Energy Savings in Buildings: Assessment and Improvement of Legislative Impact

Observations and recommendations regarding Impact, Compliance and Control issues with regard to the proposed recast of the Energy Performance of Buildings Directive (EPBD)

This synthesis report has been prepared as the outcome of discussions on Workshop on Impact, Compliance and Control of energy legislations that had a place in Brussels 1-2 September 2009. It has been reviewed by those ASIEPI project partners directly involved in assessing the impact, compliance and control of legislation. They have agreed to make it publicly available.

1 > Overall context

An international workshop was organised on September 1-2 2009 in Brussels. This open workshop was attended by some 80 participants from 17 countries. These participants were from industry, research and governmental organisations.

The workshop programme consisted of expert presentations regarding the issue of impact, compliance and control in 13 Member States (Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Italy, Netherlands, Norway, Poland, Portugal, Spain), 4 presentations from European Federations (ES-SO, EuroAce, EURIMA and REHVA) and 4 synthesis presentations. At the end, there was a brainstorming session regarding pro and cons as well as concerns regarding the envisaged recast of the EPBD.

It has been reviewed by those ASIEPI project partners active on this topic, taking into account suggestions expressed during this workshop. All country reports and the 4 synthesis reports will be published in early 2010 on www.asiepi.eu.

ASIEPI > Impact, Compliance and Control
2 > Overall findings from the workshop

The following observations are important to communicate:

1. The various expert presentations show a significant variation in EPBD implementation, with big differences in impact, compliance and control. Some variation can be justified because of diversity between the Member States. However, emphasis on consistent and sound implementation can/could release the large potential for further savings. The proposed recast may accelerate this process.

2. Several Member States perform life cycle cost analysis studies before tightening the building code requirements. This is the case for past and present. Various Member States have developed roadmaps for further improving the energy efficiency of new and existing buildings.

3. A study presented by EURIMA suggests that in several countries a substantial part of new buildings do not conform to their national regulations and also that there is a difference between the national requirements and the cost-optimum requirements concerning U-values of the building envelope.

4. There are in several countries with success stories showing a major change in the energy performances of the new building stock due to the EPBD related regulations. At the same time, there are also success stories regarding market uptake of innovative systems and technologies, wherein the EPBD regulations have had a catalysing effect.

5. Not all countries have yet fulfilled all the requirements imposed by EPBD. As guardian of the European Treaty, the European Commission must continue its efforts regarding infringement procedures.

6. It is essential to have an integrated approach which covers all energy related building components and service systems to achieve cost-efficient (cost-optimised) energy performance targets. Indoor climate aspects have also to be taken into consideration.

7. In several Member States innovative compliance and control approaches exist, which do not increase the administrative burden. These approaches depend strongly on cultural aspects.

8. In addition to compliance and control measures, it is also important (to continue) to invest in awareness and motivation actions e.g. educational and information campaigns.

3 > Recast of directive - observations and concerns

3.1> Cost-optimal requirements (articles 4 and 5)

- The definition of cost-optimal levels is very crucial and requires further discussion.
- The calculation methodology for determining the cost-optimal levels of energy performance is an essential element of the recast. It is felt important that there is an appropriate consultation of the Member States and stakeholders and the validity of a method should be proven for the intended application(s).
- Given the importance of guaranteeing good indoor climate conditions in combination with the increased evidence that there are poor indoor climate conditions in many buildings, it is expected that Member States report on the actions undertaken in relation to indoor climate aspects.
- In order to facilitate an efficient and cost-effective implementation and to allow the various stakeholders to prepare properly, it is very important that each Member States develops a detailed roadmap for the tightening of the national requirements.

3.2> Independent control system (article 17 and Annex II)

- The present specifications of 0.5% (for certification) and 0.1% (for inspections) are very deterministic and not necessary efficient. Given the major differences in regulatory systems, political visions and cultural aspects, it should be justified to allow alternative approaches at the condition that the Member States can prove that the approach is effective.
- The effectiveness of any control scheme largely depends on the intrinsic quality of the overall implementation, i.e. the way the criteria are expressed, the non-ambiguity of the requirements, etc. Therefore, attention should be drawn to the fact that regulations should be thoroughly checked regarding the possibilities for carrying out control and, if necessary, to sanction.
- Additional control activities should ensure not to extend the administrative burdens in the Member States.
3.3> Penalties (article 22)

- Sanctions in case of non-compliance of building specifications can take different forms financial penalties, obligation to make the building in line with the specifications, no right to occupy the building, withdrawal of professional rights etc. It is advised to allow a flexible handling of sanctions to fit it best to the differences cultural behaviour in the Member States.
- See also last point of § 3.2.

4> Contributions and acknowledgements

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