



**CONCERTED ACTION  
ENERGY EFFICIENCY  
DIRECTIVE**

**4<sup>th</sup> Plenary Meeting CA EED  
Proceedings**

**May 2024**

# Contents

<b>1</b>	<b><u>Opening Plenary Session</u></b> .....	<b>3</b>
	1.1 <u>Presentations by Keynote, CINEA and Coordinator</u> .....	3
<b>2</b>	<b><u>Working Group Parallel Sessions</u></b> .....	<b>4</b>
	2.1 <u>Working Group 4.1</u> .....	4
	2.2 <u>Working Group 4.2</u> .....	5
	2.3 <u>Working Group 4.3</u> .....	7
	2.4 <u>Working Group 4.4</u> .....	10
<b>3</b>	<b><u>Information Sessions</u></b> .....	<b>12</b>
	3.1 <u>Info session 4.5</u> .....	12
	3.2 <u>Info session 4.6</u> .....	13
	3.3 <u>Info session 4.7</u> .....	14
	3.4 <u>Info session 4.8</u> .....	15
<b>4</b>	<b><u>Closing Plenary Session</u></b> .....	<b>16</b>
	4.1 <u>Conclusions from Working Group Sessions and CA EED Coordinator</u> .....	16
<b>5</b>	<b><u>Presentations and Good Practice Factsheets</u></b> .....	<b>17</b>

# 1 Opening Plenary Session

In the course of the fourth Plenary Meeting of the CA EED over 140 experts, policy makers and implementers gathered together in Budapest to discuss issues related to the implementation of the EED in Member States. The Plenary Meeting was designed to give Member States and Norway the opportunity to exchange experiences and learn from each other.

## 1.1 Presentations by DG ENER, CINEA and Coordinator

Opening speech from Daniella Deli, Deputy State Secretary responsible for climate policy

Keynote speech from the International Energy Agency

News from CINEA, 4<sup>th</sup> Plenary Meeting

Coordinator opening presentation 4<sup>th</sup> PM

## 2 Working Group Parallel Sessions

The Working Group Parallel Sessions of the 4<sup>th</sup> Plenary Meeting covered the following topics: Article 4 & 8 – planning the implementation (WG4.1), Definition of public sector (WG4.2), Data centres – data bases (WG4.3), and Energy management systems and energy audits (WG4.4).

### 2.1 Working Group 4.1 – Article 4 and 8 – planning the implementation

In the EED recast Article 4 PEC and FEC contributions by Member States were significantly tightened to achieve the new EU-level PEC and FEC targets. Correspondingly Article 8 energy savings obligation for the 2021-2030 period rose remarkably. How to achieve these new requirements is of high interest in MS, and solutions should be reflected in the MS final updated national energy and climate plan (NECPs) in June 2024 where MS are expected to include measures to reach their Article 4 and Article 8 targets.

WG4.1 aimed to get information from the Commission on the progress, status and next steps related to Article 4 provisions and process and on the upcoming EED recast Article 8 guidance document, especially related to the new requirements in Articles 8-10 and Annex V. In addition, aim was to share experiences and prioritise Domain 1 topics for the upcoming CA EED 3 PMs.

The working group was structured into two sessions, one focusing on Article 8 and one on Article 4. In the first session, **DG ENER**, concentrated in their presentation especially some Article 8/Annex V parts that MS had reported to be unclear or challenging in the questionnaire circulated in January before the Plenary, at the same time avoiding repetition of the information shared in the previous Plenary Meeting October 2023. More in depth information was given from the EG ENER perspective on Article 8 interactions with EU ETS (Annex V(2)(f)) and fossil fuel exclusion (Annex V(2)(h) and (i)). This was also the case for Article 8 interactions with EU ETS (Annex V(2)(f)) and fossil fuel exclusion (Annex V(2)(h) and (i)). The Guidance document related to Art. 8 is planned to be published next after the Art. 4 Guidance document which should be published during the spring.

In addition, related to EED recast Article 8(11) and alignment with the Governance Regulation the Commission encouraged MS to include the revised amount of cumulative end-use energy savings in accordance with EED recast Article 8(1) in their updated NECPs by 30 June 2024, which several Member States already provided in their draft updated NECPs in 2023. Correspondingly Member States are encouraged to include descriptions of their policy measures and their calculation methodologies according to EED recast Annex V in their updated NECPs. Member States were also informed that a new template (Excel) to report EED recast Article 8(11) requirements is under preparation and is planned to be available, with a voluntary status, during autumn 2024 for national energy and climate progress report (NECPR) 2025 reporting by March 2025. Starting from 2027 NECPRs, the temple will have an obligatory status.

Some presented Commission interpretations, meant to be included in the upcoming Guidance document, related to eligibility of savings regarding EU ETS free allocation and fossil fuel combustion exclusions raised a lot questions and discussion in the session. One was especially the issue related to EU ETS and the eligible savings period for Art. 8 energy savings measures where the lifetime is over three years. Another much debated issue involved Annex V fossil fuel combustion exclusion provisions and the fact that after the transition period from 2024 to 2025, i.e. from 2026 onwards no previously launched policies, especially related to the residential sector, will be allowed to count any further savings if they have any component that is related to direct fossil fuel combustion. This would mean that in practice, for example, an existing subsidy scheme including any component related to fossil fuel combustion would have to be split into two different subsidy schemes from 2026. This interpretation and the practical consequences were met with surprise, and how this interpretation aligns with the aim to achieve reduction in energy consumption was considered debateable by participants.

The second session focused on Article 4. **DG ENER**, started the session with their [presentation](#), covering the past and coming timeline related to MS Article 4, the PEC and FEC target-setting by Member States, as well as application of the 'ambition gap mechanism' by the Commission. The presentation did not include in depth information on the 'ambition gap mechanism', as this was presented at the Bonus session arranged by the Commission later the same day. According to the current timeline the Commission will publish the Guidelines for Art. 4 in April. According to the presentation information after June 2024, when all NEPC updates are delivered, the Commission will assess whether an 'ambition gap' remains for the collective achievement of the Union's 2030 energy efficiency target. If this is the case the Commission could exercise its powers at the Union level and propose measures to fill the gap. This point raised questions from MS, however more information were not available as any such reaction will have to be designed

after the assessment of the NECPs has finished. In addition, the Commission explained that it will assess the NECPRs, starting with the ones in 2025, and, if applicable, ask MS to take actions for FEC according to Article 4(6) and the “gap-filling mechanism”.

In addition to the Commission presentations, in the 1<sup>st</sup> session **Ministry of Industry and Trade, Czech Republic** [presented](#) energy efficiency policy framework for Art. 8 implementation in CZ, which relies strongly on financial and regulatory measures where the regulatory measures have a new emphasis compared to the previous obligation period. Financial measures, total more than 8,5 billion EUR, are targeted at all sectors and are mostly grants. There are also specific measures for vulnerable and low income houses. In addition, there are supporting measures like energy advice, awareness campaigns, technical assistance and One Stop Shops etc.

Another MS presentation was made by the **Ministry of Environment, Climate and Energy, Republic of Slovenia**. The [presentation](#) covered the energy policy framework for Art. 4 and Art. 8 implementation in Slovenia. According to the presentation Art. 4 PEC and FEC contributions are considered to be very ambitious in Slovenia, but achievable, if the politicians support them and the planned measures are implemented. Especially, because transport has a very large influence on the final energy consumption in SI, 40% of total final energy consumption in Slovenia, implementation of measures targeted at that sector are crucial to reach the goals. One challenge is that there is a risk that excessive regulatory pressure for industry may have a negative impact on its competitiveness.

In addition to the lively Q/A part in the 1<sup>st</sup> session related to Art. 8, in the 2<sup>nd</sup> session the discussion part participants had a possibility to share views on the possible biggest challenges and issues in their country for reaching Art. 4 PEC and/or FEC contributions and implementing the Art. 4 requirements and in addition possible solutions seen for these challenges. Summaries from table discussions related to Art. 4 requirements highlighted mainly different kinds of challenges e.g. related to political stability, economic, social, sectoral, green hydrogen, aviation, industry's competitiveness and survival in the EU e.g. against China. In addition, was noted that CO<sub>2</sub> and EE strategies should be better aligned in future.

Domain 1 topics for future PMs were also ranked. Clearly three first ranked were:

- ‘Energy poverty & vulnerable customers related to Art. 8 implementation and reporting’;
- ‘New or updated policies and measures in MS fulfilling PEC/FEC contributions’;
- ‘New or updated notified policies and measures (other than related to taxation) in MS fulfilling Art. 8 target’.

Those were quite evenly followed by ‘Art. 8 implementation and eligible savings related to ETS and ETS II’ and ‘Policies and measures related to fossil fuels delivering Art. 8 eligible savings’. The last ones quite evenly were ‘Measurement, control and verification systems related to Art. 8-10 implementation’ and ‘Data gathering and sources in MS for different type of policies and measures related to Art. 8-10 M&V&C system(s)’. The topic ‘Taxation related policy measures in Art. 8 implementation’ was less popular receiving only a few votes from the 37 respondents.

WG4.1 two sessions were well attended; in both sessions, there were around 50 participants representing ministries, energy agencies, energy authorities, and a Commission, CINEA and IEA representative.

The WG4.1 members were Oscar Kvanner Grinsted (DK) and Ulla Suomi (FI).

Links to all public WG4.1 presentations in the parallel sessions can be found in [Chapter 5](#).

## 2.2 Working Group 4.2 – Definition of public sector (link with EPBD and RES)

There were two sessions at the Budapest plenary.

In the first session, Alan Ryan of SEAI, IE [introduced](#) the session and gave an overview of the various public sector targets across the EED, EPBD and RED. Kirsten Van Muijden, RVO, NL presented the findings from the WG questionnaire.

The commission gave an excellent presentation focusing on the areas MS had identified as problematic in the WG report (two slides below). They presented examples related to the concepts of ‘directly financed and administered’, and ‘not having industrial or commercial character’. The commission stated the guidance for articles 5 and 6 was being translated and hoped to be issued in June. It was agreed to host a CA EED ‘clinic with Rados approximately 2 weeks after the guidance was issued. This was followed by an extensive Q&A session with Rados. Some core points:

- Definition of authority is broader than that used in public procurement
- 'Directly financed' – greater than 50% public funds coming from authorities. Rados warned against the risks of one year being over 50% and one year under and the effects on baselines planning etc. Best to err on the side of caution and include
- 'Directly administered' – authority has powers or ability to appoint majority of management or 'step in' to manage if its unhappy. In the Q&A and resultant workshops there was a lot of specific question and circumstances i.e. what about holding companies etc.
- In slide 2 Rados took us through some ECJ rulings which help explain what is commercial and what is a public service. If the organisation operates in normal market conditions, aims to make profit and BEAR any losses, it is likely to be commercial. But if losses are not borne by the entity, they are likely to be public. If you for example tendered for water treatment facility but there is only 1 entity that could bid, this is not normal market conditions. Also if the organisation had to be 'rescued' then its public
- The basic principle to be applied was – if there was a problem with funding or management, would government step in to maintain and provide the service. If so then if wasn't commercial in nature
- Other examples included a building owned by a public body, but the services run by a commercial operator i.e. a local health service run by a private operator and the building is owned by the national health authority. Then the building is in scope of the Art 6 3% target but outside scope of the Art 5 1.9% target
- Some areas are very particular and need specific consideration per MS i.e. embassies, churches, PPPs, sports facilities (run by commercial entities), district heating companies etc
- Rados suggests that each potential public body be considered in its own merits against the criteria
- The first hurdle to assess is the organisation a national, regional or local authority. If this is the case they are in scope regardless of the other criteria. Some organisations maybe established under statute as national organisations, even though they don't meet all off the remaining criteria, they meet this first condition so are public bodies. For organisations who do not meet this first specific criteria then they must pass all of the other 3 main remaining criteria to be considered a public body. If an organisation is out for any one of those criteria, then it's out., if any organisations drop out on one of the criteria, then there is no need to assess it against the other criteria i.e. in one MS the universities were out on the basis the authorities had no powers of administration, so there was no need to ponder how much funding they received from authorities
- Article 6 allows exclusion of public transport from baseline. If you include you need to clearly define public transport following the same approach above. However, even if transport is excluded, any savings can be accounted for in the 1.9% savings target

This was then followed by a [presentation](#) from the Netherlands, RVO. They detailed their approach of listing potential organisations as green (in), red (out) or grey (TBC). The organisations they feel are in or out are detailed in her ppt. For example:

IN	OUT	GREY AREAS
National/regional/local government Teaching hospitals Education Museums	Housing companies (social housing) (only a bit of funding for EE if they went bust, govt wouldn't step in) Commercial character Harbour companies (although state owned) Schiphol airport National railway	Healthcare - funded by health insurance Cultural sector Regional ?transport (funded not administered)

This was followed by a table discussion on 'grey areas'. Most MS are clear on what's definitely in, and some organisations they know are definitely out. But what areas are 'grey'. 'Grey' areas are different for each MS depending on funding, how managed etc. Participants found it very useful to collectively apply the logic of the criteria to their 'grey' areas. They felt a little more confident in how they were assessing these problematic areas.

The **second session** had to presentations from FI and IE.

A consultant from Byrne O'Cleirigh working with SEAI presented on work to date on a formal study into the scope of ALL the directive public sector related targets, including national targets. Ireland has a monitoring system for public bodies for 13+ years. He showed the impact on baselines and projections for various interpretations of what public

bodies are in or out. Currently over 350 public bodies report based on 2014 legislation requiring them to do so with a 99% compliance rate.

Energiavirasto, FI [spoke](#) on their process and research to date on determining the scope. The presenter is a lawyer by profession and was able to articulate a legal assessment. They have undertaken a lot of consideration of criteria against potential organisations and even though there were still grey areas they were largely confident in their determination. They had reached out to other MS and the commission to help with this work and it helped assure them of their determinations.

This was following by another discussion on implications for MS in implementing the scope – identifying PBs, tracking them, legislating etc. There was a lot of discussion around governance of the target – would this be up to the PB entity to comply or who. It was felt the obligation lies on the MS at government level ultimately as that would be who would be infringed if the articles were not implemented. But MS would likely have to establish governance structures or legislate so as to make the PBs in their MS accountable for delivering the targets. And would there be allowance made for one PB whose energy MUST rise (i.e. future flood protection services) and other PBs given harder targets to compensate. Most MS expressed that their PBs have a very low awareness of the EED targets.

This was a very interactive and useful two sessions. Conversations on future work and topics continued for another hour in the room after the session ended. Snapshot below shown of the possible future work areas. The primary area is how these huge targets can be delivered – the finance, the resources, the leadership, the impetus that will be needed to deliver 000s of millions of projects by 2030. For example, one relatively **small** MS stated they have about 25million m2 of public buildings, meaning approx. 750,000m2 needs to be retrofitted each year (3!). This is HUGE!

### 2.3 Working Group 4.3 – Data centres – data bases

Two sessions were dedicated to Article 12 of the EED recast and focused on guidance by the European Commission (EC) and practical examples of two MS on data bases.

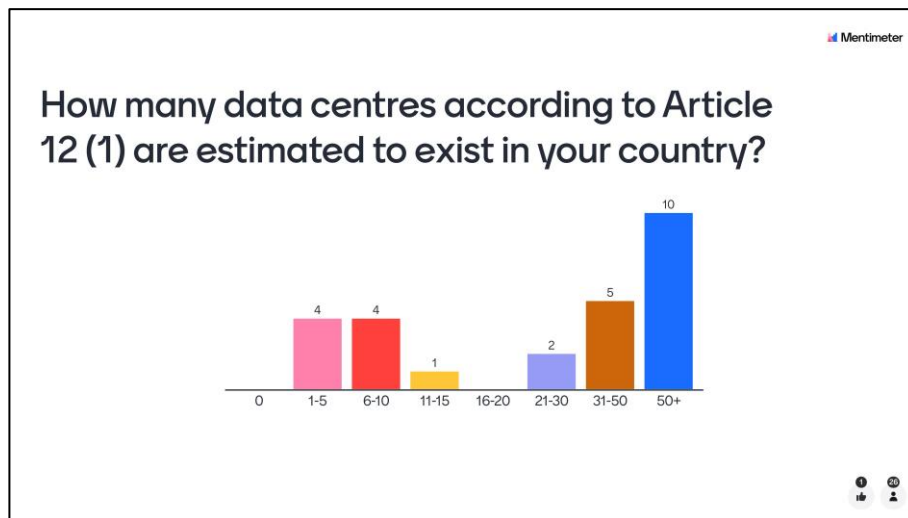
The first session started with a [presentation](#) by the EC on the Energy Efficiency Directive & the reporting scheme for data centres. The EC emphasised that owners and operators of data centres on EU territory with an installed IT power demand of at least 500 kW shall make publicly available certain information such as name, entry into operation, floor area, installed power and performance indicators during the last full calendar year by 15.05.2024 as described in Article 12 (1) in the EED recast. The corresponding delegated act was adopted by the EC on 14.03.2024 and is followed by a 2-months scrutiny period before its publication in the Official Journal. This legal document highlights that operators of data centres on EU territory with an installed IT power demand of at least 500kW shall communicate to the European database the information set out in Annex I and the key performance indicators in Annex II of the delegated act. The EC will calculate the data centre sustainability indicators of Annex III and publishes only the information from Annex IV. The corresponding European database is currently being developed for the first reporting in September 2024. MS will have the opportunity to test it in advance. In addition, the EC emphasised that the exceptions in Article 12 (2) of the EED recast apply to data centres when they are exclusively used for defence or civil protection. The adopted delegated act also mentions a number of phase-in clauses to facilitate data centres adaptation, streamlined some definitions and provided clear rules on who accesses what data and what is visible to the public. A report according to Article 12(5) will be prepared by the EC by 15 May 2025 and might suggest, if necessary, legal proposals regarding the rating/labelling scheme, minimum performance standards and changes to the reporting scheme.

A survey via Mentimeter provided a useful insight into the implementation status of the MS. The fulfilment of Article 12 (1) was at 37% on average among the 30 participants and the peak was around 80%.









In the discussion, the EC emphasised that it had revised the delegated act following the comments and discussions with the MS. The EC also highlighted that information on at least 3 data centres per MS must be available so that these can also be published in the EU database. The participants also expressed the desire for timely information (e.g. via a webinar) on the EU database. Another discussion point was whether data that is considered sensitive according to national or EU law should be entered into the EU database. Some MS thought this was not the case whereas the EC thought it was. The EC once again highlighted that no sensitive data will be published on this database.

The second session was dedicated to country cases and representatives from France and Germany informed the audience about their implementation status.

The representative of the French Ministry of Ecological Transition highlighted that data centres are currently in force in some French legislation. The tertiary eco energy decree includes an annual declaration obligation and the environmental data collection of the telecommunication authority includes information on energy and water consumption. There is also a decarbonisation roadmap for data centres and another law aims at reducing the environmental footprint of digital technology in France. For the upcoming implementation of Article 12 (1) of the EED recast, the French representative presented parts of the draft proposal.

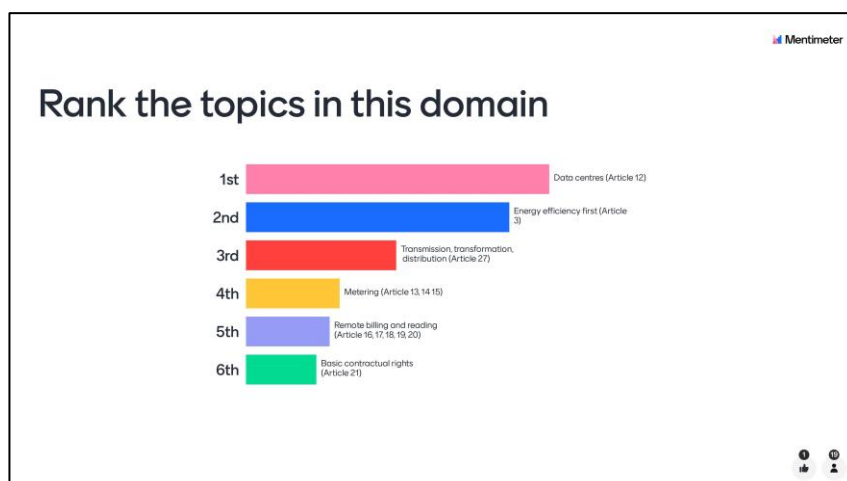
The German representative of the Federal Office for Economic Affairs and Export Control [presented](#) data centres in the German Energy Efficiency Act, which has been already in place since November 2023. It includes binding targets for primary and final energy reduction in alignment with the EED recast. According to the industry sources referenced in this presentation, Germany has the second highest number of data centres worldwide including more than 3.000 data centres with more than 40 kW of installed IT power demand and 90 with more than 5 MW. This corresponds to a yearly total energy consumption of 18 TWh. There is a mandatory use of waste heat for new data centres operated from July 2026 and certain PUE requirements for all data centres. Germany foresees a national register for data centres and this will be operational in April 2024.

In the subsequent discussion, questions from the audience were answered by the French and German representatives. In this respect, the German offer to share the software of their national register of data centres should be emphasised and was welcomed by other MS.

#### Future topics

Finally, a survey via Mentimeter was conducted amongst the participants in order to prioritise future topics and identify the most important issues.

As expected, data centres were currently the highest priority for MS in this domain, followed by energy efficiency first principle and transmission, transformation and distribution. The lowest priority was assigned to metering, billing and contractual rights. Based on this feedback and the discussions with MS, this domain will be dedicated to Article 3 (Energy Efficiency First principle) at the next plenary meeting.



## 2.4 Working Group 4.4 – Energy management systems and energy audits

The overall objective of the WG4.4 has been to review the MS's current implementation state of Article 11 of the EED recast across MSs and plans for its implementation in the future. The work has aimed to comprehensively evaluate the implementation, compliance, challenges, and effectiveness of energy management systems, audits, and related measures stipulated by Article 11.

### Session 1

Tadeusz Skoczowski highlighted the Working Group 4.4 report "Setting up a Framework for Energy Management Systems and Energy Audits for Enterprises". He overviewed the purpose and scope of the report. Further challenges faced by MSs in implementing energy management systems and energy audits for enterprises were identified during the discussion. The session followed with an interactive discussion focused on the challenges identified in the report, with particular emphasis on their impact and potential solutions. Participants shared their experiences and perspectives, enriching the discourse.

DG ENER, [systematically reviewed](#) Article 11 of the EED recast. They focused on new elements in the article and discussed aspects that may be unclear and require clarification or interpretation.

DEESME 2050, [discussed the Life Program](#) "Developing Energy Efficiency Projects in SMEs for European 2050 targets". The program aims to demonstrate and prepare tools for multiplying the benefits (MB) of SMSs. They presented DEESME methodology of MB approach for EMS energy audits and results.

Then, the participants took part in the Mentimeter survey.

Mentimeter question	Dominating answer
What is the most significant challenge in implementing Article 11 requirements for energy management systems and audits?	Limited availability of accurate data Lack of clear guidance on regulatory requirements
Which aspect of energy management certification poses the most significant challenge in ensuring compliance with Article 11?	Lack of incentives for enterprises to pursue certification Complexity of certification processes
What barriers hinder the effective implementation of transparent and non-discriminatory criteria for energy audits?	Inadequate training and capacity-building for auditors Insufficient oversight and monitoring mechanisms Resistance from auditors or audit stakeholders Lack of resources for audit quality assurance
How can Member States address the challenges of promoting high-quality, cost-effective energy audits described in Article 11?	Streamlining administrative processes for audit scheduling and reporting Providing financial incentives for audit compliance Enhancing auditor training and certification programs Strengthening enforcement mechanisms for audit requirements

<p>What strategies most effectively incentivise larger enterprises to comply with energy management requirements and undergo audits?</p>	<p>Implementing mandatory reporting requirements for large energy consumers</p> <p>Collaborating with industry associations to promote energy management best practices</p> <p>Offering tax incentives or rebates for energy efficiency</p>
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## Session 2

There were two presentations of Life Programs:

1. RSE, [reviewed "A new strategy to support companies in the uptake of audits measures: the AUDIT2MEASURE project"](#). The project's main aim is to support companies in the uptake of audit measures necessary to reduce energy consumption and support their energy transition. The project has developed a new engagement strategy (called "Audit2Action") to implement the opportunities emerging from energy audits. It helps translate standards into in-field activities.

2. LEAP11, [briefed on the project "LEAPto11: supporting Member States towards an effective implementation of new article 11"](#). The project paves the stones for the successful implementation of Article 11. The program has two objectives: 1) Improve the effectiveness of National Programs under EED Article 8 and a new Article 11 for better data management and KPI production 2) Supporting agencies, policymakers and business actors (business associations, networks), and auditors during the Article 11 transposition with data-driven and knowledge-based high-level policy advice.

Following this, a brainstorming session was held to generate ideas for addressing the challenges addressed in the presentations, aiming to evoke creative thinking and encourage stakeholder collaboration. Lastly, in table discussions, perspectives and recommendations were shared for overcoming barriers to energy management and audits, providing valuable input for future initiatives.

## Conclusions

Conclusions from the two sessions	The table discussion enabled us to find a few challenges to the plausible implementation of Art. 11:
<ul style="list-style-type: none"> <li>▪ <b>Mechanisms for data collection are crucial</b> for overcoming technical challenges and resource limitations and improving data availability.</li> <li>▪ <b>Enhanced financial support and addressing technical challenges</b> are essential for effective national-level data collection initiatives.</li> <li>▪ <b>Strengthening certification systems, supporting implementation efforts, and enhancing awareness</b> are necessary to ensure effective energy management system certification.</li> <li>▪ <b>Improving awareness, enforcement mechanisms, and streamlining processes</b> are crucial for promoting energy audit compliance.</li> <li>▪ <b>Engaging businesses, streamlining administrative processes, and enhancing auditor availability</b> are vital for meeting energy audit deadlines.</li> <li>▪ <b>Implementing educational initiatives, streamlining processes, and investing in training programs</b> are necessary for enhancing energy audit quality and effectiveness.</li> <li>▪ <b>Securing resources, fostering collaboration, providing clearer guidelines, and simplifying processes</b> are critical to the successful implementation of Action Plans.</li> <li>▪ <b>Tailoring guidelines, simplifying processes, and enhancing communication</b> are essential for improving energy and water consumption reporting. <b>Enhancing monitoring mechanisms,</b></li> </ul>	

<p><b>establishing clear criteria, and improving guidance</b> are necessary for ensuring energy audits meet minimum standards effectively.</p> <ul style="list-style-type: none"> <li>▪ <b>Emphasising awareness, collaboration, streamlined processes, legal frameworks, and financial support</b> is crucial for addressing organisational challenges in energy-related initiatives.</li> </ul>	
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### 3 Information Sessions

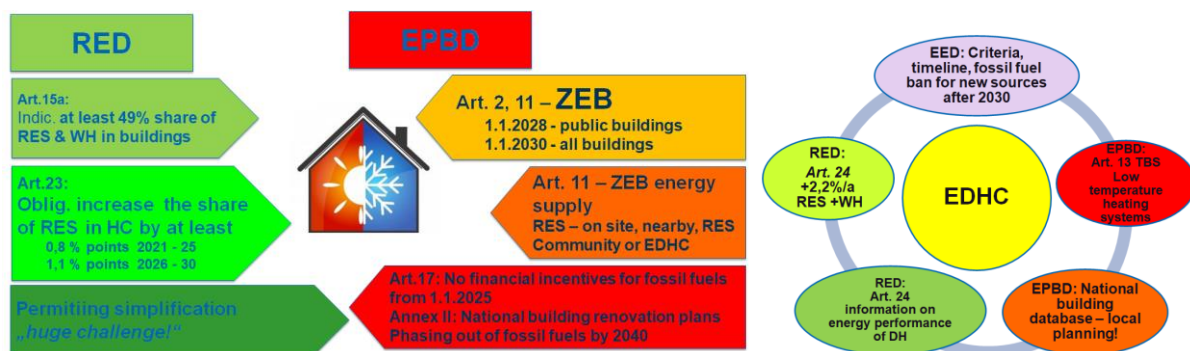
Information sessions were organised to brief participants about developments on specific topics: ‘Horizon 2020. Beyond saving CO2 and energy costs – what is in it for society? The multiple impacts of energy efficiency and their role for consumers’ (Info2.5), ‘Expert Study Group on the correlation between energy poverty and health’ (Info2.6).

#### 3.1 Info session 4.5 Cross influences of EED, RED and EPBD on heating and cooling (link with EPBD and RES)

The implementation of the "Energy Efficiency First" principle, the green transformation of district heating and cooling (DHC) systems and local planning are the main common aspects of all three Directives in terms of heating and cooling efficiency, as Stane Merše pointed out in his presentation.

CA-RES [discussed](#) the key targets set by the new RED for heating and cooling – especially the indicative target of at least 49% RES in buildings which Member States shall include in their NECP. This target may also include the use of waste heat in accordance with the EED, which should be further explained in the guidelines expected in the summer.

The new EPBD introduces the Zero-emission building (ZEB) standard, which demands very high energy performance, a zero or very low amount of energy requirement, zero on-site carbon emissions from fossil fuels and zero or a very low amount of operational greenhouse gas emissions. This ZEB standard will apply to newly constructed buildings owned by public bodies from 1 January 2028, and from 1 January 2030 will apply to all new buildings. From 1 January 2025, Member States shall not provide any financial incentives for the installation of stand-alone boilers powered by fossil fuels. The complete phasing out of fossil fuel boilers by 2040 should be elaborated in the national building renovation plans. Public databases for the energy performance of buildings shall be established and enable broad data access. These are just some of the main new provisions of the EPBD related to heating and cooling presented by [CA-EPBD](#).



**Figure 1: The main new provisions of all three new directives on heating and cooling and efficient district heating and cooling**

In the panel discussion, we addressed several other aspects alongside questions from participants.



There is no clear definition for public buildings in the RED, which opens up the opportunity for establishing a shared definition across Directives.

Participants expressed concerns about the timeline and efforts required for establishing the public national databases for building energy performance. Especially in MSs where public administration can be split across thousands of municipalities, it will be difficult to get an overview of ownership and other relevant information for the required database. In response, the panel suggested that there is a task for central government to create the database at national level in a way facilitates local authorities/organisations as much as possible in the collection of data.

The panel was asked to elaborate on the RED 22a target that the contribution of renewable fuels of non-biological origin used for final energy and non-energy purposes shall be at least 42 % of the hydrogen used for final energy and non-energy purposes in industry by 2030. The target is compulsory and suggests the use of green hydrogen in industry in a way that in most cases is difficult and most MS are still quite far removed from the target.

We dwelt for some time on the question of how all three directives will affect DHC delivery. EPBD would allow no onsite fossil fuels emission but as DHC are classified as a nearby heating provider, these systems would still be allowed to have fossil fuels emissions. However, ZEBs also have thresholds for GHG emissions. DHC are considered as one of the supplier systems that a ZEB will have to cover. The performance of the DHC system will affect the performance of the building as it is connected by (high) primary energy factor from DHC system (the EED Primary energy factor applies across Directives). RED will not change a lot in the DHC sector. Provisions are more related to internal issues, such as providing consumers with information, but people can disconnect if a DHC system is not efficient and they have a better RES alternative. Participants raised concerns that the obligation for NZEB/ZEB will come into play sooner than current DHC systems will be upgraded to accommodate these higher standards, which fits with the EED as current DHC will need a longer transition time. MS should try to separate this influence and in parallel put pressure on DHC system owners to improve their systems.



**Figure 2: Panel participants**

### **3.2 Info session 4.6 One stop shops**

The market for energy renovations in Europe is often fragmented and uncoordinated. Therefore One-Stop Shops, or OSS, are often thought of as a key instrument to accelerate energy renovations.

During PM4 an info-session on the theme of “Good Practices and Guidelines on how to set up One-Stop shops” was arranged within Domain 6.

In Article 22 OSS are lifted as a key component for Member States to achieve a more efficient use of energy. According to the directive, these One-Stop shops shall provide technical, administrative and financial advice on energy efficiency to households, SMEs, microenterprises and public bodies; with a particular focus on households affected by energy poverty.

Since One-Stop shops for energy efficiency already are a reality in several European countries and regions, the info-session was set up to explore good practices and experiences made in different Member States and to look further into the guidelines from the Commission on how to set up these One-Stop shops.

During the session, Climate Alliance [presented](#) their Life-project EU Peers, which aims to set up a European Community of Practice to increase the residential energy renovation rate and to support the OSS movement within Europe. Within their community they see different categories of OSS. For example:

- The advise model – were the OSS provides essential information and first level advice
- The support model – with detailed design of the energy renovation project, and engagement in marked activities
- The implementation model – that offers both detailed advice and the actual work during the renovation.

Experience from the project shows that public authorities and energy agencies often are strong in the upstream parts of the renovation journey, while private companies can go deeper into support and implementation. The take home message from EU PEERS was that one size does not fit all when it comes to one-stop-shops. Each country needs to identify what they wish to achieve with the OSS. A one-stop-shop is not a solution in itself, first there is a need to consider what it should achieve.

CINEA also presented some of the OSS-activities within the H2020/LIFE programme. Up until today there has been a longstanding EU support to the development in this sector with 36 projects in 16 member states, and more is yet to come. It was pointed out that these projects can offer valuable experiences.

In the session, different One-Stop shop-schemes were presented. One from [Ireland](#), and one from [France](#).  
OSS in Ireland

- Provides end-to-end service for homeowners
- Authorisation (SEAI) of private actors (for example requirements on financial stability, technical competence, skilled workforce etc)
- 10 years funding (tax on CO2 emissions)
- The programme has led to almost 50 000 energy upgraded homes during 2023

OSS in France

- Managed by the National Housing Agency (Anah)
- Financed by Energy Savings Certificates
- More than 550 one-stop shops located throughout the country
- More than 2,300 France Rénov' advisors
- The front door - A unique telephone number and a unique website ([france-renov.gouv.fr](http://france-renov.gouv.fr))

At the end of the session the representative from the EU Commission recommended MS to anchor OSS in long-term regulatory frameworks, such as the NECP or the long-term renovation strategy.

The commission is preparing additional guidance on OSS to be published by the end of 2024 [but offered some advice for the practical implementation](#):

- Define the structure of the OSS: integrate digital and in-person services. Local authorities could be well suited and are close to the target groups. They also have knowledge of the local landscape and about the workforce etc.
- Identify consumer segments and their needs: full mapping of national and local stakeholders.
- Design line of service: appropriate line of services for each consumer segment.
- Identify the cost structure and revenue streams.
- Identify the key partners and resources.
- Define consumer relationships and communication channels.

### 3.3 Info session 4.7 Exemplary role of the public sector – supporting local sustainable energy and H&C strategies (Art.5, 6 & 25)

The session focussed on the role of local authorities in leading the clean energy transition in the context of the recasted EED Articles 5, 6 and 25 (6) with concrete examples given by H2020 and [LIFE CET](#) funded projects.

CINEA, [gave an overview](#) of the project activities supporting local and regional public authorities by LIFE Clean Energy Transition. This includes some [40+ projects dedicated to help local authorities](#) in building their capacity in developing and implementing clean energy transition policies (e.g. SECAPs, DHC, zero emission), [40+ projects supporting the set up of One-Stop-Shops for home and public building renovations](#), and [60+ projects assisting mostly public project promoters to implement their energy efficiency investments](#) through Project Development Assistance. Other key initiatives include the [European City Facility](#) that already provided lump sum grants to more than 280 local authorities in developing their investment concepts for energy efficiency implementation and the [ManagEnergy initiative](#) that builds capacity of local and regional energy agencies. He concluded with a reminder on the next [LIFE CET Call 2024](#) that will open on 18 April and include dedicated funding topics for the support of public authorities at national, regional and local levels in their ambitions to move towards clean energy.

The [Covenant of Mayors Office provided an insight](#) into the initiative with nearly 12,000 signatory cities and municipalities that submitted almost 8,100 Action Plans and collected 19,825 best practice actions for the clean energy transition. Based on an analysis of over 400 action plans and their monitoring reports, signatories are on track to achieve a 30,9% reduction of CO2 emissions by 2030, which falls short of the 44.6% target. Kristina pointed out that the EU's subnational governments mobilise around 58% of climate-significant public expenditures surpassing their central governments, highlighting the important role local authorities play already today in the clean energy transition. They also presented Energy Cities' EU Tracker on local heating and cooling planning across Member States, which will be regularly updated until 2026. From the experience of working with local authorities for some decades they gave a number of policy recommendations to national legislators, including, ensuring detailed content of local action plans in national legislation; providing local authorities with a clear mandate; and consistent technical support and set-up of OSS for local authorities.

Ekodoma [presented](#) the LIFE [OwnYourSECAP](#) project, which aims to support local authorities in introducing a systematic approach to the implementation of their SECAPs based on three pillars: energy management, implementation of SECAPs and climate mainstreaming. They recommended to national legislators to make energy management in municipalities mandatory; support local authorities in defining local/regional energy and climate objectives; and encourage climate mainstreaming through national and local climate budgets.

e-think energy research [presented](#) the H2020 [act!on heat](#) project, which aims to further disseminate and facilitate the take up of the concept and methods for strategic H&C planning at local level, increase its quality and to push the development and implementation of identified measures. Marcus highlighted that there is currently a call open for local and regional governments, energy agencies and city planners interested in receiving strategical support on H&C infrastructure from the project. Act!on heat analysed various heating and cooling plans from across Europe and found out that none of them fully complies with the new requirements of Art. 25 EED. His recommendations to national policy makers included the need for guidance, legislative structure and financing for local authorities to develop comprehensive and compliant H&C plans.

### **3.4 Info session 4.8 Expert Study Group on the correlation between energy poverty and health**

In February 2023, the very first CA EED Expert Study Group (ESG) came to life. Colleagues from Ireland, Italy, Greece, the Netherlands and Flanders (BE) with a shared interest in the impact of EE and energy poverty on health and vice versa got together. Based on a variety of scientific reports and policy and project descriptions, the group collected interesting insights in a brief report that also highlights the link with and potential for Energy Efficiency schemes.

Based on screening of 50 studies and reports, the report examines the relationship between poor housing quality and physical and mental health problems. Subsequently, the positive effects of renovations and energy efficiency interventions on health are addressed. It also discusses the health costs associated with poor housing conditions and the interesting payback potential of renovation measures. The aim is to raise awareness among Member States and to use these insights in the renovation strategies and the development of EE-policy measures for target groups, including possible cooperation with the health sector.

At the Budapest PM the Expert Study Group [presented](#) the result of the work in the form of [a public available report](#). A concise yet comprehensive overview of the scope of the work is presented in the [infographic](#). There was high interest in the subject matter and the work was received well with high attendance numbers. Following the [presentation](#) the participants were invited to discuss a selection of issues. The presentation and ensuing discussions triggered a number of suggestions for follow-up activities. Specific interest was shown by the IEA during the meeting, leading to a follow-up meeting to exchange further on the topic of wider benefits and possible future cooperation. The members of the ESG are also using additional fora to spread the report and infographic and are exploring possibilities for pilot projects, eg financed by EU-grants (LIFE CET, Interreg).



Why energy efficiency is such a smart way to improve people's health, alleviate energy poverty and save money

Scientific intervention studies repeatedly show that renovating houses can lead to:

- ↑ IMPROVED WELL-BEING
- ↓ LOWER MORTALITY
- ↓ REDUCED USE OF HEALTHCARE RESOURCES
- ↓ REDUCED VOLUME OF PRESCRIBED DRUGS

By making energy efficient and healthy homes for people in energy poverty we can significantly improve people's mental and physical health and save money. This is the first international reference for an analysis of approximately 10 studies and reports. Compiled by the European Energy Group (EEG) of the member states of Belgium, The Netherlands, Ireland, Italy and Greece.

[CLICK HERE TO DOWNLOAD THE FULL REPORT](#)

Research shows that living in cold, damp homes can lead to serious health problems

These are some examples from the analyzed studies

RESPIRATORY PROBLEMS

30-50%

Increase in multiple respiratory and asthma-related health problems due to dampness and mold



21%

Fewer days of absence for children with asthma aged 6-12 years in households that received an efficient heater

MENTAL HEALTH PROBLEMS



47%

Of people in a survey study reported becoming anxious or depressed because of cold indoor temperatures

14%

Higher levels of stress for households that spend a high amount of their income on energy bills

These mental health improvements are mostly a result of increased living space, since they could properly heat more rooms

CARDIOVASCULAR PROBLEMS



32.7%

Lower mortality risk for 65+ year olds, with a history of a cardiovascular-related hospitalization, after home is properly insulated

18°C

Could prevent 9% of high blood pressure cases, which lowers the chance of strokes and heart attacks

Energy renovation projects can save significant amounts of health costs

€194 billion every year

We now spend on costs for inadequate housing in the EU. This concerns both direct costs (e.g. healthcare bills) and indirect costs (e.g. loss of earnings, career prospects and missed days at school or work)

If we keep spending the costs for inadequate housing, this will add up to almost 2000 billion in 10 years. With only 295 billion of investments to prevent this,

€1.700 billion

the potential savings of energy renovations in the EU can add up to

Cumulative cost of inadequate housing over a 10 year period vs total investment cost of energy renovations (in EUR billions)



On the other hand, the total investment costs for energy renovations for all member states are estimated at

€295 billion in total

As member states you can play a big role in these solutions

By helping to fill in the existing knowledge gaps and preparing policies to stimulate energy poverty schemes.

Identify target groups



Develop adequate communication tools



Set up referral services that, for example, refer healthcare patients to energy renovation schemes



Provide low threshold tailored renovation interventions



Measure outcomes



Set up training for health and renovation professionals



Share costs, for example by shifting health budgets to energy saving programs



## 4 Closing Plenary Session

The Closing Plenary Session provided participants with an overview of the discussions and results of the Working Group sessions.

### 4.1 Conclusions from Working Group Sessions and CA EED Coordinator

Conclusions presentation 4.1 - Article 4 and 8 – planning the implementation

Conclusions presentation 4.2 – Definitions and scope of public body targets

Conclusions presentation 4.3 – Data Centres

Conclusions presentation 4.4 – Setting up a framework for energy management systems and energy audits for enterprises

Conclusions presentation 4.5 – Cross influence of new EED, RED, and EPBD on heating and cooling (link with EPBD and RES)

Conclusions from CA EED Coordinator: Coordinator closing presentation 4<sup>th</sup> PM including invitation to the 5<sup>th</sup> Plenary Meeting CA EED in Warsaw

# 5 Presentations and Good Practice Factsheets

A number of presentations provided participants with valuable insights into Member States' EED implementations as well as examples from EU projects and information from the European Commission. All presentations are available on the CA EED website.

## **Working Group 4.1 Article 4 and 8 – planning the implementation**

Article 8 & Annex V - European Commission

[Article 4 – European Commission](#)

[Energy Efficiency Policy Framework - Czech Republic](#)

[Energy Efficiency Art. 4 & Art. 8 – Slovenia](#)

## **Working Group 4.2 Definition of public sector (link with EPBD and RES)**

Working group presentation 4.2 – Definition of public sector (link with EPBD and RES)

Article 2 (12) Public bodies - DG ENER

[NL approach to understanding scope of public bodies - The Netherlands](#)

Article 5 Public sector target - Byrne Ó Cléirigh, Ireland

[EED Recast – Articles 5 and 6 Overview of the State of Implementation - Finland](#)

## **Working Group 4.3 Data centres – data bases**

Working Group presentation 3.4 Data centres – data bases

[Implementing the EED: Data centers and the German Energy Efficiency Act – Germany](#)

[EED & Reporting scheme for data centres - DG ENER](#)

FR regulation overview of data centers – France

## **Working Group 4.4 Energy management systems and energy audits**

Working group presentation 4.4 – Energy management systems and energy audits

[Supporting Member States towards an effective implementation of new Article 11: LEAPto11 - ENEA & EnR](#)

[DEESME 2050 project plan and results + H2020 DEESME - IEECP](#)

[Article 11 - DG ENER](#)

[A new strategy to support companies in the uptake of audits measures - Audit2Measure](#)

## **Info session 4.5 Cross influences of EED, RED and EPBD on heating and cooling (link with EPBD and RES)**

Information session presentation 4.5 – EED recast – new heating and cooling issues

[CA EPBD – National Building Database](#)

[Implications of EBPD recast on heating and cooling](#)

#### **Info session 4.6 One stop shops**

A complete home energy upgrade solution for homeowners, OOS service - Ireland

[One-stop shops in France dedicated to energy savings, France Rénov' – France](#)

LIFE Clean Energy Transition, Overview of OSS support - CINEA

[Situation of One-Stop Shops in Europe, EU Peers - Climate Alliance](#)

[Guidelines from the EU Commission on how to set up OSS – DG ENER](#)

#### **Info session 4.7 Exemplary role of the public sector – supporting local sustainable energy and H&C strategies (Art.5, 6 & 25)**

[Exemplary role of the public sector – supporting local sustainable energy and H&C strategies](#)

[Accelerating the use of strategic heating and cooling planning in cities and regions - actionheat](#)

[Local authorities leading the clean energy transition - Covenant of Mayors, EU Cities](#)

[Role of local authorities in leading clean energy transition - Own Your SECAP](#)

#### **Info session 4.8 Expert Study Group on the correlation between energy poverty and health**

[Information session overview – Expert Study Group EE & Health](#)

[Infographic – Expert Study Group EE & Health](#)

## Legal Disclaimer

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For further information please visit [www.ca-eed.eu](http://www.ca-eed.eu) or contact the CA EED Coordinator Lucinda Maclagan at [lucinda.maclagan@rvo.nl](mailto:lucinda.maclagan@rvo.nl)



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