

National schemes for energy efficiency in SMEs

Deliverable 5.2

Outcome report of meetings organised with the National Authorities

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Project information

Project Title	Project Title Developing national schemes for energy efficiency in SMEs	
Project Acronym	DEESME	
Project Number	892235	
Project coordinator	IEECP, Ivana Rogulj, ivana@ieecp.org	
Project dates	September 2020 – December 2023	

Deliverable information

Nature: Public Version: final Delivery date:

Rev.	Written by	Date	Checked by	Date
v1	FIRE	01/12	IEECP	14/12
v2	FIRE	23/12		

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About

Unlike large companies, SMEs have less technical human and financial resources to improve their energy efficiency. Barriers have been deeply investigated including lack of awareness, low capital, difficulty to access financing, doubts around actual saving potential and the lack of technical human resources. To provide SMEs with technical resources such as methodologies, best practices, technology inventories and subsidies, national schemes exist. Some of the schemes introduce mandatory actions (energy analysis) to obtain such subsidies. Nevertheless, national policy schemes have failed to some extent to convince companies 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, and
- 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 finally assist SMEs to develop and test the technical DEESME solutions by organizing information and training initiatives, realising energy audits and implementing energy management systems starting from international standard and adding the multiple benefits energy efficiency approach.

The project is built on a 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).

The project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 892235.



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Executive Summary

This Deliverable intends to summarize the outcomes received from the meetings that the partners held with the National Authorities.

These meetings were organized to ensure the policy proposals prepared in T5.1 reach their aim so partners explored main challenges related to energy audits national schemes and how NAs can adopt policy proposals to improve their schemes and overcome their challenges.

Interactions between partners and NAs took place in two ways:

- A joint workshop focused on policy challenges, strategies and experiences from countries.
- Bilateral meetings between partners and NAs to complement the workshop and explore other topics, especially news from EED recast.

This dual mode of interaction allowed the partners to collect numerous and useful information on the energy audits national schemes and to transfer the DEESME proposals and results to the NAs. The workshop focused on sharing experiences while the bilateral meetings aimed to highlight the challenges that the NAs believe they need to face in their countries and what strategies they will implement to overcome these challenges.

The transfer of policy recommendations, produced by the DEESME project, allowed the NAs to have an immediate comparison between challenges, identified solution strategies and key actors recommendations and resources from the project.



1. Joint meeting of EU countries sharing knowledge on policy challenges with the implementation of the new EED and audits in companies

The Joint Policy Workshop: "Policy challenges with the implementation of the new EED and audits in companies" took place on 5th October 2023. The workshop focused on policy challenges with the implementation of the new EED and audits in companies and targeted national authorities, policy makers, chambers, and associations of companies and represented the presentation of project results and recommendation, introduction to the changes and knowledge sharing among the countries included and beyond the project scope.

The briefing from the workshop is available on the following link: <u>DEESME workshop with NAs briefing.</u>

Here is the event agenda:

10.00 Introduction to the workshop, Dario Di Santo – FIRE

10.10 Update on the recast of EED forArt.11 (ex Art. 8), Edyta Nowak - DG ENER

10.30 Effective policies for energy audits, Antoine Durand - Fraunhofer ISI

10.45 Experience sharing and feedbacks about challenges and possible solutions

- Bulgaria Ognian Markovski, SEDA
- Poland Anna Piórkowska, KAPE
- Italy Claudia Toro, ENEA

11.30 Discussion

Eleven NAs took part at the workshop:

- Italian Energy Agency (ENEA).
- Lithuanian Energy Agency.
- Austrian Energy Agency.
- Portuguese Energy Agency (ADENE).
- Malta Energy and Water Agency.
- Sustainable Energy Authority of Ireland (SEAI).
- Energy Authority of Finland.
- Hungarian Energy and Public Utility Regulatory Authority.



- Spanish Ministry for the Ecological Transition.
- Polish Ministry of Climate and Environment Republic.
- Bulgarian Sustainable Energy Development Agency (SEDA).

Of those NA, Lithuania, Portugal, Malta and Hungary have not been previously included in the analysis, which represents broadening the scope of the target countries.

1.1. Introduction to the workshop

Dario Di Santo, managing director of FIRE (Italian Federation for the Rational use of Energy) presents the topics that will be covered in the workshop. The main purpose of the event is to discuss the challenges that the new EED recast poses especially for SMEs.

1.2. Update on the recast of EED for Art.11 (ex Art. 8)

Edyta Novak, member of Directorate-General for Energy, presents EED recast adopted on 13 September 2023, published on 20 September 2023 and entered in force on 10 October 2023. The directive has new, more ambitious energy efficiency targets to be achieved as a result of the Fit for 55 package. The greenhouse gas emissions reduction target is raised to 55% by 2030, in much of it linked to a more rational use of energy. The target on final consumption goes from one reduction compared to the 2020 scenario of 2%, to one of 11.7%, which becomes mandatory at EU level. Regarding additional annual savings, the current target (0.8%) goes from 1.3% of 2024-2025 at 1.9% of 2028-2030, equal to average coefficient of 1.49% annual increase. Furthermore, Member States must achieve a reduction in public entities consumption of 1.9% per year and comply with the 3% requalification requirement in NZEB or ZEB for all public buildings. The architecture of the new article 11 compared to the previous article 8 has been completely redesigned so that the obligations for energy audits and energy management systems no longer concern the type and size of companies but only their consumption.

Member States may set up mechanisms such as energy audit centres for SMEs and microenterprises, where these are not in competition with private auditors, to provide energy audits, as well as other support schemes for SMEs.

In the development of their support schemes and programmes for the SMEs, Member States will have to ensure that their programmes include:

- support to SMEs in quantifying the multiple benefits of energy efficiency measures within their operation.
- development of energy efficiency roadmaps.
- development of energy efficiency networks for SMEs, facilitated by independent facilitators.



1.3. Effective policies for energy audits

Antoine Durand, researcher and project manager at Fraunhofer Institute for Systems and Innovation Research (ISI), presents the results of the survey/interviews with NAs about inventory of needs and requirements of NAs to enhance the impact of Energy Audits and EMS. The identification of challenges allows to find 11 challenges (6 for non-SMEs and 5 for SMEs) and 27 sub-challenges. This identification leads to definition of best practices (55 solution strategies). Individuation of challenges in transposition of Art. 8 EED for non-SMEs allows to find that quality of audits it's a key aspect. Factors with influence on the quality of energy audits include the qualification of auditors, the requirements to both content and structure of the audit reports as well as the regularity and depth of audit quality checks. In Germany, requirements were recently updated and auditors are now obligated to participate in regular trainings, on which they have to inform the national agency BAFA (EDL-G Article 8). It is expected that auditors will have to complete 16 units of training (each 45 minutes) with relevance to energy audits every 2 years. Ireland created an elaborate 64 page interactive PDF document that guides auditors and companies step by step through the process of conducting the energy audit and reporting the results. Compromise between reporting effort and monitoring and enhancing the uptake of measures are other challenges. Under the Environmental Management Activities Decree, the Netherlands obliges companies which consume more than 50 000 kWh of electricity or 25 000 m³ of natural gas to take energy-saving measures with a payback period of 5 years or less. The regulation was implemented independent from the energy audit obligation. For SMEs creation of support mechanisms is crucial. There are various support mechanisms to encourage SMEs to carry out energy audits and to implement energy efficiency measures, based on either informational instruments or financial incentives. Limited available resources are also a barrier for SMEs so it's important guiding SMEs towards energy audits or energy management systems. This process can be supported by passive facilitation, e.g. lean application process for funding schemes, by active facilitation, e.g. via individual consultancy services or by establishing peer networks.



1.4. Experience sharing and feedbacks about challenges and possible solutions - Bulgaria

Ognian Markovski (SEDA) presents implementation of Article 8 EED in Bulgaria and an overview of national transposition about obligations, energy auditors and control and monitoring. Challenges identification allows to find the main issues for SMEs (creation of support mechanism, facilitation, and awareness) and for non-SMEs (identification of obligated companies, ensuring compliance and enhancing the uptake of measures). For each challenge, SEDA finds a solution strategy that can help companies and match their needs.

1.5. Experience sharing and feedbacks about challenges and possible solutions - Poland

Anna Piórkowska (KAPE) presents some experiences from Poland. The Ministry of Climate and Environment, which deals with energy issues in Poland, runs programmes to encourage SMEs to carry out energy audits and implement energy efficiency measures. One of these programmes was technical support for the promotion of energy audits and energy efficiency investments in small and medium-sized enterprises in Poland carried out by KAPE in cooperation with the Ministry (November 2018 - May 2021). 11% of companies indicate that they have performed an energy audit in the past 5 years. In the manufacturing sector, the percentage is higher at 15%, and a further 5% of manufacturing companies plan to implement an audit soon. 30% of companies indicate that there are areas of potential energy reduction in their case. For the manufacturing sector, the percentage is 35%. Among all enterprises, the area mentioned most often as one where there is potential for energy reduction is office equipment and lighting, while among manufacturing enterprises it is machinery and equipment. 37% of companies believe that investments in reducing energy consumption can be profitable. The opposite opinion is presented by 44% of respondents. Entrepreneurs are primarily profit-oriented and are much more convinced to cooperate by the economic aspect of energy saving than by the environmental aspect. The awareness of entrepreneurs regarding the impact of energy efficiency on the operating costs is rather low - concrete examples are needed. As a result of the pandemic, entrepreneurs are focused on activities leading to the maintenance of the company on the market, putting aside activities considered by them as secondary, namely those related to increasing energy efficiency. It is therefore worth showing by example that this is the way to reduce business costs. Entrepreneurs have very limited time to take additional actions – the message to get their interest should be clear and specific. More and more entrepreneurs, especially those well-functioning on the market, notice the positive influence of actions related to energy saving on their positive pro-environmental image.

Main challenges in Poland:



- development of energy efficiency roadmaps.
- identification of obliged companies, particularly the creation of a full list of all obliged entities, considering market developments.
- improve the quality of energy audits to better reflect the cost-effectiveness of operations.
- coordinate support mechanisms provided by different institutions and establish national mechanisms for SMEs.
- raising awareness of the benefits of energy efficiency, considering the inactive participation of SMEs in sectoral associations.

1.6. Experience sharing and feedbacks about challenges and possible solutions - Italy

Claudia Toro (ENEA) presents SMEs energy efficiency awareness plan under the Italian transposition of art. 8 of the EED. In Italy, more than 99% of all enterprises are SMEs (95% Micro enterprises). SMEs generate 64% of overall value added in the Italian 'non-financial business economy', exceeding the EU average of 56.4%. The estimated share of energy consumption on GIC in Italy ranges from 13% to 29%. Energy audit plays a crucial role in enterprises' decision making on energy efficiency investments. The probability to invest in EPIAs are 1,5 times higher for companies having an energy audit (European Investment Bank, 2019) relative to those not having one. The energy audit is an effective tool to overcome the information barriers relative to energy efficiency and to enhance the adoption of EPIAs in SMEs. The LEAP4SME analysis of the market for energy audits and EE at European level, together with interviews and literature review, allowed to identify a number of barriers and their different impact according to firm size and sector. There are economic, organisational, bureaucratic barriers. The energy efficiency national awareness plan for SMEs has a series of actions as:

- Training/information and awareness campaign on energy efficiency for SMEs
- Preparation and implementation of energy efficiency support tools for SMEs.
- Training/information and awareness campaign on energy efficiency for SMEs
- Dissemination to stakeholders of energy efficiency support tools for SMEs (Tools and Guidelines).

ENEA in collaboration with the University of Basilicata has developed a tool to support the implementation of energy audits in SMEs in the industrial and tertiary sectors.

During the various meetings, synergies were explored and developed with the LEAP4SME project, coordinated by ENEA under Horizon 2020 projects, and focused precisely on policies to be adopted for implementing energy audits in SMEs and overcoming existing barriers. As part of the project's activities, the National Observatory on Energy Efficiency for SMEs was established to bring together SMEs, local and national public administrations, and all industry stakeholders to discuss specific SME issues.





2. Meetings organised per countries to complement the joint meeting

2.1. Austria - Ministry of Climate Action, Environment, Energy, Mobility, Innovation and Technology

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 furthermore collaborates with the Ministry of Finance and business data companies.

Main challenges

Main challenges regarding the legal framework of energy audit scheme are:

- Identification process and compliance with the regulation especially for new companies.
- Reporting effort and monitoring is often a burden for companies.
- Enhancement of the implementation of the recommended measures is a practical challenge.

DEESME project usefulness and proposal to overcome challenges

Based on DEESME, several solution strategies can be identified:

- Ensuring compliance of obligated companies in Austria:
- Assisting in the self-declaration of companies.
- Utilize existing databases to identify companies.
- Enhance push- and pull-factors for compliance.
- Reporting effort and monitoring
- Optimize the audit submission content and offer submission support.
- Enhancing the uptake of measures
- Use informational instruments to enhance the uptake of measures.

2.2. Bulgaria - SEDA

Sustainable Energy Development Agency (SEDA) is the responsible authority for the implementation of the state energy efficiency improvement policy, incl. implementation of the requirements of art.8/art.11



EED. It is also carrying out the control activities over the mandatory energy audits in Industry sector as well as the quality of the energy audits. SEDA is the national body responsible for monitoring and reporting on the implementation of national EE policies.

Main challenges and discussion points

Main challenges regarding the legal framework of energy audit scheme are:

- Lack of national register of the companies obligated to perform energy audits.
- No legal obligation for energy efficiency measures from the audit to be implemented.
- Lack of enough financial mechanisms (besides grant schemes) to support EE measures implementation.

In the current legislation there is already obligation for energy audits based on energy consumption of 3000 MWh/year as well as obligation for energy management system for non-SMEs. The challenges with the identification of the obligated parties, based on self-declaration still are valid and there is need for legislative texts and involvement of other institutions in this process. There is also need of determination of financial support for companies performing energy audits as well as of structuring of financial mechanisms to support measures implementation.

DEESME project usefulness and proposal to overcome challenges

Considering 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 obligated to perform energy audits.
- Determination of financial support for companies performing energy audits.

The proposals are based on the results of questionnaire for stakeholders and expert meeting with Bulgarian Ministry of Energy.



2.1. Croatia - EIHP and Ministry of Economy and Sustainable Development

The main contact points were Energy Institute Hrvoje Požar (providing technical assistance) and the Ministry of Economy and Sustainable Development (in charge of the transposition)

Main challenges and discussion points

The meeting with Croatian authority was organised in the beginning of the project implementation to identify the challenges:

- Ensuring compliance and enhance the uptake of measures. Ensure that all obligatory companies carry out an energy audit and implement recommendation from the audit.
- Creation of support mechanism, SMEs are often unaware of the benefits.
- Guiding SMEs to action, they do not participate due to fear of administrative burden.

The challenges identified during the second meeting were even more complex with the new obligations coming from the EED:

Data

There is an issue with gathering data from the companies (market related, GDPR, general protection of important information), without having this information, it is impossible to identify obligatory parties. For such data gathering, there are two prerequisites that are not fulfilled: the way data is collected/companies are obligated to do it and the way it is stored, gathered and used from other sources. In some cases, data exists, but it is linked to specific platform (for example, data was gathered for audits funding). This data cannot be easily transferred towards the National Energy Efficiency Center, functioning inside the Ministry. The infrastructure to connect all this would be the major necessity for further implementation of the obligations.

EMS

The issue with data collection and reporting about how many EMS (ISO 50001) have been implemented in the country is still not available (as in the first interview) and voluntary reporting is not easy to implement, whereas for the obligatory reporting the above mentioned data is needed.

Availability of skills and technical knowledge

Industry is a sector which is considered that will invest in measures that are shown as relevant and technically feasible. However, it is sometimes hard to get to that awareness level to check the feasibility and it is sector – specific and technically challenging so needs specific knowledge and skills to carry out high quality energy audit and identify best possible measures.

Administrative burden



The administrative burden of SMEs working in sector not linked to energy, but being obliged to report on multiple aspects needs to be reduced by finding synergies with other policies and concept (for example, SDGs)

DEESME project usefulness and proposal to overcome challenges

DEESME has provided solutions in the form of knowledge share on the identified issues, campaigns for SMEs and tool for the integration of multiple benefits in the Action Plans of the companies.



2.2. Finland – Energy Authority of Finland (ENERGIAVIRASTO)

ENERGIAVIRASTO is 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.

Main challenges and discussion points

The meeting was organized by FIRE to ensure that the policy proposals drafted in T5.1 of the DEESME project would achieve their purpose. With this target FIRE explored together with ENERGIAVIRASTO the main challenges and opportunities for national energy audit schemes posed by the EED recast.

The following discussion points were addressed in this meeting:

- Scope of the enterprise following under the revised EED.
- Action plan required after the Energy Audit.
- Energy consumption's threshold obligation.
- Tools to promote energy audits among SMEs.
- Exemptions from the obligation.
- Water consumptions.
- Exemption for companies with Environmental Management Systems.
- Role of the Energy Authority.
- Support from the European Commission.

The purpose of the present meeting was to discuss the main strengths and weaknesses of the new directive, while providing support to the energy national authority for the best implementation of the directive itself.

The first discussion point addressed with the interviewed NA concerns the scope of the enterprise definition that falls under the EED recast. In this case, it is still not entirely clear what is being considered and what is not, i.e., whether the perimeter is national, EU, or global. Article 2 does not contain a clear definition of enterprise in this regard. For ENERGIAVIRASTO, such a definition is preliminary, even under Finnish national law – especially in the case of multinationals with subsidiaries outside European borders. In case the definition remains to MSs to decide, the collection of reliable and complete information is a difficult task to manage and complete, as it would be necessary to trust the companies



about the sharing of information. Pending more detailed guidelines on the scope of the company to be considered, rules like those of the previous obligation may be considered valid.

A second point of discussion concerned the action plan required after the energy audit. On this point ENERGIAVIRASTO believes it is necessary to better clarify the contents of this plan.

A third point of discussion concerns the threshold of obligation from the perspective of energy consumption. Energy consumption data is classified and known only to energy consumers and energy companies. On the point, which is still open, the EA is trying to figure out what is the best solution, wondering about the need for a different database and the identification of the party to be informed if the obligation threshold is exceeded. In the latter case, the information will probably have to be made public, but without providing the details of consumption - so as not to conflict with data privacy issues. Checking companies about the proper reporting of their obligations remains a sore point. The EA contacted the Finnish government's statistics department and received some consumption data for the industrial sector. But for the service, retail, and other sectors ENERGIAVIRASTO does not have much data available.

A fourth discussion point is about tools to promote energy audits among SMEs. In this regard, ENERGIAVIRASTO initiated a special program in 1990. Even if the number of energy audits decreased dramatically after the obligation for non-SMEs (2020), energy audits have also been conducted in the public and non-SME sectors (which account for about 10 percent of total national consumption). ENERGIAVIRASTO has therefore gained good experience with energy audit programs and can be a benchmark to this respect for other member states.

A fifth point of discussion concerns exemption from the obligation. On this point, the EA reports the existence of a voluntary system of subsidies by the central government which incentivizes companies to implement the measures identified in the energy audits. ENERGIAVIRASTO is also awaiting indications on the EPC (especially on the scope of the exemption). For the Finnish EA just to have an EPC won't be enough to overcome the obligation, unless a certain quota of the energy consumption is met, for example.

Several other side discussion points were brought to the table, which are reported below:

- Water consumption: ENERGIAVIRASTO believes that it should be included in the annual report like
 other consumption. However, the annual report is not mandatory for all Finnish companies, but only for
 larger ones. Smaller ones may be required to publish such data in an appendix to their financial statements.
- Exemption for companies with Environmental Management Systems: the Finnish EA interpreted the
 point referring to companies with a management system certified in accordance with ISO 14001, even if
 there is no clear reference to the latter in the text of the directive. In any case, for ENERGIAVIRASTO,
 this requirement seems too mild from an energy point of view.



- Role of the Energy Authority: This will remain more or less the same. There are new tasks, but the mandatory energy audit system will remain almost unchanged. The energy management system side is completely new and will require guidance, legislation, and human resources. In Finland, several expert groups have been created to work on each article of the directive to find the best way to implement it at national legislative level (the expert groups will be working on the legislation until the end of next year, the latter should become effective October 2025).
- Support from the commission: ENERGIAVIRASTO believes that the most complex issue on which they will need support from the European Union concerns the collection of consumption data (the information is currently confidential, they will have to promulgate new legislation, see point 3). Alongside the latter, a clarification of the company perimeter affected by the directive remains central (see point 1).

According to the Finnish EA, new ideas and central support should hopefully arrive by the first half of 2024 and a new dialogue on the points mentioned in this report would be more fruitful following the receipt of more precise indications from the European Commission. The possibility to receive support from projects like DEESME in 2024 is considered useful.

2.3. Germany

During the design phase of the DEESME project, Germany was excluded as a target country for DEESME, as previous experience with the implementation of the former Article 8 EED had flagged Germany as being very advanced in many aspects of implementation. Despite this initial assessment, it was decided to reassess this at a later stage of the project and to include Germany on a provisional basis in the list of target countries. In order to identify and assess the potential need for assistance, the German implementing body¹ and the responsible ministry² were contacted by telephone and e-mail in June 2023 and asked about the need for assistance with the implementation of the forthcoming Article 11. Both institutions confirmed initial assumptions that no active support from DEESME would be required. In order to rule out any change in the situation, another follow-up contact was made in October 2023 with no change in the situation. In the absence of any apparent challenges, it was decided to take no further action in the case of Germany.

2.4. Greece - Ministry of Environment and Energy

The ministry responsible for the Implementation of the EED in Greece is the Ministry of Environment and Energy: Inspection Departments of Northern and Southern Greece of the Special Secretariat of the

¹ BAFA: Federal Office for Economic Affairs and Export Control

² BMWK: Federal Ministry for Economic Affairs and Climate Action



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.

Main challenges

Main challenge regarding the legal framework of energy audit scheme is that the identification of obligated companies is based only on financial and labour data – not a precise approach for who is obligated based on energy data.

For the corresponding determination of the status as a non-SME, complex ownership structures must be considered which are difficult to determine for the Ministry of Environment and Energy. Thus, ensuring that all obligated companies carry out the audit is challenging.

DEESME project usefulness and proposal to overcome challenges

Based on DEESME, several solution strategies can be identified:

- 1. Identification of obligated companies in Greece:
- Simplified energy audits define who would be targeted by the simplification.
- Enhance push- and pull-factors for compliance underline the added value of audits.

Simplified audits are a mean to reduce the burden on non-SMEs with a very low energy consumption who nonetheless are obliged to conduct time and cost consuming energy audits. Several MS already started to allow such companies to conduct a simplified audit if they can verify that their energy consumption lies below a certain threshold. To define a threshold, MS can analyse submitted data from previous auditing periods, and analyse it according to the energy consumption data.

2.5. Ireland - SEAI

The Sustainable Energy Authority of Ireland (SEAI) is an Irish governmental entity established to promote and aid in the development of sustainable energy in Ireland. The main objectives of the SEAI as a statutory body is to ensure the implementation and adoption of energy efficiency across all Irish sectors, as well as the development of new technology for use in with renewable energy sources and the decarbonisation of the Irish energy supply. It also funds and supports research into new technologies and their deployment in sectors including bioenergy, electric vehicles, the combination of heat and power



systems, and ocean energy. Among their large public initiatives are the Better Energy Communities and Sustainable Energy Communities programmes aimed at domestic and community energy and sustainability programmes.

Main challenges and discussion points

Challenge #1: Identification and ensuring compliance of obligated companies in Ireland

It is demanding to gather information about private businesses, because they are not clearly informed about being obligated.

There is also an issue with identification of companies in case of group of companies. The definition of a large enterprise applies to each legal entity registered in Ireland and it is not applied at the group level, but for each separate entity independently.

Challenge #2: Quality of audits

There is no regularity of quality checks and intensity of this activity is too low. Necessary information is fully available for Registered Auditors, but there is no obligatory examination or additional trainings for auditors.

Challenge #3: Enhancing the uptake of measures

In Ireland, implementation of measures is not obligated. Many companies, which are obligated to carry out energy audits do not implement the results of the energy audit and regard the energy audit as burden with no benefits for them.

Challenge #4: Guiding SMEs with limited available resources to action

The limited access to information about an energy audit or funding programmes is the biggest issue of SMEs. Even SMEs which are aware of benefits of energy efficiency with no experience or belonging to the network have problems with carrying out audits.

The NA faces the difficulty of how to engage SMEs in energy efficiency and support their participation in existing programmes.

Challenge #5: Raising awareness on opportunities and create support mechanisms

Big challenge is to increase awareness of potential benefits of energy efficiency and to create easier accessible information. SMEs seldom know where to find information or advice.

DEESME project usefulness and proposal to overcome challenges

Possible strategies to overcome challenges are the following.



<u>Strategy#1</u>: Gather and update information about companies registered in Ireland and to inform obligated companies to carry out the energy audits (SEAI); Assisting in the self declaration of companies; Promote carrying out energy audit by showing its benefits on other company's examples;

<u>Strategy#2</u>: Verification of the quality of the energy audits and monitoring the quality checks; Examination and prepare additional trainings for auditors;

<u>Strategy#3</u>: Use informational instruments to enhance the uptake of measures; Use obligations to directly/indirectly increase the uptake of measures;

<u>Strategy#4</u>: Engaging SMEs with networks to facilitate access to information; Simplify the process of the energy audit for SMEs;

<u>Strategy#5</u>: Use informative activities such as workshops, e-learning platforms and topic-specific information materials to show potential benefits of energy audits; Establish cooperation with regional institutions to facilitate access to financial instruments and to minimize a research effort for SMEs



2.6. Italy – Italian National Authority (ENEA)

ENEA is the National Agency for New Technologies, Energy and Sustainable Economic Development, a public entity aimed at research, technological innovation, and the provision of advanced services to enterprises, public administration, and citizens in the sectors of energy, the environment and sustainable economic development. Its focus sectors are energy technologies (renewable sources, energy storage, smart grids), for which the Agency is also the coordinator of the Energy National Technology Cluster, nuclear fusion and nuclear safety (the Agency is the reference national research coordinator), energy efficiency (with the National Agency for Energy Efficiency), technologies for cultural heritage, seismic protection, food safety, pollution, life sciences, strategic raw materials, climate change. obligation.

Main challenges and discussion points

The meeting was organized by FIRE to ensure that the policy proposals drafted in T5.1 of the DEESME project would achieve their purpose. With this target FIRE explored together with ENEA the main challenges and opportunities for national energy audit schemes posed by the EED recast.

The following discussion points were addressed in this meeting:

- New consumption-based parameter for audits obligation;
- Extension of the obligation to apply Energy Management Systems.
- Link between water and energy consumptions.
- Multiple-benefits analysis and lack of in-house expertise.
- Role of NAs in implementing the mechanism.
- Data centre's energy consumptions.
- Implementation of the interventions.
- Sectoral guidelines, trade associations, and quality of energy audits.
- Geopolitical scenario, raise of awareness and voluntary entities' adherence.
- Lack of human resources deputed to energy management in SMEs.
- EPC contracts as a new option to avoid the energy audit obligation.
- Usefulness of DEESME project for NAs and its criticalities.

The purpose of the present meeting was also to discuss the support provided by DEESME to the Italian national authority.

The first discussion point addressed with the national NA interviewed concerned the energy audit (EA) obligation. In this regard, the interlocutor believes that the new directive correctly releases the EA obligation from registry-based business parameters by promoting a consumption-based logic, which is



more in line with the purposes of the directive itself – to reduce overall energy consumptions. In the case in point, the new consumption-based parameter will, according to ENEA, broaden the range of obligated entities to include all those small and medium-sized enterprises that today are not subject to any obligation but whose consumption has a non-negligible impact on the total. At the same time, the revision of the parameter will leave out of the obligation scheme several large enterprises that have so far experienced the EA tool as a mere bureaucratic fulfillment devoid of real value, due to the low energy consumption (the Italian legislation provides a minimum threshold of 50 toe for the EA obligation). The new consumption-related parameter, on the other hand, makes the identification of obligated parties more complex. However, it gives the opportunity to structure a comprehensive, digital and up-to-date national database. A second point of discussion concerned energy management systems (EMS). ENEA in this sense has always looked at EA as a preliminary step for the application of an EMS and the entry of the company into a more correct and functional logic of continuous improvement of its energy performance. One critical issue, in this view, concerns the scope of application of the EMS. Cases have not been uncommon in the past of organizations certified according to major international standards that covered, however, only some sites or some production lines. The extension of the obligation to apply an EMS to certain entities is seen as a major step forward, necessary for the achievement of EU goals in terms of decarbonization and reduction of primary consumption. Such an extension could provide the right opportunity to relaunch national, regional or local calls for tenders to incentivize companies to adopt energy management systems compliant with ISO 50001 or other adequate EU or international standards.

A third point of discussion concerned the link between water and energy consumption. In several sectoral analyses conducted by the national NA, it was pointed out that these consumptions were in some cases not negligible. Moreover, the issue has a good international resonance and in the face of an increase in the price of the water carrier it is of particular importance. ENEA supports the option to add water consumption to the EA, something that many companies already do. A fourth point of discussion concerned multi-benefit analysis, an approach that the national NA considers functional and effective. Even after the interesting results achieved in the respective European project, ENEA's intention is that the tool can be spread and strengthened. One of the main critical issues encountered in this regard concerns the lack of in-house know-how in companies. There are two main options for overcoming this obstacle: professionalization of supply chains on the one hand and the adoption of alternative and more effectively calibrated international standards on the other (such as, but not limited to, ISO 50009 for SMEs and/or districts). With a view to creating supply chain or district synergies, ENEA believes that renewable energy communities can also act as a driving force. A fifth point of discussion concerned the role of NAs in implementing the mechanism. ENEA believes in this regard that NAs can play a fundamental role not only in monitoring but also in disseminating knowledge and expertise. The revision of the directive sees the role of NAs directly mentioned in the adoption of the scheme, which bodes well with respect to a growing and more effective role of NAs in the overall landscape. The hope is that the role of NAs can also grow in terms of responsibility, moving from operational arm to supervisor, providing know-how and support to national governments based on the collected EAs and supporting



companies in implementing energy efficiency measures. A number of other side discussion points were brought to the table, which are reported below:

- The inclusion of data center consumption in the obligation scope of the mechanism is considered positive by ENEA, given the rising energy demand related to ICT data management.
- According to ENEA, an important point is the implementation of the interventions, which would revive
 the mechanism from a mere bureaucratic fulfillment to a true efficiency driver; the new EED introduces
 some interesting option, but there is more than can be done by MSs to stimulate the implementation of
 energy efficiency measures, both through incentives and specific obligations.
- ENEA pointed out that as EA cycles have progressed, the average quality of audits has improved. However, the reluctance of some companies to draft documentation in the first two cycles remained intact. In 2019, there was a significant step forward in this regard, mainly related to the ENEA's drafting of sectoral guidelines. In this regard, a key role was played by the dialogue with trade associations, which made it possible to grasp and interpret the real needs of enterprises. As a result of the drafting of so-called "energy efficiency notebooks," levels of compliance and document quality have increased significantly.
- According to ENEA, the radically changing economic and geopolitical scenario and its impacts have helped a deeper awareness among businesses of the central role of energy efficiency and management. An analysis conducted by ENEA on the percentage of voluntary entities' adherence to the EA requirement saw the figure rise from about 0.4 percent in 2015 to nearly 10 percent in 2022. Among those adhering were numerous entities among local health agencies, universities and municipalities-an indication that the message has also gotten through in public administration.
- A central criticality, according to ENEA, concerns the lack of human resources (internal or external) in companies deputed to energy management. This barrier, ENEA points out, makes obligated parties mostly passive toward regulatory obligations and significantly worsens the quality of EAs.
- With regard to the signing of EPC contracts as an alternative to implementing an EA, the national
 authority made no particular comments, since it lacks presently information on how such option will be
 implemented; theoretically, there is the same risk as with EMS to ensure that the EPC will effectively
 impact the energy consumption of the enterprise, and not just one or two energy services with low overall
 impact.

A sixth point of discussion concerned the usefulness of the DEESME project for national agencies. ENEA expressed an overall favorable opinion on the point, stressing, however, the importance of coordination among the various European projects. Indeed, the risk of overlapping project areas and the lack of coordination risk preventing a rational use of the human, economic and time resources available, both for EAs and companies involved in surveys and other support actions within EU funded projects. In this perspective, a board of project scientific referees or other management coordination would avoid overlaps and facilitate synergies. The role of the project, as a whole, is seen as important both in terms of support and identification of specific case studies. ENEA directly mentioned the survey implemented in cooperation with FIRE, the webinar about directive 2023/1791 art. 11, and the DEESME guidelines as useful actions.



DEESME project usefulness and proposal to overcome challenges

ENEA expressed an overall favorable opinion on the DEESME project usefulness, stressing, however, that better ex ante coordination by CINEA among the various European projects would certainly have fostered better synergy and effectiveness of the projects. Indeed, the risk of overlapping project areas and the lack of coordination risk preventing a rational use of the human, economic and time resources available. The role of the project, as a whole, is seen as important both in terms of support and identification of specific case studies.



2.7. Poland - Ministry of Climate and Environment

The Polish Minister of Climate and Environment conducts a policy of sustainable development while preserving native natural resources and the Polish landscape. The Minister is also responsible for rational forest management and effective use of natural resources.

Main challenges and discussion points

Challenge #1: Limited transposition resources

The Managing Authority (Energy Regulatory Office) has limited resources to implement, enforce, monitor and verify the obligation (both in terms of staff and financial resources). A similar situation also applies to the Ministry of Climate and Environment.

Challenge #2: Identifying and ensuring compliance of obligated companies in Poland

To date, no complete list of all obligated companies has been created, despite the obligation to carry out an energy audit among companies other than SMEs. In the first period of the obligation, the self-declaration of obligated companies was used. This was the basis for creating a list of companies obliged for the following years. This list was not published, but the report on the implementation of the obligation included the total number of companies that carried out audits. This is not enough.

Challenge #3: Quality of audits

The quality of energy audits is considered unsatisfactory in some cases, but it is also not verified to a large extent. Only in some audits where a significant error/irregularity (difference of order of magnitude) was noticed in the reporting, the company was contacted to confirm the correct amounts.

Challenge #4: Increasing the implementation of measures

Low awareness of the benefits of auditing affects the level of implementation. The implementation of the actions recommended during the audit in Poland is not directly monitored. It is tracked through participation in support programs such as the White Certificate system. Comparing the total potential energy savings with the results of the support schemes, however, there is still significant potential to be exploited.

Challenge #5: Creating support mechanisms

There is no national mechanism, so local organisations offering support or advice inform SMEs in each region separately. Many programmes aimed at a wider audience (rather than specifically SMEs) have additional financial criteria that are difficult for SMEs to meet (loan guarantees, minimum investment value, etc.). For this reason, many support schemes are unsatisfactory in their performance among SMEs.

Challenge #6: Raising awareness of opportunities

Along with low awareness, SMEs usually have very limited resources to benefit from existing support schemes that are not well targeted at SMEs. In addition, a lack of trust in auditors and energy service



providers is a common phenomenon. Audit recommendations are often seen as uneconomical for SMEs. Raising awareness is even more challenging, as SMEs often do not actively participate in regional or sectoral associations.

DEESME project usefulness and proposal to overcome challenges

To overcome the challenges, various activities are carried out/planned. Challenges #3, #5 and #6 are being addressed at the national level. On the other hand, overcoming challenges #2 and #4 are directly related to the relevant provisions in the EED that will enable them to be overcome. Possible strategies to overcome challenges are the following.

Strategy #1: Automation of repetitive processes;

Strategy #2: Helping companies to self-declare;

Considering a change towards a system database-oriented; Reducing the burden on other businesses than SMEs with particularly low energy consumption.

The above strategies were indicated as proposed at the beginning of the project, but now solving the problem is still a challenge. Despite the definition of companies obliged to carry out an audit, it is still difficult to create a full list of such companies, due to the still large lack of willingness to carry out audits and the perception of them by companies as an obstacle. Currently, verification of companies that are obliged to perform an audit is possible only by identifying companies that have high energy consumption and do not have a complex energy audit. After initial identification, it is checked whether the company meets the definition of a large company. Some companies are not even aware that they are obliged to carry out an energy audit.

Strategy#3: Defining and monitoring requirements for energy auditors;

Providing support materials for conducting audits and creating reports from audits; Checking that quality standards are met; Highlighting the added value of audits.

The provision from the Energy Efficiency Act specifying who can carry out an energy efficiency audit is helpful. According to the Act, it is a person who has relevant experience or has the appropriate education.

Strategy#4: Use of mandatory recommendations to directly increase the input of results audits;

Using mandatory recommendations to indirectly increase the input of results audits;

Strategy#5: Use of information instruments for creating awareness of effectiveness energy; Designing the right support financial system;

The Ministry of Climate and Environment has prepared:

• a list of programmes and financial instruments relating to energy efficiency improvement projects for the end user.



- financial instruments to finance energy efficiency improvement measures.
- Central Register of Final Energy Savings (Institute of Environmental Protection)

Strategy#6: Providing individual insight for SMEs;

Creating and disseminating success stories for SMEs; Implementing a Peer Network; Force the integration of non-energy benefits;

Currently, there are tools in place to make it easier for SMEs to access free information; courses for auditors and employees of SMEs, often organized by employers; various information campaigns and knowledge bases.

2.8. Slovenia – Energy Agency

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.

Main challenges and discussion points

One interview and further discussion via e-mail has been implemented in Slovenia.

Main challenges regarding the legal framework of energy audit scheme are:

- Ensuring that all obligated companies carry out an audit and that audits are of high quality.
- SMEs are often not aware of the benefits that energy efficiency can have for them.



DEESME project usefulness and proposal to overcome challenges

The recommendations from DEESME project to overcome the main challenges highlighted above are the following:

- Lack of a list of obliged companies. This challenge could be overcome by identify ingcompanies based on existing registers; Identify companies based on data collection; Assist the self-declaration of companies; Ensure target group is aware of obligation; Underline the added value of audits.
- Quality of audits: in order to enhance the quality of audits, requirements to education and experience
 could be defined. Ensure auditors meet requirements; Ensure that auditors freshen up their knowledge;
 Define requirements for conducting audits and creating audits reports; Ensuring education and expertise
 of auditors; Define frequency and depth of quality checks; Monitor results and impose sanctions.
- Guiding SMEs to participation: use informational instruments to create awareness on energy efficiency;
 Use informational instruments to provide decision making support; Use informational instruments to
 increase implementation rate; Design an adequate financial support system; Implement, disseminate and
 evaluate the financial support system; Provide a clear overview of available support schemes; Facilitate the
 application process.
- Raising awareness on opportunities and create support mechanisms.: Collect stories of successful energy efficiency measures; Disseminate success stories and underline their added value.



2.9. Spain – Ministry for the Ecological Transition and the Demographic Challenge (MITECO)

The Ministry for the Ecological Transition and the Demographic Challenge (MITECO) is the department of the Government of Spain responsible for developing the government policy to fight against climate change, prevention of pollution, protecting the natural heritage, biodiversity, forests, sea, water and energy for a more ecological and productive social model. Likewise, it is responsible for the elaboration and development of the government policy against the country's demographic challenges (population ageing, territorial depopulation, floating population effects, etc.).

Main challenges and discussion points

Main challenges regarding the legal framework of energy audit scheme are:

- Lack of a list of obliged companies: the list of obliged companies made by the central government is not
 public and not complete. There exists only a list of companies that have declared to have done an energy
 audit
- Limited number of people dedicated to inspections: responsibility for the inspection of energy audits falls on the Autonomous Communities. Monitoring of compliance is carried out on a random selection of a statistically significant proportion of energy audits.
- Quality of audits: energy audits need to be proportionate and sufficiently representative to permit the
 drawing of a reliable picture of overall energy performance and the reliable identification of the most
 significant opportunities for improvement. Information gathered through energy audits in Spain is not
 sufficient. In Spain audits are carried out by independent auditors/experts, in house consultants or
 ESCOs. A registration as energy service provider is required in order to conduct an energy audit compliant
 with the national regulation; no specific certification is required.
- Enhancing the uptake of measures: 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. One point to improvement could be oblige companies to implement some of the interventions found during the audit; this could not be done "voluntarily", since there's not a political interest in doing so; but this could be done if the directive will change in that way, so this point could be stressed at European level.
- Guiding SMEs to participation. Many SMEs don't implement energy audits mainly because of limited financial capacity, limited know-how, limited persons dedicated. They also perceive energy consumption as not relevant.
- Raising awareness on opportunities and create support mechanisms. Especially small SMEs are often not aware of the benefits that energy efficiency can have for them
- The country regulation is based on the central government (which role is mainly of coordination) and the Autonomous Communities (to which the responsibility of implementing art. 8 is delegated); this system causes a frequent and not always efficient interaction between communities and the central government.



Other challenges deal with enforcement of obligation. About this point, MITECO has difficulties with small delegations of multinational companies.

DEESME project usefulness and proposal to overcome challenges

The recommendations from DEESME project to overcome the main challenges highlighted above are the following:

- Lack of a list of obliged companies. This challenge could be overcome by identify ingcompanies based on existing registers; Identify companies based on data collection; Assist the self-declaration of companies; Ensure target group is aware of obligation; Underline the added value of audits.
- Quality of audits: in order to enhance the quality of audits, requirements to education and experience
 could be defined. Ensure auditors meet requirements; Ensure that auditors freshen up their knowledge;
 Define requirements for conducting audits and creating audits reports; Ensuring education and expertise
 of auditors; Define frequency and depth of quality checks; Monitor results and impose sanctions.
- Enhancing the uptake of measures: informational instruments should be created to raise awareness; Use informational instruments to increase implementation rate; Design an adequate financial support system.
- Guiding SMEs to participation: use informational instruments to create awareness on energy efficiency;
 Use informational instruments to provide decision making support; Use informational instruments to
 increase implementation rate; Design an adequate financial support system; Implement, disseminate and
 evaluate the financial support system; Provide a clear overview of available support schemes; Facilitate the
 application process.
- Raising awareness on opportunities and create support mechanisms.: Collect stories of successful energy
 efficiency measures; Disseminate success stories and underline their added value.

The Spanish NA MITECO was interested in the DEESME project and agreed that the recommendations elaborated by the project gave useful insights for the uptake of energy audit and energy efficiency measures. MITECO participated to the NA workshop but was not available to discuss further the main outcomes of the workshop and the new challenges and opportunities due to the recast EED. The DEESME policy recommendations following the recast EED were shared with MITECO.

3. Communication with the European Commission

Since the end of 2022, Fraunhofer ISI has been involved in the project "Technical assistance for the support in the negotiations and the development of the guidelines for the implementation of the EED



recast, in particular Articles 2, 3, 4, 11, 20, 21, 22, 24, 27 and the related annexes". For Art. 11 on energy management systems and energy audits, Fraunhofer ISI and e7 are supporting DG ENER in:

- the elaboration of the Guidance Notes, which will help EU countries fully transpose the different elements of the EED recast into national law.
- the Contractors Report: report by the consortium providing additional information and good practices.

For the elaboration of both documents, which are almost finalised but not yet published,⁵ the extensive knowledge gathered within the DEESME project has been very useful. In particular, all the information gathered from the MS on the challenges and example of good practice for the implementation of Art. 8 of the previous EED was very relevant. In this regard, D2.4 "Generic guideline on best-practice" was very valuable and was mentioned, where appropriate, in both of the above-mentioned documents under preparation.

Similarly, the results of the DEESME project were useful and regularly used during the meetings with the European Commission's policy officers.

In conclusion, it was very fortunate to have the DEESME project already well advanced at a time when the final work on the recast of the EED was being prepared.

Thanks to this situation, it can be considered that the DEESME project has had an indirect impact at EU level for the implementation of Article 11 of the EED. 11.

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³ Specific Tender under Framework Contract ENER/2020/OP/0021

⁴ Recast of Art. 8 of the former EED

⁵ expected early 2024

⁶ Guidance for national authorities on overcoming challenges in the implementation of Article 8 EED, see: https://www.deesme.eu/wp-content/uploads/2021/07/D2.4 Generic-guideline-on-best-practise-public-version.pdf



4. Communication with the non-EU countries

4.1. UK – Department for Energy Security & Net Zero (DESNZ), former Department for Business, Energy and Industrial Strategy (BEIS)

DESNZ is a department of His Majesty's Government established on 7 February 2023. The new department took on the energy policy responsibilities of the former BEIS. DESNZ in responsible to maintain energy supplies, to reduce energy bills and lower inflation and to ensure the UK is on track to meet its legally binding carbon budgets and Net Zero commitments. Moreover, DESNZ is in charge of the delivery of network infrastructure and green and improving the energy efficiency of UK homes, businesses, and public sector buildings.

Main challenges and discussion points

First meeting was held on May 22nd 2023. UK Department for Business, Energy and Industrial Strategy (BEIS) requested for some insights about mandatory energy audit scheme. FIRE and IEECP gave some insights on Italian scheme and on the findings of DEESME project. A further exchange via mail was in place after meeting, giving further hints on energy audit mechanism.

The most important challenges targeted were:

- the eligibility thresholds, so the mandatory energy audit scheme in Italy very much differs from the UK approach to threshold, which is done on a full time equivalent or size of company, size of employees basis and so the use of the energy consumption thresholds within the Italian scheme is of real interest, as this is aligned with the new EED target,
- linking EEOS with the obligation to implement energy audits and the follow-up projects,
- incentives and programmes
- data collection and monitoring

A second meeting was held by FIRE on December 15th, 2023. During this meeting, the NA confirmed that it has started working on the barriers that SMEs encounter in carrying out energy audits and energy efficiency measures. These barriers deal with access to knowledge and to financing resources. DESNZ agrees that SMEs need an extra level of support, so they are working on the idea of an in-person or even virtual or telephone and energy assessment and on financial incentives dedicated to SMEs. The NA is also financing some energy efficiency measures on a small scale in UK. DESNZ is engaged in pilot projects on a regional scale with the aim of collecting useful information to understand the potential for reducing energy demand in SMEs. One of these projects was carried out in the West Midlands region and allowed 4000 energy assessments to be carried out and energy efficiency measures to be subsidised.



The aim of these projects is also the segmentation of companies by sector in the use of energy to understand which sectors to prioritize and involve more in energy efficiency and decarbonization programs. DESNZ believes there is a lot of work to be done on the supply chain to provide services to SMEs and to facilitate them in their energy efficiency process. With these pilot projects, DESNZ intends to develop a tailored approach with two levels of detail, a standard one and a more complex one for energy intensive companies. The development of a methodology for telephone or virtual assessment intends to meet the needs of SMEs and micro-enterprises.

DEESME project usefulness and proposal to overcome challenges

Baringa Partners LLP and the Department of Energy Security & Net Zero shared with DEESME IEECP their International Industrial Energy Efficiency Policy Case Studies report, including the overview of EU /Italy from DEESME, to which additional comments and inputs were provided.

4.2. Energy Community countries – EC Secretariat

Energy Community countries were represented in the joint workshop with the Energy Community Secretariat Senior expert.

4.1. USA - NREL

DEESME partners had a meeting with the research group on hybrid energy systems in the United States' National Renewable Energy Laboratory, which has been awarded a project that will build a tool to help quantify non energy benefits for industrial energy efficiency decisions. Insights were shared and further communication occurred.



Conclusion

Through meetings organized with the National Authorities it was possible to learn about the main challenges that NAs must face in relation to mandatory audits schemes, also in consideration of the recent EED recast. Given that the transposition of the EED recast at a national level has not yet occurred, the NAs agree that the main challenge to overcome will be the identification of the entities obliged to carry out the energy audit. EED 2023/1791 requires that obliged companies be identified exclusively through energy consumption thresholds, therefore the availability and management of energy consumption data will be critical to implement high-performance national schemes. Other significant topics that emerged during the meetings concern the quality of the audits and the involvement of SMEs.

The NAs are ready to make themselves available to their national stakeholders to create flexible schemes capable of meeting the needs of companies (especially SMEs) and at the same time guarantee high quality audits. The NAs expressed satisfaction with the support received from the DEESME project which allowed them to share experiences with NAs from other countries and to learn about the national schemes of other countries.