

EPBD on a bumpy road

by Dick Dolmans

Recast of building directive in political turmoil

by Dick Dolmans
Secretary General of ES-SO
(European Solar Shading Organisation)
www.es-so.eu

Energy saving has become a major political priority in the European Union. For a number of solid reasons: strategic (reducing our uneasy dependence on oil and gas from politically unstable regions), economic (lowering our production costs and helping our competitiveness), security (access to affordable energy for all) and last but not least environmental (reducing our carbon emissions and meeting our commitments under the Kyoto Protocol). Energy efficiency and increased production of renewable energy are emphatically up front in the list of policy measures. That message was easy to convey when the price of oil hit an all-time record of 147 dollar per barrel in July 2008. But then, in six months time, it nosedived to a three-year low of 47 in December of last year, inevitably reducing somewhat the sense of urgency of the energy efficiency initiatives. Since then, the steep economic downturn provides our politicians with plenty more reasons to backpedal on some of the much needed action plans. Witness the bumpy road of the EPBD.

The history of the EPBD and its Recast

The acronym EPBD, you may remember, stands for the Energy Performance of Buildings Directive, issued in December 2002. It



demands that Member States set minimum requirements for the energy efficiency of new and refurbished buildings, ensure certification of this performance and require regular inspection of installations for heating and cooling. Renovation of buildings below 1000 sq m was not in the scope of the Directive – a missed opportunity as the renovation market is huge and offers a colossal savings potential. What happened next:

- **January 2006:** deadline for the implementation of the Directive in the Member States, but many of them announced a delay until 2009, for various reasons.
- **June 2007:** deadline for the Member States' first national energy efficiency action plan (NEEAP).
- **November 2008:** Many Member States having failed to implement the legislation on time, the European Commission decides to propose a revised EPB directive (mostly referred to as 'recast EPBD'), with the objective to clarify and strengthen its content and aims. The Commission's text as proposed to the European Parliament lists for the first time solar shading among the energy-influential techniques of a building's envelope. The Commission expects that the 'recast' will help reduce the EU's energy consumption by 5 to 6%. In the Commission's proposal, the 1000 sq m threshold for refurbishment is removed completely.
- **April 2009:** the European Parliament, after having received hundreds of amendments to the text of the revised EPBD, many of them reinforcing its scope and tightening its time table, adopts the amended text with an overwhelming majority. A surprising, all-new amendment requires all new buildings to be net zero energy from 2019 onwards. The

next step is for the text to be approved by the Council of Ministers before becoming law.

- **July 2009:** the specialized newsletters report that 'the list of concerns regarding the recast of the EPBD expressed by the delegations of the Member States is growing longer' and that a number of them have taken issue with the Parliament's April amendments, many of which they find 'overly ambitious and even unrealistic'. Therefore, said Euractiv, the newsletter on European issues, in its July 8 edition, 'speedy progress is not in sight'. The withdrawal of the 1000 sq m threshold is only one of the hurdles: some members states would like it lowered or gradually withdrawn, not immediately. In other words: the decisions of the Parliament are being criticized and renegotiated by the governments.



Reputation at stake

The Swedish EU Presidency, however, is working very hard to reach an agreement prior to the upcoming December 7 meeting of the Council of Ministers of Energy. On that very same day the United Nations Climate Change Conference (COP15) opens in Copenhagen. It would be very embarrassing for Europe to have to report on that day that it is too timid to commit itself to implementing its own laws,

made more ambitious by its parliamentarians and adopted with a large majority. Europe is proud to be seen as the leading force on climate change and as the driver of international environmental cooperation. Says the website europa.eu: 'The EU intends to lead a new industrial revolution and create a high efficiency energy economy with low CO2 emissions'. The European Union is already the major source of environmental legislation. So, noblesse oblige!

What about solar shading?

EPBD is about the energy behavior of buildings. Energy savings in buildings should first and foremost concentrate on the building's skin: that's where the energy is lost – or gained. The typical infrared thermographic picture (source: www.lbnl.gov) shows clearly the heat loss through the windows. But concern about summer comfort, now a common worry, is about heat gain. Too much sun in summer will lead to overheating and must be avoided. However, the sun's free energy is very welcome in the heating season. The solution can only be to equip windows with a dynamic solar shading device, automated for optimum effect. The text of the EPBD Recast, as proposed by the European Commission to the Parliament, seems to recognize that. It reads as follows (Recital 9): *The energy performance of buildings should be calculated on the basis of a methodology, which may be differentiated at national and regional level and that includes, in addition to thermal characteristics, other factors that play an increasingly important role, such as heating and air-conditioning installations, application of renewable energy sources, passive heating and cooling elements, shading, indoor air quality, adequate natural light and design of the building. The methodology for calculating energy performance should not only be based on the season where heating, but should cover the annual energy performance of a building*

(emphasis is mine). Yes, shading is taken into consideration and there is no reason why it should be removed from the final text, when the Council of Ministers adopts a compromise version, hopefully in December. That fact, plus the colossal potential of the refurbishment market (assuming the 1000 sq m threshold will be lowered substantially or removed completely) will open new markets for our business. But let's make no mistake: it will not come easy. The credibility of our basic message (better comfort and energy savings through reduction of active cooling and from better use of free natural daylight) must be sustained by scientific calculations (how much kWh saved and what kind of payback?), product improvement and innovation. Because we do get critical questions from users, spoken to at random, especially about external solar shading. Like this one: "What can you do to avoid that external blinds get so dirty after a few years?" or also "Why is it that my external system goes up as soon as there is a little bit of wind, which reduces its efficiency seriously?". We all know that blinds and shutters deserve maintenance and cleaning, but how often is it done in time? Ideas and developments in that area, and new products, of course, will help our industry seize the opportunities that the EPBD and other environmental legislation will offer.

