EU Directives and Challenges for Member States

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The new Paragidm

Move from the current society based on fossil energy to a sustainable Society based on Renewable Energy.

And let’s do it quickly, to avoid problems such as climate change, rise of the ocean level, and energy independence (or security of supply...).

Let’s move to Fusion energy and its derivatives...
But...

How?

And at what cost?

This is where reality kicks in....
Supply

- Fossil fuels
- Nuclear Fission
- **Renewables**
- Nuclear Fusion
- ...

Demand

- Buildings
- Industry
- Transport
- ...

**National Energy Efficiency Action Plan (NEEAP)**

**National Renewable Energy Action Plan (NREAP)**

**Public Acceptance!**

**National plans for increasing the number of nearly zero-energy buildings**

**Economic feasibility**

**Keep the costs down!**
IEE CONCERTED ACTION
CA EPBD II

Supporting transposition and implementation of the EPBD

Member States cooperating towards harmonization and finding the best solutions together
Main Difficulties

- Slow transposition;
- Slower implementation;
- Difficulty to coordinate all the requirements from all 3 Directives;
- Lack of enthusiasm by national authorities to invest and impose added costs on the electorate;
- “Low-cost” solutions for EPCs in some MS (e.g., some self-issued EPCs over the internet);
- Bad press (e.g., publication of different EPC issued on a blind basis by different experts...);
- Consumers unconvinced about value of the EPCs;
- ....

- LACK OF CREDIBILITY  !!!
- LACK OF POLITICAL WILL  !!!
Concerted Action EPBD

Supporting transposition and implementation of the recast EPBD (2010)

Member States cooperating to finding the best solutions and moving towards harmonization
Certification

National or regional central databases of Energy Performance Certificates enable the implementation of control mechanisms which are necessary to prevent fraud and strengthen the trust in the certificate.

The effective use of an Energy Performance Certificate in advertisements and as a supporting tool for financing is very important to increase the demand for energy efficient buildings on the market.

Monitoring of the implementation of recommendations is crucial to keep track on the actual improvements in building energy performance, especially in the building stock.

A database-centred approach with standard lists of recommendations is considered useful, but most Member States are still at the beginning and little experience is available.
Inspections

The scope of inspection has been changed, with new options and alternatives and additional reporting requirements. Alternative measures in the form of advice can now replace inspection of air-conditioning systems as well as heating.

There is no established methodology for assessing the impact of alternative measures and comparing it with inspection, and no uniformity of approach. This area remains under active development.

Inspection schemes have been running for 3 years and, in some cases, reviewed. Little has been done so far to evaluate their wider impact and cost-effectiveness.
In most MS, clients select experts based mainly on the cost of the Energy Performance Certificate and the reputation of the issuing expert.

When selling or renting an apartment, less than 50% of owners are aware of the role of the Energy Performance Certificate as a competitive instrument in the decision-making process of prospective purchasers or tenants.
Procedures & Cost-Optimal

Minimum Energy Performance Requirements for new and existing buildings were improved in many MS after the Cost-Optimal exercise.

Compliance checks for energy performance requirements in new buildings are crucial for achieving cost-optimal solutions towards NZEB buildings.

In many cases, especially in the case of minor refurbishments, it is a matter of the owner and craftsmen to secure compliance with the requirements.
Nearly-Zero Energy Buildings

Member States have adopted a wide range of definitions of Nearly Zero-Energy Buildings.

There is often a significant difference between the predicted (calculated) Energy Performance of buildings and the measured results. In countries that already have good practical experience with high performance houses, these houses have a dominant share in the market of new residential buildings.

The planned average tightening of the Nearly Zero-Energy Buildings requirements compared to the current Energy Performance requirements for new buildings is about 40%.
Lack of political will is cited by 1/3 of MS as the main cause for lack of checking compliance.
Support Initiatives

The effectiveness of incentives depends on: having a clear target group, design and administration of the instrument, accompanying actions (e.g., information), and particularly on having available matching capital for building owners to invest.

The most common role of the Energy Performance Certificate (EPC) is to verify the energy savings from implementing specific measures. The EPC is not always linked to the EPC improvement class.

Grants are the most popular scheme, but different kinds of loans and tax reliefs appear to be becoming more important. Detailed exchange of experiences with different schemes would be valuable.
Reducing energy consumption and eliminating wastage are among the main goals of the European Union (EU). EU support for improving energy efficiency will prove decisive for competitiveness, security of supply and for meeting the commitments on climate change made under the Kyoto protocol. There is significant potential for reducing consumption with cost-effective measures. With 40% of our energy consumed in buildings, the EU has introduced legislation to ensure that they consume less energy.

A key part of this legislation is the Energy Performance of Buildings Directive (Directive 2002/91/EC EPBD), first published in 2002, which required all EU countries to enhance their building regulations and to introduce energy certification schemes for buildings. All countries were also required to have inspections of boilers and air-conditioners.

The introduction of national laws meeting EU requirements was very challenging, as the legislation had many advanced aspects. It was a great opportunity to mobilise energy efficiency in EU buildings, but also a formidable and continuing challenge for many EU countries to transpose and implement the Directive.

To support EU countries in this task, the Concerted Action (CA) EPBD was launched by the European Commission to promote dialogue and exchange of best practice between them.

www.epbd-ca.eu

New book including country reports to be released in 2015
Country information

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European Energy Performance of Buildings Directive and its implementation in Italy

Find below the publications related to the implementation of the European Energy Performance of Buildings Directive, as well as other relevant resources, submitted by the Concerted Action EPBD national coordinators for Italy.

Implementation Reports
- EPBD implementation in Italy – status at the end of 2012
- Implementation of the EPBD in ITALY status November 2010
- Implementation of the EPBD in Italy: Status June 2009
- Attuazione della Direttiva EPBD in Italia: stato dell’arte a Giugno 2009
- Implementation of the EPBD in Italy: Status January 2007
- Stato del recepimento della direttiva 2002/91/CE (Rendimento energetico degli edifici) a gennaio 2007

National Legislation
- Italian Law n. 10 of 9 January 1991
- Decree of the President of the Republic of Italy of 26 August 1993, n. 412
- Decree of the President of the Republic of Italy of 21 December 1999, n. 551
- Italian Legislative Decree of 15 August 2005, n. 152
- Italian Legislative Decree of 23 December 2006, n. 311
- Italian Decree of the President of the Republic of 2 April 2009, n. 69
- Italian Decree of 26 June 2009 on the energy certification of buildings
Conclusions

- Much progress already achieved in all MS;
  - New regulations and better minimum requirements;
  - EPCs widely used.

- But a lot more needs to be done...
  - Faster progress towards NZEBs in 2020;
  - Better quality and use of EPCs;
  - Renovation plans for existing buildings:
    - Campaigns for better public acceptance;
    - Realistic goals for policy makers.