


EPBD Concerted Action



Support for the Transposition of the Energy Performance of Buildings Directive


The Concerted Action

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Background

- EPBD approved as a prime example of the subsidiarity principle.
- The EPBD states the goals that must be reached, but it lets MS a wide range of freedom to implement them.
- **With good reason:** types of houses and HVAC practices vary widely across Europe, climates are very different, heating and cooling needs totally different from North to South.



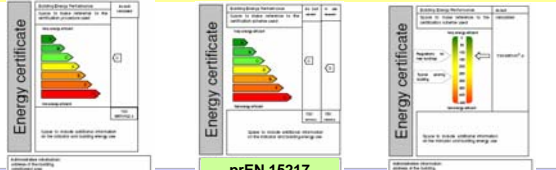
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The Push towards Harmonization


- Lack of the detailed common methodology for characterizing the energy performance of buildings – a major difficulty for MS.
- Energy Certificate – format and content – huge potential for major differences.
- The EC wishes to help convergence and similarity of approaches among MS – comparability for consumers.



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The Path towards Harmonization

- **EDM Committee** meets to discuss common problems and help with common solutions.
- **Mandate to CEN** to produce a set of suitable standards, available by 2007.
- These Standards must become National Standards but that does not make them mandatory... Nor does the EPBD make them mandatory
- But the EC expects that the MS methodologies shall be in at least broad compliance with the new EN standards, available in draft form since 2005.
- **European Concerted Action** for MS to voluntarily exchange ideas and converge towards reducing the spread of solutions.

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BUILDINGS CONCERTED ACTION - OVERALL OBJECTIVES

- To enhance and structure the **sharing of information and experiences from national implementation.**
- To **promote good practice** concepts in activities required of Member States for implementation of the EPB Directive.
- To create **favourable conditions for an accelerated degree of convergence** of National procedures in EPBD related matters.
- To complement the work of the Energy Demand Committee (Article 14 of the EPBD) and its ad-hoc group on **CEN standards and Certification.**

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THE CONCERTED ACTION IN OPERATION...

- **24 countries (now 28...)** working together on a voluntary basis
- **Getting inspiration and ideas from one another**
- Towards limiting the range of solutions to the common challenge of transposing the EPBD
- **Every country gains from the exchange**
- **Developing a European philosophy for Energy Efficiency in Buildings**

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WORKING STRATEGY FOR THE CA

- Work focuses on a series of specific, objective issues arranged in 4 core themes:
 - CERTIFICATION
 - INSPECTION OF BOILERS AND AIR-CONDITIONING SYSTEMS
 - CERTIFICATION OF EXPERTS AND INSPECTORS
 - USE OF THE NEW CEN STANDARDS

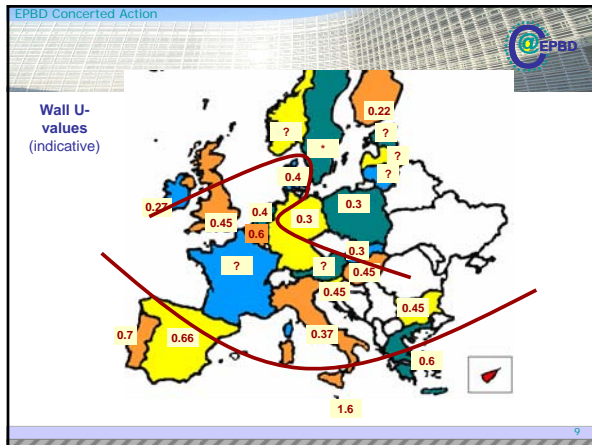
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The Status of Transposition

- D-day, 4 January 2006, is long past...
- There are significant delays in most countries and that many technical issues still remain – something that became evident in mid 2005
- The number of Full Transpositions is quite small
- There are still many unresolved issues in most MS
- MS show a clear resistance to change despite all the pressures and indications that the Energy Performance of European Buildings must greatly improve to meet increasing restrictions in CO₂ emissions

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CA-EPBD Achievements on Certification

- **Certification of new buildings:** most MS agreed that, ideally, it should be required at both project stage (it is easier to introduce changes and improvements) and after construction;
- **Certification of existing buildings:** it is far more complex and it requires extra planning time to be implemented – few MS are able to start now;
- **Certification of existing buildings:** absolute need for simplified methods, default values and interaction with national methodologies;
- **Conclusions:** Methodologies are well advanced for new buildings, still many issues unresolved for existing buildings.

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Accredited Experts must check project or building...

AE checks at...

Check Type	Count	Percentage
Use permit only	8	33%
Construction permit only	7	29%
Both Construction and Use permit	9	38%

• 71% have an assessment at the beginning of the use

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Certificates for Residential Buildings

	By:	2006	2007	2008	2009	Undecided
Timing for starting: Residential Buildings	New	5	8	6	3	5
		19%	48%	70%	81%	
Residential Buildings	Exist.	5	3	4	8	7
		19%	30%	44%	74%	
Type of Rating: Existing Residential Buildings	Calculated Rating					
	Measured Rating					
	Both Ratings	10	11	3	1	
	Undecided	37%	41%	11%	4%	

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Model of the Certificate (Residential)

- How many steps?
- Where to put minimum level for new buildings (B or other)?
- Possibility to improve the standard without changing the scales?
- Confusion or information?
- Text?
- CO₂ values?
- More than one scale (calculated, measured,...)?
- Should you use A⁺ and A⁺⁺?
- Or even B⁺?

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There are many variations in the form of the Certificates....

And yet many others...

But, despite the differences, we can all "read" the same type of message in any of the certificates...

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Inspection of boilers

■ Major topics discussed

- Boiler inspection schemes (option a) have been introduced by some MS, usually interacting with other services (check of regular maintenance, safety or environmental controls).
- Information and advice schemes (option b) have been discussed.

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Inspection of air conditioners

■ Further effort is needed in the field of air conditioners inspection:

- Most MS have delayed the decision;
- Inspection methods have not yet been tested;
- More time needed until a clear picture emerges for AC inspections.

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TRAINING OF EXPERTS

Important questions that were dealt with during the Concerted Action meetings:

- How many assessors and inspectors are needed in each MS?
- Which criteria and qualifications for the accreditation of assessors and inspectors are needed?
- How will the training of assessors and inspectors be organised?
- How will the degree of Independence of the assessors and inspectors be maintained?
- Do we need a Code of Practice for assessors and inspectors?
- How will the Quality assurance for experts assessors and inspectors be organized in various MS.
- How will Insurance and Liability of the assessors and inspectors be dealt with?
- How will national monitoring of inspections after 2006 take place in MS?

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TRAINING OF EXPERTS: Conclusions from the meetings

- The total number of required assessors and inspectors cannot be discussed independently from national implementation procedures;
- The needed skills and training needs also depend strongly on national procedures, and a large variation is to be expected;
- Awareness was increased for all the aspects needed to ensure the independence of the assessors and inspectors;
- Starting all the required certification efforts within a short period will create unacceptable changes in the required number of experts – phasing in of requirements seems evident for a stable certification market;
- the ongoing IEE projects, like Stable, Impact, EPA-NR, Budi and others offer valuable instruments that can be used in the National implementation processes;
- Harmonisation and benchmarking of implementation processes through some of these instruments can be of added value to the CA-activities to come after the official implementation of the EPBD in MS.

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Procedures

- **Major discussion items:**
 - Overview of application of the new CEN standards
 - Calculation methodologies in MS and link to CEN standards
 - Simplified procedures and default values used in MS
 - Integration of renewables in MS building codes
 - Summer requirements in MS regulations
 - Cooling demand calculation: reliability of the CEN methods
 - Software demonstrations
 - Quality control procedures for software in MS
- **Major conclusions:**
 - Most countries will have a single National procedure (3 should have different regional procedures)
 - Most countries will have different procedures for residential and non-residential buildings
 - Most countries adopt the new CEN standards, though about half without explicitly citing them
 - Most countries adopt calculated energy ratings, but measured ratings also widely used, especially for non-residential buildings

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CA-EPBD Achievements on Calculation Methodologies

- Presentations of various national software tools provided very useful information, both for:
 - Residential buildings;
 - Nonresidential buildings (calculated and measured ratings);
- Fruitful cooperation with the Certification group in discussing how to set up simplifications and default values for existing buildings;
- Survey of integration of renewables and other especially challenging issues (e.g., air-tightness, daylighting, thermal bridges) showed that much progress is still needed in almost every MS – **major lesson: keep it simple!**
- Discussion on how to include innovative systems also showed promising approaches but they are not expected to be too common among MS.

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EXTERNAL COMMUNICATION & DISSEMINATION

- The CA-EPBD is focused on internal communication – a significant portion of the materials often remains confidential until MS complete transposition and publication of legal documents;
- **However:**
 - A monthly **Webzine** is distributed with recent news and announcements (national decrees, events, etc.);
 - The webzine drew a lot of outside interest and it is now circulated to about 600 persons – some information remains restricted to CA members though;
 - Formal **cooperation** agreed with the **Buildings Platform** (e.g., publication of national and topic reports);
 - **International interest** drew requests for presentations in USA (RESNET), Canada, New Zealand, etc., and at IEA events;
 - Very useful cooperation and information exchange with EPBD related **SAVE projects**.

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20 Webzines published by the end of 2006.



Register at
www.epbd-ca.org

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The near future...

- Many countries enacted legislation and regulations before the end of 2006, but not all...
- Most countries will request an extension of 3 years.
- We shall start to see certificates popping up for **NEW** buildings, **PUBLIC** buildings, and, to a lesser extent, **EXISTING** buildings over the period 2007-2008.
- The complete EPBD shall not be fully in force in the whole of Europe before 2009. No change really feasible before then.
- But the new Energy Action Plan of the EC (January 2007) calls for upgrading the EPBD in 2009...

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The major bottleneck

- **Certified experts!**
- I.e., the lack of certified experts...
- Thousands needed across the EU.
- It takes time to get them trained and certified with a minimum of credibility.
- This will allow most MS to request the 3-year extension.
- Many countries have not yet decided the qualifications of experts and inspectors

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CONCLUSIONS

- **There is a lot happening in all MS to transpose the EPBD**
- **The Commission is providing support towards harmonization:**
 - new CEN standards
 - Buildings Concerted Action - a discussion and exchange forum for MS
 - Various SAVE projects to support EPBD implementation – regular cooperation with the CA-EPBD foreseen
 - The Buildings Platform was launched in 2007
- **MS are cooperating with one another quite effectively**
- **Only a few MS have fully completed their plans**
- **Still, many challenges remain... and time is very short**