA (IT), Fraunhofer ISI (DE), CLEOPA (DE), SEDA (BG), ECQ (BG), KAPE (PL), EEIP (BE).

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About this document

The objective of this document is to help National Authorities (NAs) in the Member States of the European Union with the application of Article 11 from the European Energy Efficiency Directive (EED). Compiled within the DEESME project, this document draws from information collected during this period.

1 Identified barriers and solutions

The project initiated discussions with National Authorities to understand their challenges and needs regarding the execution and enforcement of Article 11 EED, (while it still was Article 8 of the former Directive). Through this dialogue, common barriers were identified and comprehensive research was conducted to explore potential solutions. There were 11 common challenges identified, six linked to the requirements for non-small and medium-sized enterprises (non-SMEs) in alignment with Article 8 EED, and four concentrating on facilitating small and medium-sized enterprises (SMEs). Additionally, these challenges show the potential advantages of considering non-energy benefits (NEBs) related to energy efficiency.

2 Consultations with companies and key actors

Companies actively engaged in the DEESME initiatives through training, energy audits, and implementing Energy Management Systems (EMS) based on ISO 50001 and the Multiple Benefit's (MB) approach, which were included in the semi-structured interviews. These interviews aimed to gather insights by querying the companies on the most effective ways National Authorities (NAs) could assist them in driving actions toward enhancing energy efficiency.

A questionnaire was sent to key actors, including: chambers, associations, ESCOs, financial institutions as well as companies, to assess the effectiveness of the solutions outlined in DEESME, focusing on key actors recommendations to stimulate the engagement of companies in energy efficiency. Meetings were implemented with key actors, as well as national and local trade associations and companies in pilot countries, to showcase the DEESME approach and gather their input.

3

New challenges with the changes in the EED

Partners evaluated additional challenges deriving from the changes in the Energy Efficiency Directive' obligations of National Authorities and linked parties. These changes particularly impact the execution of audits, the implementation of Energy Management Systems (EMS), and the adoption of a multiple benefits approach to enhance energy efficiency within companies. The assessment includes a comprehensive analysis of how these updated obligations from the Energy Efficiency Directive have influenced the roles and responsibilities of National Authorities and other actors involved in various aspects related to energy efficiency in companies.

4

Discussions with National Authorities

The results were discussed in the meetings that the project partners held with the National Authorities and in a joint workshop. The purpose of organizing these meetings was to guarantee that the prepared policy recommendations effectively achieve their objectives. During these sessions, partners delved into the primary challenges associated with energy audits in national schemes. They also discussed ways in which National Authorities can embrace policy suggestions to enhance their schemes and effectively address the barriers.

Overview of challenges

1 Limited resources for transposition

Limitations with regard to the staff and financial resources for effective implementation, enforcement, monitoring and verification of the energy-audit obligation, also in view of the difficult identification of non-SMEs, are a challenge.

2 Identification of obligated companies

The energy-audit obligation applies to "non-SMEs" only. The distinction between SMEs and non-SMEs is clear from a theoretical perspective. However, the challenge is that, in practice, determining the actual values of criteria that determine the status of particular companies is challenging due to unavailable and/or distributed information.

3 Ensuring compliance

All non-SMEs are required to carry out energy audits or to implement energy management systems. However, also due to lack of information on company status, the challenge concerning the implementation of Article 8 is that some companies do not comply with the audit requirement or only fulfil the requirement late.

4 Quality of audits

While the EED requires high quality energy-auditors and energy audits, there remains many audit reports with low quality and auditors who tend to only focus on areas they know well.

5 Compromise between reporting and monitoring effort

Finding a good balance between ensuring compliance and a follow up on the implementation of measures while limiting the additional burden for companies is a practical challenge in the monitoring process concerning non-SMEs.

6

Enhancing the uptake of measures

Energy audits and energy management systems help companies understand potential energy efficiency measures. However, a practical challenge is that the implementation of the recommended measures could be enhanced.

7

Creation of support mechanisms

Creating support mechanisms to carry out energy audits and implementing their recommendations is a requirement from Member States. However, it can be a challenge to find out how to best overcome burdens that hinder SMEs to implement audits and energy efficiency measures.

8

Limited resources available

Staying in touch with SMEs is considered very helpful to encourage them towards energy audits and efficiency measures. Yet creating and maintaining communication with SMEs, and participating in all events and talks with experts is a challenge.

9

Guiding SMEs to participate

Even if SMEs are aware of the potential benefits from engaging in energy efficiency, their reluctance to participate in activities, e.g. due to a fear of administrative burdens, a lack of experience in participation and the difficulty to analyse the associated costs and benefits is a barrier.

10

Raising awareness on opportunities

Encouraging SMEs for energy audits can be a challenge as they lack of awareness of the opportunities of applying energy efficiency and have limited capacity to implement it.

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Overview of key stakeholders' conclusions

1 Overcome the information barrier...

...by creating a central information hub at national or regional level, depending on the EU Member State specific characteristics. Improving information, access to financial support, and compliance control systems is crucial. Particularly for small and medium-sized enterprises (SMEs), central information hubs at national or regional levels are essential, especially for businesses spanning multiple areas. These hubs serve as vital points of contact and should offer clear, concise information, including legislative documents and funding summaries, potentially utilizing visual aids or videos to engage SMEs. Testing by target groups is vital for optimizing user experience despite the initial resource requirements for National Authorities. Leveraging existing infrastructure or involving trade and industry associations can enhance familiarity, visibility, and accessibility for companies.

2 Inform on Non-Energy Benefits related to energy

Energy efficiency measures often appear cost-ineffective when solely assessed on energy savings. However, numerous multiple benefits, known as co-benefits or non-energy benefits (NEBs), arise from these projects. These advantages, such as reduced air pollution, improved workplace safety, and reduced machinery breakdowns, may hold more significance for decision-makers than energy savings alone. Sharing case studies and best practices is crucial to encourage broader company adoption. Utilizing well-structured awareness campaigns, particularly through visually engaging short videos, can be highly effective. Creating a dedicated YouTube channel with content adapted to various languages and countries, actively promoted through digital marketing, can significantly boost visibility.

3 Create a set of structured guidelines...

...to clarify the relationships between energy obligations – or NON obligations – and European sustainability regulations. This can be complex for non-experts, leading to challenges in compliance monitoring at a national level. Conversely, the lack of clarity results in minimal oversight and pressure on responsible state institutions to implement these rules. The existing regulatory framework for emissions and energy efficiency is scattered across numerous documents, lacking clarity for most businesses. A simplified, well-structured document, like guidelines or a practical handbook, is essential to enable easier interpretation and application of various requirements. A unified information framework, structured as clear guidelines, would significantly aid in understanding the relationship between energy obligations, sustainability, and reporting standards.

4

Carbon Footprint calculation...

...associated to audit should be encouraged linking carbon footprint calculations to energy audits can foster competition between obligated and non-obligated companies in reducing carbon emissions. Performing a precise energy audit is the initial crucial stage for calculating the carbon footprint. Companies can leverage this as a commercial advantage, showcasing leadership in sustainability, which is increasingly significant.

5

Benchmarking approach

Key actors and companies highlighted the importance of using benchmarks to measure not only energy consumption but also operational variables. Companies often struggle to recognize areas for improvement as they believe their operations are well-managed. National Authorities could allocate resources to develop sector-specific benchmarks in collaboration with research centers and industry associations, aligning with the needs of working with indicators and benchmarks in the Multiple Benefits approach.

Insights on the new EED – Article 11

With the new EED Article 11, some previously identified challenges have become more prominent:

1 Limited resources for transposition

Member States are required to establish initiatives geared towards motivating and offering technical assistance to SMEs not covered under specific paragraphs, encouraging them to conduct energy audits and subsequently execute the recommendations derived from these audits. This presents a challenge to Member States.

2 Identification of obligated companies

Member States shall ensure that enterprises with an average annual consumption higher than 85 TJ of energy over the previous three years, taking all energy carriers together, implement an energy management system. The energy management system shall be certified by an independent body, in accordance with the relevant European or international standards.

3 Ensuring compliance

Member States must ensure that specified enterprises establish an energy management system by October 11, 2027. Additionally, companies with an annual consumption exceeding 10 TJ over the past three years (across all energy types) and that lack an energy management system are mandated to undergo an energy audit. Moreover, these enterprises must conduct their initial energy audit by October 11, 2026, and subsequently perform audits every four years thereafter.

4 Quality of audits

Member States must encourage cost-effective, high-quality energy audits available to all end consumers. These audits should be conducted independently by certified experts meeting defined qualification criteria, or they can be overseen by independent authorities as per national legislation. To maintain audit quality and ensure energy management system efficiency, Member States need to establish clear, unbiased minimum criteria for energy audits based on Annex VI and relevant European or international standards.

5

Compromise between reporting effort and monitoring

Member States shall ensure that the Action Plans and the recommendation implementation rates are published in the enterprise's annual report, and that they are made publicly available, subject to Union and national law protecting trades as well as business secrets and confidentiality.

6

Enhancing the uptake of measures

The enterprises concerned shall draw up a concrete and feasible Action Plan on the basis of the recommendations arising from those energy audits. The Action Plan shall identify measures to implement each audit recommendation, where it is technically or economically feasible. The Action Plan shall be submitted to the management of the enterprise.

7

Creation of support mechanisms

Member States shall develop programmes to encourage enterprises that are not SMEs and that are not subject to paragraph 1 or 2 to undergo energy audits and to subsequently implement the recommendations arising from those audits.

8

Limited available resources

Member States may encourage the enterprises referred to in paragraphs 1 and 2 to provide information in their annual report about their annual energy consumption in kWh, their annual volume of water consumption in cubic metres, and a comparison of their energy and water consumption with previous years.

9

Guiding SMEs to participation

Member States can establish mechanisms, like energy audit centres for SMEs and microenterprises, ensuring they do not compete with private auditors, to conduct energy audits. They may also offer financial assistance to cover audit costs and the implementation of highly efficient recommendations for SMEs that have entered into voluntary agreements, provided these recommendations are put into action.

10

Raising awareness on opportunities

The enterprises concerned shall draw up a concrete and feasible Action Plan on the basis of the recommendations arising from those energy audits. The Action Plan shall identify measures to implement each audit recommendation, where it is technically or economically feasible. The Action Plan shall be submitted to the management of the enterprise.

11

Non-energy benefits

Member States shall ensure that the programmes include support to SMEs in quantifying the multiple benefits of energy efficiency measures within their operation, in the development of energy efficiency roadmaps and in the development of energy efficiency networks for SMEs, facilitated by independent experts.

Results of interactions with National Authorities

DEESME's latest workshop gathered national authorities, policy makers, chambers and associations of companies to discuss the policy challenges since the Energy Efficiency Directive (EED) recast. This meant assembling effective policies for energy audits but also experience sharing between countries on the challenges and potential solutions.

Experts from Bulgaria, Italy and Poland shared their experiences and the challenges each country faces to implement energy audits and boost companies to invest in energy efficiency.

Discover what the recast of the Energy Efficiency Directive means for companies and which policies have already been successfully put into place for companies, you can find the workshop [briefing here](#).

Recommendations to National Authorities

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Legal documents in Austria

In Austria, Art. 8 Energy Efficiency Directive (EED) has been transposed into national law by Art. 9 of the national Energy Efficiency Law (Energieeffizienzgesetz, EEffG), which entered into force in 2014. Guiding documents for implementation are offered in the form of FAQs documents published on the website of the National Energy Efficiency Monitoring Agency. Furthermore, annual reports provide information on the status of implementation of the EEffG, and there are several guidance documents, for example offering explanations on how to use the digital business platform (USP) to submit audit reports.



Involved actors in Austria

The ministry responsible for the Implementation of the EED in Austria is the Ministry of Climate Action, Environment, Energy, Mobility, Innovation and Technology. The Austrian Energy Agency with the National Energy Efficiency Monitoring Agency has been appointed as national monitoring body. To identify obligated companies, the national monitoring body collaborates with the Ministry of Finance and business data companies.

Challenge	Identified solution strategies	Key actors recommendations and resources from the project
<p>Identification and ensuring compliance of obligated companies in Austria.</p> <p>Especially for new companies and companies with complex ownership structures, the identification process and compliance with the regulation is challenging.</p>	<ul style="list-style-type: none"> • Assist in the self-declaration of companies. • Utilize existing databases to identify companies. • Enhance push- and pull-factors for compliance. 	<ul style="list-style-type: none"> • Key Recommendation #01: Overcome the information barrier by the creation of a central information hub at national or regional level depending on the EU MS specific characteristics
<p>Relevance to the new EED HIGH</p>		

Challenge	Identified solution strategies	Key actors recommendations and resources from the project
<p>Compromise between reporting effort and monitoring.</p> <p>Finding a good balance between following up on the implementation of measures while limiting the additional burden for companies is a practical challenge.</p>	<ul style="list-style-type: none"> • Optimize the audit submission content and offer submission support. 	<ul style="list-style-type: none"> • Key Recommendation #02: Inform on Non-Energy Benefits (multiple benefits) related to energy efficiency • Key Recommendation #04: Carbon Footprint calculation associated to audit should be encouraged <hr/> <ul style="list-style-type: none"> • Resource #01: <u>Integration of Multiple Benefits in Companies' Business Model</u> • Resource #02: Calculation of cost benefit analysis with integrated multiple benefits (available on request)
<p>Relevance to the new EED MEDIUM</p>		

Challenge	Identified solution strategies	Key actors recommendations and resources from the project
<p>Enhancing the uptake of measures.</p> <p>Energy audits and energy management systems help companies to understand potential energy efficiency measures. However, a practical challenge is that the implementation of the recommended measures could be enhanced.</p>	<ul style="list-style-type: none"> • Use informational instruments to enhance the uptake of measures. 	<ul style="list-style-type: none"> • Key Recommendation #02: Inform on Non-Energy Benefits (multiple benefits) related to energy efficiency • Key Recommendation #04: Carbon Footprint calculation associated to audit should be encouraged <hr/> <ul style="list-style-type: none"> • Resource #01: Integration of Multiple Benefits in Companies' Business Model • Resource #02: Calculation of cost benefit analysis with integrated multiple benefits (available on request)
<p>Relevance to the new EED HIGH</p>		

Challenge	Identified solution strategies	Key actors recommendations and resources from the project
<p>Guiding SMEs with limited available resources to action.</p> <p>Many SMEs restrain from participating in governmental energy efficiency programmes due to a fear of administrative burden.</p>	<ul style="list-style-type: none"> • Provide a clear overview of available support schemes. • Simplify the application process to reduce administrative burdens. 	<ul style="list-style-type: none"> • Key Recommendation #03: Create a set of structured guidelines to clarify the relationships between energy obligations – or NON obligations – and sustainability <hr/> <ul style="list-style-type: none"> • Resource #03: Communication campaign plan and report • Resource #04: Training documents
<p>Relevance to the new EED HIGH</p>		

Challenge	Identified solution strategies	Key actors recommendations and resources from the project
<p>Raising awareness on opportunities and create support mechanisms.</p> <p>Especially small SMEs are often not aware of the benefits that energy efficiency can have for them.</p>	<ul style="list-style-type: none"> • Use active facilitation such as dedicated events to engage SMEs. • Establish cooperation with regional institutions and share success stories 	<ul style="list-style-type: none"> • Key Recommendation #03: Create a set of structured guidelines to clarify the relationships between energy obligations – or NON obligations – and sustainability <hr/> <ul style="list-style-type: none"> • Resource #03: <u>Communication campaign plan and report</u> • Resource #04: <u>Training documents</u>
<p>Relevance to the new EED MEDIUM</p>		

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DEESME 2050 is a continuation of the DEESME project and develops energy efficiency projects in SMEs for European 2050 targets, in the furniture sector.



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WHO IS DEESME 2050 FOR?

Support SMEs (and their staff) in the furniture sector
To overcome obstacles in implementing energy efficiency measures and its value chain

SME

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DEESME 2050's pilot countries

BULGARIA

POLAND

ECQ

KAPE

ITALY

FRANCE

SOGESCA

FIRE

mt partenaires Ingénierie

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Bulgaria



Legal documents in Bulgaria

In Bulgaria, Article 8 of the Energy Efficiency Directive (EED) has been transposed in Article 57 of the [Energy Efficiency Act \(EEA\)](#), in force since 2015 ([last amended in March 2021](#)) and [Regulation No. E-RD-04-05/08.09.2016](#) on the determination of energy consumption indicators, energy performance of enterprises, industrial systems and outdoor artificial lighting systems, as well as on the determination of the conditions and procedures for carrying out an energy audit and preparing an energy savings assessment and its annexes. Guidance on implementation is available in the form of a [Frequently Asked Questions](#) section published on the Sustainable Energy Development Agency (SEDA) [website](#). In addition, the annual report on the implementation of the National Energy Efficiency Action Plan (NEEAP) provides annual information on the implementation of the EEA.



Involved actors in Bulgaria

The ministries responsible for the transposition of the EEA in Bulgaria are the Ministry of Energy, responsible overall for final energy consumption and the Ministry of Economy, in the area of improving energy efficiency in small and medium-sized enterprises (SMEs) as well as in the use of energy from industrial systems. AER is the national body responsible for monitoring and reporting on the implementation of national policies.

In order to identify the obliged companies, the ASER cooperates with the [Bulgarian Agency for the Promotion of Small and Medium-sized Enterprises](#) and branch organisations in the Industry sector.



Policy recommendation including relevant learnings from

interactions with key stakeholders

Taking into account the new requirements of the recast EED there are some actions that could be implemented in the field of energy audits:

- Carrying out information campaigns about the new requirements and benefits of energy audits, the energy management system or energy efficiency investments.
- Ensuring that all energy audits and energy management systems are carried out in the public sector in line with European or international standards.
- Establishing a national register of the companies obliged to perform energy audits.
- Determination of financial support for companies performing energy audits.

Concerning energy audits there is a legal requirement in the national legislation for non SME companies to carry out an energy audit every four years. There is also an energy threshold to include SMEs with high energy consumption.

The main challenge is that the process is very dynamic because of the criteria for current energy consumption or if the company is micro, small, medium or big enterprise. The status of companies according to these criteria could be changed at any moment and thus the register will not be accurate in real time. So the companies should be incentivised to inform national authorities if they fall into the group of SMEs.

The main feature of the policy is to promote the new EED and the benefits of energy audits, the energy management system or energy efficiency investments. Companies that are not legally obliged in this area could be encouraged to carry out energy audits and to implement energy efficiency measures, based on either informational instruments or financial incentives. Information can help to increase awareness and knowledge within the companies.

Auditors can be encouraged to consider National Enforcement Bodies when evaluating potential measures. They can provide additional arguments beyond merely financial savings. This can also help to support the follow-up process after the audit was carried out and to overcome inertia for moving towards action. This can be further enhanced if auditors link the identified measures to available funding schemes, and if the administrative parts of programs, in turn, are kept to the necessary minimum. Also, a form of financial support should be determined. This can range from tax reductions to grants or funding schemes.

Outcome of meeting(s) organised with the National Authorities

- There is no a clear understanding among all companies of which official websites in Bulgaria to consult to obtain information on obligations, benefits and other aspects related to energy efficiency. Some of them are familiar enough and know where to look for the information. They share an opinion that the information published on the website of SEDA regarding the obligations under the Energy Efficiency Act is up-to-date and comprehensive. With regard to energy efficiency benefits, there are still no clearly developed and easy-to-use end-user accessible materials that provide sufficiently understandable and technically uncomplicated information, not only for businesses but also for domestic end-users. But there are also companies that share they are not familiar enough.
- There is currently no permanent incentive mechanism for energy audits, for SMEs as well as for large enterprises. Incidental interest appears when there are EU funding schemes. Since recently, such procedures do not imply an audit - the interest is minimal, almost non-existent. In addition, large businesses obliged to do audits do not worry about fines, and subsequently postpone the required audits for the coming years. There are dozens of new large businesses NOT on the indicative lists and NOT interested in energy audits. Thus, a huge proportion of SMEs and Large Enterprises have virtually NO regular interest in energy audits, and respectively are NOT actively pursuing an energy savings policy.

- Regarding the existing incentive systems, a centralised information hub would be appropriate for information rather than a division of information availability between several subjects (e.g. State, Regions, Agencies, etc.). Perhaps there should be a centralised centre to cover both SMEs and Large Enterprises in Bulgaria. It should provide major updates on an annual basis. Systematizing the information and making it accessible would contribute significantly to them being better informed.
- Investments in energy efficiency have significant added value, but only when implemented correctly and as prescribed.
- The carbon footprint should be mandatory for companies obliged to carry out the energy audit.
- The risks associated with energy efficiency interventions should be thoroughly evaluated. The unassessed risks of implementing the measures can significantly affect a business.

Challenge	Identified solution strategies	Key actors recommendations and resources from the project
<p>Identification of obliged companies.</p> <p>Self-declaration as an insufficient tool to identify all obliged companies.</p>	<ul style="list-style-type: none"> • Assist in the self-declaration of companies. • Consider a change to a database-centric mode. 	<ul style="list-style-type: none"> • Key Recommendation #01: Overcome the information barrier by the creation of a central information hub at national or regional level depending on the EU MS specific characteristics
Relevance to the new EED		HIGH

Challenge	Identified solution strategies	Key actors recommendations and resources from the project
<p>Ensuring compliance and enhancing the uptake of measures.</p>	<ul style="list-style-type: none"> • Highlight the added value of audits. • Provide additional support for peer networks. 	<ul style="list-style-type: none"> • Key Recommendation #02: Inform on Non-Energy Benefits (multiple benefits) related to energy efficiency • Key Recommendation #04: Carbon Footprint calculation associated to audit should be encouraged <hr/> <ul style="list-style-type: none"> • Resource #01: <u>Integration of Multiple Benefits in Companies' Business Model</u> • Resource #02: Calculation of cost benefit analysis with integrated multiple benefits (available on request)
<p>Relevance to the new EED HIGH</p>		

Challenge	Identified solution strategies	Key actors recommendations and resources from the project
<p>Creation of support mechanisms.</p> <p>SMEs are often unaware of the benefits that energy efficiency can have for them.</p>	<ul style="list-style-type: none"> • Use information tools to encourage SMEs to carry out audits and implement their results and to raise awareness of energy efficiency among SMEs • Establish an adequate financial support system • Create appropriate indicators for the evaluation of implemented measures. 	<ul style="list-style-type: none"> • Key Recommendation #02: Inform on Non-Energy Benefits (multiple benefits) related to energy efficiency • Key Recommendation #04: Carbon Footprint calculation associated to audit should be encouraged <hr/> <ul style="list-style-type: none"> • Resource #01: <u>Integration of Multiple Benefits in Companies' Business Model</u> • Resource #02: Calculation of cost benefit analysis with integrated multiple benefits (available on request)
<p>Relevance to the new EED MEDIUM</p>		

Challenge	Identified solution strategies	Key actors recommendations and resources from the project
<p>Guiding SMEs to action.</p> <p>Many SMEs refrain from participating in energy programmes efficiency for fear of administrative burden.</p>	<ul style="list-style-type: none"> • Provide a clear overview of available support schemes. • Us active facilitation, such as technical support for project submissions. 	<ul style="list-style-type: none"> • Key Recommendation #03: Create a set of structured guidelines to clarify the relationships between energy obligations – or NON obligations – and sustainability <hr/> <ul style="list-style-type: none"> • Resource #03: Communication campaign plan and report • Resource #04: Training documents
Relevance to the new EED		HIGH

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To overcome obstacles in implementing energy efficiency measures and its value chain

DEESME 2050

SME!

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DEESME 2050's pilot countries

BULGARIA

POLAND

ECQ

ITALLY

FRANCE

SOGESCA

FIFE

KAPE

mt partenaires Ingénierie

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Croatia



Legal documents in Croatia

In Croatia, Article 8 of the Energy Efficiency Directive (EED) was transposed into national legislation through the Law on Energy Efficiency in 2014, with the latest updates in 2018.

Implementation guidelines are offered in the form of the Energy Audit Ordinance for Large Enterprises with very detailed descriptions of the rules for conducting audits. An energy audit for large companies (in contrast to small and medium-sized enterprises (SMEs) in Croatia includes an analysis of the energy consumption of buildings and an analysis of all technical and process systems of a large company, i.e. all systems of production, transformation, distribution and consumption of energy/water/raw materials that consume energy and water to determine the overall efficiency of the company (including vehicles if there are more than 50).

The obligation related to the implementation of the energy audit is not related to the ownership, but to the company itself, i.e. a company that meets the criteria for a large company in the Republic of Croatia, i.e. a company registered in the Republic of Croatia. Directive 2012/27/EU allows for the possibility that large companies in terms of the obligation to conduct energy audits are considered a company in a member state that depends on a foreign company that meets the criteria for large enterprises, but the Republic of Croatia has not obliged such entities to conduct energy audits. The energy audit also includes an energy audit of affiliated and branch offices of large companies and all company locations. All sectors are involved. Companies that have ISO 50001 are not required to implement energy audits, but the creation of a register of companies with ISO 50001 is still in progress.



Involved actors in Croatia

The Ministry responsible for the implementation of EED in Croatia is the Ministry of Economy and Sustainable Development. The Ministry owns the database of the Chamber of Commerce, the Croatian Association of Entrepreneurs.

Challenge	Identified solution strategies	Key actors recommendations and resources from the project
<p>Ensuring compliance and enhance the uptake of measures.</p> <p>Ensure that all bond companies carry out an energy audit and implement recommendations from the audit.</p>	<ul style="list-style-type: none"> • Use the non-energy benefits and other added value of the audits as motivation. • Motivate companies in different ways not only to complete their energy audits with a report, but also to implement measures. 	<ul style="list-style-type: none"> • Key Recommendation #02: Inform on Non-Energy Benefits (multiple benefits) related to energy efficiency • Key Recommendation #04: Carbon Footprint calculation associated to audit should be encouraged <hr/> <ul style="list-style-type: none"> • Resource #01: Integration of Multiple Benefits in Companies' Business Model • Resource #02: Calculation of cost benefit analysis with integrated multiple benefits (available on request)
<p>Relevance to the new EED HIGH</p>		

Challenge	Identified solution strategies	Key actors recommendations and resources from the project
<p>Creation of support mechanisms.</p> <p>SMEs are often unaware of the benefits that energy efficiency can have for them.</p>	<ul style="list-style-type: none"> • Implement a continuous system of long-term financial support. • Develop effective indicators for the evaluation of the implemented projects. 	<ul style="list-style-type: none"> • Key Recommendation #03: Create a set of structured guidelines to clarify the relationships between energy obligations – or NON obligations – and sustainability <hr/> <ul style="list-style-type: none"> • Resource #03: Communication campaign plan and report • Resource #04: Training documents
<p>Relevance to the new EED HIGH</p>		

Challenge	Identified solution strategies	Key actors recommendations and resources from the project
<p>Guiding SMEs to action.</p> <p>Many SMEs do not participate in energy efficiency programs due to fear of administrative burden.</p>	<ul style="list-style-type: none"> • Give a clear overview of available support schemes. • Simplify the application process to reduce administrative burdens. 	<ul style="list-style-type: none"> • Key Recommendation #03: Create a set of structured guidelines to clarify the relationships between energy obligations – or NON obligations – and sustainability <hr/> <ul style="list-style-type: none"> • Resource #03: Communication campaign plan and report • Resource #04: Training documents
Relevance to the new EED		HIGH

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WHO IS DEESME 2050 FOR?

Support SMEs (and their staff) in the furniture sector To overcome obstacles in implementing energy efficiency measures and its value chain

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DEESME 2050's pilot countries

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Legal documents in Finland

Energy audits were one of the measures implemented within the Action Plan for Energy Efficiency 2003-2006. Finland's Energy Audit Programme (the EAP) is one of the oldest energy efficiency subsidy schemes in place. The EAP started as a subsidy policy in 1992, and was developed into a programme in 1993 and launched in practice in 1994. Mandatory energy audits are pursuant to the Energy Efficiency Act and concern big corporations; there is also another kind of energy audits, the voluntary ones, concerning other companies such as small and medium-sized enterprises (SMEs). Legal documents relevant for the topics are the Energy Efficiency Law and the Government Regulation of Energy Audits 20/2015.



Involved actors in Finland

The mandatory energy audits of large enterprises are managed and implemented by Energiavirasto, the Energy Authority of Finland. It regulates and promotes operation of the electricity and gas markets, emission reductions, energy efficiency and the use of renewable energy. Operating under the administrative sector of the Ministry of Employment and the Economy, the Energy Authority verifies the functionality of the converging electricity and gas markets, and the reasonableness of network service pricing. Functional emissions trading, the use of renewable energy and energy efficiency promote the fulfilment of climate targets in a cost-efficient manner. Motiva Ltd provides instructions and guidance on voluntary energy audits, the so-called "Motiva energy audit" or "MEAE audit".

To identify obligated companies, the national monitoring body furthermore collaborates with government entities (Motiva), ministries and Statistical Centre of Finland.

Challenge	Identified solution strategies	Key actors recommendations and resources from the project
<p>Identification of obligated companies, especially due to the lack of financial data.</p>	<ul style="list-style-type: none"> Assist the self-declaration and identify companies based on data collection. 	<ul style="list-style-type: none"> Key Recommendation #01: Overcome the information barrier by the creation of a central information hub at national or regional level depending on the EU MS specific characteristics

Relevance to the new EED **MEDIUM**

Challenge	Identified solution strategies	Key actors recommendations and resources from the project
<p>Quality of audits, in terms of auditor qualification and accuracy of savings calculation.</p>	<ul style="list-style-type: none"> Encourage/ oblige auditors to link suggested measures to funding programmes and best practise examples. 	<ul style="list-style-type: none"> Key Recommendation #05: Benchmarking approach Resource #01: Report on audits and EMS implementation with MB approach Resource #02: Calculation of cost benefit analysis with integrated multiple benefits (available on request)

Relevance to the new EED **HIGH**

Challenge	Identified solution strategies	Key actors recommendations and resources from the project
<p>Enhancing the uptake of measures.</p>	<ul style="list-style-type: none"> • Use of obligation or support scheme to increase the uptake of measures. 	<ul style="list-style-type: none"> • Key Recommendation #05: Benchmarking approach <hr/> <ul style="list-style-type: none"> • Resource #01: Report on <u>audits</u> and <u>EMS implementation</u> with MB approach • Resource #02: Calculation of cost benefit analysis with integrated multiple benefits (available on request)

Relevance to the new EED **HIGH**

Challenge	Identified solution strategies	Key actors recommendations and resources from the project
<p>Compromise between reporting effort and monitoring.</p>	<ul style="list-style-type: none"> • Cost-benefits analysis to establish the information needed. 	<ul style="list-style-type: none"> • Key Recommendation #03: Create a set of structured guidelines to clarify the relationships between energy obligations – or NON obligations – and sustainability <hr/> <ul style="list-style-type: none"> • Resource #03: <u>Communication campaign plan and report</u> • Resource #04: <u>Training documents</u>

Relevance to the new EED **MEDIUM**

Challenge	Identified solution strategies	Key actors recommendations and resources from the project
<p>Creation of support mechanisms and overcome the limited availability of resource in SMEs.</p>	<ul style="list-style-type: none"> • Introduction of informational tools and creation of direct communication channels. 	<ul style="list-style-type: none"> • Key Recommendation #03: Create a set of structured guidelines to clarify the relationships between energy obligations – or NON obligations – and sustainability <hr/> <ul style="list-style-type: none"> • Resource #03: Communication campaign plan and report • Resource #04: Training documents
<p>Relevance to the new EED HIGH</p>		

Challenge	Identified solution strategies	Key actors recommendations and resources from the project
<p>Guiding SMEs to action and raising awareness on opportunities.</p>	<ul style="list-style-type: none"> • Use facilitation such as dedicated events to engage SMEs in an "individual" way. • Highlight the benefits of energy efficiency efficiency, providing also personal support. 	<ul style="list-style-type: none"> • Key Recommendation #03: Create a set of structured guidelines to clarify the relationships between energy obligations – or NON obligations – and sustainability <hr/> <ul style="list-style-type: none"> • Resource #03: Communication campaign plan and report • Resource #04: Training documents
<p>Relevance to the new EED HIGH</p>		

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Support SMEs (and their staff) in the furniture sector To overcome obstacles in implementing energy efficiency measures and its value chain

Icons: SME (head with 'SME'), Furniture (bed and lamp), Energy Efficiency (thermometer and gear).

DEESME 2050 logo: bar chart, person, lightbulb.

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Legal documents in Greece

In Greece, Article 8 of the Energy Efficiency Directive (EED) has been transposed into national law by Article 10 "Energy audits and energy management systems" of the national Law 4342/2015 on Energy Efficiency, which entered into force in 2015.

Guiding documents for the implementation are offered in the documents published on the website of the Ministry of Environment and Energy. These are the Portal for the Register of Energy Auditors and Legal Entities and Portal for the Energy Audits Archive.



Involved actors in Greece

The ministry responsible for the Implementation of the Energy Efficiency Directive in Greece is the Ministry of Environment and Energy: Inspection Departments of Northern and Southern Greece of the Special Secretariat of the Inspectors and Auditors Body. The Center For Renewable Energy Sources (CRES) has been appointed as National entity for the promotion of renewable energy sources, rational use of energy and energy conservation.

To identify obligated companies, the national monitoring body furthermore collaborates with the Ministry of Finance and business data companies.

To identify obligated companies, the Ministry of Environment and Energy has created a list of the obligated companies, which is frequently updated after cross-checking data with other public authorities such as the Independent Public Revenue Authority, the General Commercial Register (GEMI) with data concerning all companies and the Information System of the Ministry of Labour.

Challenge	Identified solution strategies	Key actors recommendations and resources from the project
<p>Identification of obligated companies.</p> <p>The main challenge is a better identification of the obliged companies based on energy data of both power installation and annual energy consumption and not only based on financial and labour data.</p>	<ul style="list-style-type: none"> • Simplified energy audits. • Enhance push- and pull-factors for compliance 	<ul style="list-style-type: none"> • Key Recommendation #01: Overcome the information barrier by the creation of a central information hub at national or regional level depending on the EU MS specific characteristics

Relevance to the new EED **HIGH**

Challenge	Identified solution strategies	Key actors recommendations and resources from the project
<p>Guiding SMEs to participation.</p> <p>Many SMEs restrain from participating in governmental energy efficiency programmes due to a fear of administrative burden</p>	<ul style="list-style-type: none"> • Simplify the application process to reduce administrative burdens. 	<ul style="list-style-type: none"> • Key Recommendation #03: Create a set of structured guidelines to clarify the relationships between energy obligations – or NON obligations – and sustainability • Resource #01: Communication campaign plan and report • Resource #02: Training documents

Relevance to the new EED **MEDIUM**

Challenge	Identified solution strategies	Key actors recommendations and resources from the project
<p>Raising awareness on opportunities and create support mechanisms.</p> <p>Especially small SMEs are often not aware of the benefits that energy efficiency can have for them.</p>	<ul style="list-style-type: none"> • Provide a clear overview of available support schemes. • Use active facilitation such as dedicated events to engage SMEs. • Establish cooperation with regional institutions and share success stories. 	<ul style="list-style-type: none"> • Key Recommendation #03: Create a set of structured guidelines to clarify the relationships between energy obligations – or NON obligations – and sustainability <hr/> <ul style="list-style-type: none"> • Resource #01: Communication campaign plan and report • Resource #02: Training documents
Relevance to the new EED		HIGH

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Ireland



Legal documents in Ireland

In Ireland, Article 8 of the Energy Efficiency Directive has been transposed into national law under the Statutory Instrument (S.I.) 426 of 2014, which entered into force in 2014. On the website of the Sustainable Energy Authority of Ireland, there are guiding documents for the implementation in the form of FAQs.



Involved actors in Ireland

The department responsible for the Implementation of the Energy Efficiency Directive in Ireland is the Department of Communications, Energy and Natural Resources. The main governmental energy monitoring body in Ireland is the Sustainable Energy Authority of Ireland (SEAI). SEAI promotes and advises in the development of sustainable energy. Large Industry Energy Members (LIEN), supported by the SEAI, work on improving their energy performance and on inspiring other companies to increase energy efficiency.

Challenge	Identified solution strategies	Key actors recommendations and resources from the project
<p>Identification of obligated companies, having regard to private companies, and ensure compliance.</p>	<ul style="list-style-type: none"> • Improve the identification of obligated companies based on database and information. • Enhance the gathering of data about companies from all potential data sources e.g. data from utilities, corporate websites. • Improve hotline service to make information about identification better accessible. • Create a detailed guideline for companies to simplify identification. 	<ul style="list-style-type: none"> • Key Recommendation #01: Overcome the information barrier by the creation of a central information hub at national or regional level depending on the EU MS specific characteristics

Relevance to the new EED **HIGH**

Challenge	Identified solution strategies	Key actors recommendations and resources from the project
<p>Ensuring quality of energy audits.</p>	<ul style="list-style-type: none"> • Establish validity and quality checks. • Install monitoring system to control results of quality checks. • Require additional trainings for auditors. • Examine process to verify written and practical knowledge of auditors. • Limit accreditation for auditors in time. 	<ul style="list-style-type: none"> • Key Recommendation #03: Create a set of structured guidelines to clarify the relationships between energy obligations – or NON obligations – and sustainability • Resource #01: Report on <u>audits and EMS implementation</u> with MB approach

Relevance to the new EED **MEDIUM**

Challenge	Identified solution strategies	Key actors recommendations and resources from the project
<p>Increasing the implementation of measures resulting from energy audits.</p>	<ul style="list-style-type: none"> • Publish walk-throughs for audits and create helpdesk. • Publish accessible information about successful implementation (best practices/ innovative technologies). • Encourage / oblige auditors to link identified measures to funding schemes. • Oblige non-SMEs to justify for each measure why it is not being implemented, and consider NEBs. 	<ul style="list-style-type: none"> • Key Recommendation #01: Overcome the information barrier by the creation of a central information hub at national or regional level depending on the EU MS specific characteristics • Key Recommendation #05: Benchmarking approach • Resource #02: Calculation of cost benefit analysis with integrated multiple benefits (available on request) • Resource #03: Communication campaign plan and report • Resource #04: Training documents
<p>Relevance to the new EED HIGH</p>		
Challenge	Identified solution strategies	Key actors recommendations and resources from the project
<p>Create support mechanisms and raise awareness on opportunities of energy audits.</p>	<ul style="list-style-type: none"> • Make existing informational instruments more accessible for SMEs by sharing information about workshop via e.g. social media, industrial associations. • Share examples of successful implementation of measures by other SMEs as good practices. • Increase cooperation between SMEs and institutions to minimize research effort for SMEs. • Present potential benefits of energy audits. 	<ul style="list-style-type: none"> • Key Recommendation #01: Overcome the information barrier by the creation of a central information hub at national or regional level depending on the EU MS specific characteristics • Key Recommendation #05: Benchmarking approach • Resource #02: Calculation of cost benefit analysis with integrated multiple benefits (available on request) • Resource #03: Communication campaign plan and report • Resource #04: Training documents
<p>Relevance to the new EED HIGH</p>		

Challenge	Identified solution strategies	Key actors recommendations and resources from the project
<p>Guiding companies about how to get the energy audit done and about criteria for SMEs energy audits.</p>	<ul style="list-style-type: none"> • Support SMEs at regional level and create direct channels to contact regional institutions through e.g. hotline. • Establish peer networks. • Continue of advising and mentoring for SMEs. • Simplify the process of energy audits by offering interactive help during application. 	<ul style="list-style-type: none"> • Key Recommendation #01: Overcome the information barrier by the creation of a central information hub at national or regional level depending on the EU MS specific characteristics • Key Recommendation #05: Benchmarking approach <hr/> <ul style="list-style-type: none"> • Resource #02: Calculation of cost benefit analysis with integrated multiple benefits (available on request) • Resource #03: Communication campaign plan and report • Resource #04: Training documents
<p>Relevance to the new EED MEDIUM</p>		

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Italy



Legal documents in Italy

In Italy, Article 8 of the Energy Efficiency Directive has been transposed into national law by Article 8 of the national Legislative Decree 102/2014, which entered into force in 2014. The new version of the Directive has been transposed by Legislative Decree 73/2020. In 2015, the Ministry published a guidance document to inform and support companies regarding the interpretation of national legislation. These documents have been updated during the years and ENEA provided sectoral guidance as well as FAQs and dissemination events. Sectoral guidance by ENEA is available for the banking sector, coat and confectionery sector, paper sector, foundry sector, real estate sector, telecommunications sector, glass sector, concrete sector, ceramic sector, steel sector, distribution sector, rubber and plastic sector, petroleum products sector, water and waste sector, power production and district heating sector, private healthcare sector and local public transport sector. In November 2016, the Ministry of Economic Development (MISE) published the document "Clarifications regarding energy audits in companies" with useful information regarding the identification of obliged companies, the deadlines for carrying out the audit and the communication to ENEA of the results and savings (to comply with the provisions of art. 7 of Legislative Decree 102/2014).



Involved actors in Italy

The ministry responsible for the Implementation of the EED in Italy is the Ministry of Environment and Energy Security. The National Energy Agency (ENEA) has been appointed as national monitoring body.

To identify obligated companies, the Ministry furthermore collaborates with CSEA (Cassa per i Servizi Energetici e Ambientali) to identify energy-intensive companies that are subject to the obligation including SMEs.

Challenge	Identified solution strategies	Key actors recommendations and resources from the project
<p>Identification of obligated companies</p>	<ul style="list-style-type: none"> • Improve and assist the self-declaration of companies. 	<ul style="list-style-type: none"> • Key Recommendation #01: Overcome the information barrier by the creation of a central information hub at national or regional level depending on the EU MS specific characteristics • Key Recommendation #03: Create a set of structured guidelines to clarify the relationships between energy obligations – or NON obligations – and sustainability <hr/> <ul style="list-style-type: none"> • Resource #01: <u>Communication campaign plan and report</u>

Relevance to the new EED **MEDIUM**

Challenge	Identified solution strategies	Key actors recommendations and resources from the project
<p>Ensuring compliance of obligated companies.</p>	<ul style="list-style-type: none"> • Raise the awareness of obligated companies, going beyond the pure obligation and stressing the added value of energy efficiency. 	<ul style="list-style-type: none"> • Key Recommendation #01: Overcome the information barrier by the creation of a central information hub at national or regional level depending on the EU MS specific characteristics • Key Recommendation #03: Create a set of structured guidelines to clarify the relationships between energy obligations – or NON obligations – and sustainability <hr/> <ul style="list-style-type: none"> • Resource #01 <u>Communication campaign plan and report</u>

Relevance to the new EED **HIGH**

Challenge	Identified solution strategies	Key actors recommendations and resources from the project
<p>Creation of support mechanisms and overcoming the scarce availability of resources.</p>	<ul style="list-style-type: none"> • Implement a dedicated support system, making information easily accessible. 	<ul style="list-style-type: none"> • Key Recommendation #01: Overcome the information barrier by the creation of a central information hub at national or regional level depending on the EU MS specific characteristics • Key recommendation #03: Create a set of structured guidelines to clarify the relationships between energy obligations – or NON obligations – and sustainability <hr/> <ul style="list-style-type: none"> • Resource #01: Communication campaign plan and report
<p>Relevance to the new EED HIGH</p>		

Challenge	Identified solution strategies	Key actors recommendations and resources from the project
<p>Compromise between reporting effort and monitoring.</p>	<ul style="list-style-type: none"> • Find the right balance between the amount of monitored data and the effort by the companies. 	<ul style="list-style-type: none"> • Key Recommendation #05: Benchmarking approach <hr/> <ul style="list-style-type: none"> • Resource #02: Report on audits and EMS implementation with MB approach • Resource #03: Calculation of cost benefit analysis with integrated multiple benefits (available on request) • Resource #04: Training documents
<p>Relevance to the new EED MEDIUM</p>		

Challenge	Identified solution strategies	Key actors recommendations and resources from the project
<p>Enhancing the uptake of measures</p>	<ul style="list-style-type: none"> Consider non-energy benefits (NEBs) in the energy audits. 	<ul style="list-style-type: none"> Key Recommendation #05: Benchmarking approach Resource #02: Report on <u>audits</u> and <u>EMS implementation</u> with MB approach Resource #03: Calculation of cost benefit analysis with integrated multiple benefits (available on request) Resource #04: <u>Training documents</u>
<p>Relevance to the new EED HIGH</p>		

Challenge	Identified solution strategies	Key actors recommendations and resources from the project
<p>Raising awareness and guiding SMEs to action.</p>	<ul style="list-style-type: none"> Different strategies identified, e.g. facilitate application process, implement peer network, collect and share success-stories, or create information hub on energy efficiency and support mechanisms. 	<ul style="list-style-type: none"> Key Recommendation #05: Benchmarking approach Resource #02: Report on <u>audits</u> and <u>EMS implementation</u> with MB approach Resource #03: Calculation of cost benefit analysis with integrated multiple benefits (available on request) Resource #04: <u>Training documents</u>
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Poland



Legal documents in Poland

In Poland, Article 8 of the Energy Efficiency Directive was transposed into national law by Chapter 5 of the national Energy Efficiency Act , of 20 May 2016.

Guidance on the implementation of the obligation has been posted in the form of FAQs on the website of the Energy Regulatory Office (ERO). In addition, ERO has posted on its website templates of notifications on the fulfillment of the obligation together with a summary of the implementation of the audits in the first period.



Involved actors in Poland

The Ministry responsible for the implementation of Article 8 of the EED in Poland is the Ministry of Climate and Environment. The Energy Regulatory Office (ERO) has been designated as the national monitoring body.

Challenge	Identified solution strategies	Key actors recommendations and resources from the project
Lack of resources in the Managing Authority and the Ministry to implement the changes.	<ul style="list-style-type: none">Automate monitoring and verification of audits.	<ul style="list-style-type: none">Key Recommendation #01: Overcome the information barrier by the creation of a central information hub at national or regional level depending on the EU MS specific characteristicsKey Recommendation #03: Create a set of structured guidelines to clarify the relationships between energy obligations – or NON obligations – and sustainability <p>• Resource #01: Communication campaign plan and report</p>

Challenge	Identified solution strategies	Key actors recommendations and resources from the project
<p>Coordination of support mechanisms provided by different institutions and the establishment of national mechanisms for SMEs.</p>	<ul style="list-style-type: none"> • Create central information centre for SMEs. • Develop guidelines for institutions providing financial support to SMEs. • Establish national financial support programme for SMEs to implement audit results. 	<ul style="list-style-type: none"> • Key Recommendation #01: Overcome the information barrier by the creation of a central information hub at national or regional level depending on the EU MS specific characteristics • Key Recommendation #03: Create a set of structured guidelines to clarify the relationships between energy obligations – or NON obligations – and sustainability <hr/> <ul style="list-style-type: none"> • Resource #01: Communication campaign plan and report
<p>Relevance to the new EED MEDIUM</p>		

Challenge	Identified solution strategies	Key actors recommendations and resources from the project
<p>Identification of obligated companies.</p> <p>In particular the creation of a complete list of all obligated entities, taking into account market developments.</p>	<ul style="list-style-type: none"> • Involve industry associations and regional institutions in informing companies of the obligation. • Using a combination of existing databases to supplement the current company register. • Consider usage of energy-related thresholds to reduce the burden on businesses. 	<ul style="list-style-type: none"> • Key Recommendation #01: Overcome the information barrier by the creation of a central information hub at national or regional level depending on the EU MS specific characteristics • Key Recommendation #03: Create a set of structured guidelines to clarify the relationships between energy obligations – or NON obligations – and sustainability <hr/> <ul style="list-style-type: none"> • Resource #01: Communication campaign plan and report
<p>Relevance to the new EED HIGH</p>		

Challenge	Identified solution strategies	Key actors recommendations and resources from the project
<p>Improve the quality of energy audits to better reflect the cost-effectiveness.</p>	<ul style="list-style-type: none"> • Introduce requirements for auditors and ensuring that they are met. • Provision of support material for auditors to standardise audit results. • Implement more in-depth quality control procedures. • Increase visibility of energy audits benefits and integrate assessment of non-energy benefits into audit procedures. • Link audit obligation to support mechanisms. 	<ul style="list-style-type: none"> • Key Recommendation #05: Benchmarking approach • Resource #02: Report on audits and EMS implementation with MB approach • Resource #03: Training documents
<p>Relevance to the new EED HIGH</p>		

Challenge	Identified solution strategies	Key actors recommendations and resources from the project
<p>Increase implementation of identified measures.</p>	<ul style="list-style-type: none"> • Require companies to present the results of energy audits to management. • Include a justification as to why the measure was not implemented in the report. • Committing companies that do not implement any measures to participate in educational activities. 	<ul style="list-style-type: none"> • Key Recommendation #01: Overcome the information barrier by the creation of a central information hub at national or regional level depending on the EU MS specific characteristics • Resource #04: Integration of Multiple Benefits in Companies' Business Model • Resource #05: Report on audits and EMS implementation with MB approach • Resource #06: Calculation of cost benefit analysis with integrated multiple benefits (available on request)
<p>Relevance to the new EED HIGH</p>		

Challenge	Identified solution strategies	Key actors recommendations and resources from the project
<p>Raising awareness of the benefits of energy efficiency, taking into account the inactive participation of SMEs in sector associations.</p>	<ul style="list-style-type: none"> • Maximise the impact of existing materials and tools. • Create a strategy to expand, maintain, and better distribute available materials and tools. • Create success stories related to financial support and implementation of innovative solutions. • Consider pilot implementation of peer networks. • Enhance the use of non-energy benefits of energy audits and financial support 	<ul style="list-style-type: none"> • Key Recommendation #01: Overcome the information barrier by the creation of a central information hub at national or regional level depending on the EU MS specific characteristics • Resource #04: <u>Integration of Multiple Benefits in Companies' Business Model</u> • Resource #05: Report on <u>audits</u> and <u>EMS implementation</u> with MB approach • Resource #06: Calculation of cost benefit analysis with integrated multiple benefits (available on request)
<p>Relevance to the new EED HIGH</p>		

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WHO IS DEESME 2050 FOR?

Support SMEs (and their staff) in the furniture sector
To overcome obstacles in implementing energy efficiency measures and its value chain

DEESME 2050

SME

Icons: Lightbulb, person, furniture, energy efficiency.

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DEESME 2050's pilot countries

DEESME 2050

- BULGARIA: ECQ
- POLAND: KAPE
- ITALY: SOGESCA, FIRE
- FRANCE: mt partenaires Ingénierie

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Slovenia



Legal documents in Slovenia

Article 16 of the Act on Energy Efficiency (Uradni list RS, št. 158/20) and Regulation on energy audits (Pravilnik o metodologiji za izdelavo in vsebini energetskega pregleda (Uradni list RS, št. 41/16 in 158/20 – ZURE)) obliges large companies to carry out energy audits every four years and to report it to the Energy Agency. This provision transposes the requirement of Article 8 of the Energy Efficiency Directive (EED) 2012/27 and 2018/2002 of the European Parliament and of the Council into national law.



Involved actors in Slovenia

The Energy Agency (<https://www.agen-rs.si/domov>) takes care of the implementation of audits and their quality. In accordance with the second paragraph of Article 16 of the Act on Energy Efficiency, a large company must report to the Agency on the performed energy audit. The responsible authority for analysing the obligation mechanism is the legislator, not the Agency.

Challenge	Identified solution strategies	Key actors recommendations and resources from the project
<p>Ensuring compliance and ensuring the quality of the audits.</p> <p>Ensuring that all obligated companies carry out an audit and that audits are of high quality.</p>	<ul style="list-style-type: none"> • Use non-energy benefits (NEBs) and other added values of audits as motivation. • Refine minimum quality requirements for auditors. • Encourage/ oblige auditors to link suggested measures to funding programmes and best practise examples. 	<ul style="list-style-type: none"> • Key Recommendation #01: Overcome the information barrier by the creation of a central information hub at national or regional level depending on the EU MS specific characteristics • Key Recommendation #03: Create a set of structured guidelines to clarify the relationships between energy obligations – or NON obligations – and sustainability <hr/> <ul style="list-style-type: none"> • Resource #01: <u>Integration of Multiple Benefits in Companies' Business Model</u> • Resource #02: Calculation of cost benefit analysis with integrated multiple benefits (available on request) • Resource #03: <u>Communication campaign plan and report</u>
<p>Relevance to the new EED HIGH</p>		

Challenge	Identified solution strategies	Key actors recommendations and resources from the project
<p>Creation of support mechanisms.</p> <p>SMEs are often not aware of the benefits that energy efficiency can have for them.</p>	<ul style="list-style-type: none"> • Implement an ongoing long-term financial support system. • Create effective indicators for evaluating implemented projects. 	<ul style="list-style-type: none"> • Key Recommendation #01: Overcome the information barrier by the creation of a central information hub at national or regional level depending on the EU MS specific characteristics • Key Recommendation #05: Benchmarking approach <hr/> <ul style="list-style-type: none"> • Resource #03: Report on <u>audits and EMS implementation</u> with MB approach • Resource #04: <u>Training documents</u>

<p>Relevance to the new EED HIGH</p>		
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Spain



Legal documents in Spain

Article 8 of the Energy Efficiency Directive 2012/27/EU was transposed into Spanish law by adoption of Royal Decree 56/2016 of February 12th 2016 (Source: NEEAP 2017 <https://cms.law/en/int/expert-guides/cms-expert-guide-to-energy-audit-requirements-and-standards/spain>).

Large industrial companies (or groups of companies that comply with certain requirements) are legally bound to carry out energy audits. These audits must be conducted every 4 years and must cover at least 85% of final energy use of facilities located in Spain and that are part of the activities managed by the companies and groups in question (Source: ODYSSEE MURE 2021).



Involved actors in Spain

The Ministry for the Ecological Transition and the Demographic Challenge (MITERD) is responsible for preparing federal energy legislation, developing national energy policy and measures to ensure energy supply, co-ordination with other ministries, and monitoring of policies related to the fulfilment of energy policy objectives. Therefore, it is responsible for energy savings and efficiency policies, through the Secretary of State for Energy.

The General Sub-Directorate for Energy Efficiency and the Institute for Energy Diversification and Saving (IDAE), which is a public business entity, reports to the Secretary of State for Energy. The General Sub-Directorate for Energy Efficiency is in charge of developing the guidelines of the Secretary of State for Energy in the area of energy efficiency, while the IDAE manages energy efficiency programmes and projects to help Spain meet its energy efficiency objectives. The programmes are often financed by the National Energy Efficiency Fund.

Energy efficiency policies and measures are frequently implemented at the regional and municipal level, therefore MITERD usually develops these policies and measures in co-ordination with the Autonomous Communities (CCAA) (Source: IEA 2021, pg. 57).

Due to the fact that Spain consists of 17 Autonomous Communities, energy efficiency policy is mainly characterised by local programmes. Each region decides independently on the allocation of resources to the specific programme (Source: EC 2016).

The competent body for energy efficiency in the autonomous cities of Ceuta and Melilla will establish, implement and apply a system of independent energy audit inspections — for which it can carry out as many inspections as it deems necessary — in order to monitor compliance with the energy audit obligation by the companies to which the Royal Decree applies, as well as to ensure and verify quality of them. The inspections will be performed annually on a random sample and, as a minimum requirement, statistically significant percentage of the energy audits conducted in each four-year period (Source: NEEAP, 2017).

Challenge	Identified solution strategies	Key actors recommendations and resources from the project
<p>Identification and ensuring compliance of obligated companies in Spain.</p>	<ul style="list-style-type: none"> • Improve interaction between Autonomous Communities and Central Government. • Considering a change towards a database-oriented regime. • Enhance push- and pull-factors for compliance. 	<ul style="list-style-type: none"> • Key Recommendation #01: Overcome the information barrier by the creation of a central information hub at national or regional level depending on the EU MS specific characteristics • Key Recommendation #03: Create a set of structured guidelines to clarify the relationships between energy obligations – or NON obligations – and sustainability <hr/> <ul style="list-style-type: none"> • Resource #01: Communication campaign plan and report

Relevance to the new EED **HIGH**

Challenge	Identified solution strategies	Key actors recommendations and resources from the project
<p>Raising awareness on opportunities and create support mechanisms.</p>	<ul style="list-style-type: none"> • Use active facilitation such as dedicated events to engage SMEs. • Establish cooperation with regional institutions and share success stories. 	<ul style="list-style-type: none"> • Key Recommendation #01: Overcome the information barrier by the creation of a central information hub at national or regional level depending on the EU MS specific characteristics • Key Recommendation #03: Create a set of structured guidelines to clarify the relationships between energy obligations – or NON obligations – and sustainability <hr/> <ul style="list-style-type: none"> • Resource #01: Communication campaign plan and report

Relevance to the new EED **HIGH**

Challenge	Identified solution strategies	Key actors recommendations and resources from the project
<p>Guiding SMEs to participation.</p>	<ul style="list-style-type: none"> • Provide a clear overview of available support schemes by implementing a central information website. • Simplify the application process to reduce administrative burdens by designing an “easy-to-understand” process. 	<ul style="list-style-type: none"> • Key Recommendation #01: Overcome the information barrier by the creation of a central information hub at national or regional level depending on the EU MS specific characteristics • Key Recommendation #03: Create a set of structured guidelines to clarify the relationships between energy obligations – or NON obligations – and sustainability <hr/> <ul style="list-style-type: none"> • Resource #01: Communication campaign plan and report
<p>Relevance to the new EED MEDIUM</p>		

Challenge	Identified solution strategies	Key actors recommendations and resources from the project
<p>Quality of audits.</p>	<ul style="list-style-type: none"> • Define official and mandatory requirements for auditor qualification at national level. • Implement an adequate verification process to accredit auditors and ensure that their knowledge is regularly updated. • Define requirements for conducting audits and provide support materials. • Improve monitoring and quality checks. 	<ul style="list-style-type: none"> • Key Recommendation #05: Benchmarking approach <hr/> <ul style="list-style-type: none"> • Resource #02: Report on audits and EMS implementation with MB approach • Resource #03: Training documents
<p>Relevance to the new EED MEDIUM</p>		

Challenge	Identified solution strategies	Key actors recommendations and resources from the project
<p>Enhancing the uptake of measures.</p>	<ul style="list-style-type: none"> • Use informational instruments to enhance the uptake of measures. • Make sure the financial support is adequate. 	<ul style="list-style-type: none"> • Resource #04: Calculation of cost benefit analysis with integrated multiple benefits (available on request)
<p>Relevance to the new EED</p>		<p>HIGH</p>

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