The implementation of the new EPB-standards will boost product and HVAC system innovation and create new market opportunities for the HVAC industry

January 2017 the series of 17 EN-ISO Energy Performance Buildings (EPB) standards and 29 EPB EN-standards have been accepted. These standards passed the Final Vote last week of January 2017 and will soon be published. At ISO global level the 17 ISO standards and seven accompanied Technical Reports. At CEN level in Europe also the additional set of 31 EN standards and 23 CEN Technical Reports.

This set of EPB standards will be the basis for the Energy Performance Buildings assessment in Europe. It will be more or less obligatory for the EU Member States and EFTA countries to use these standards as a basis for their national regulation on Energy Performance of Buildings. More or less because the EPBD is just directing the EU MS's. However, if the MS's regulators seriously respect the outcome of the vote of the CEN and ISO community, where professionals, industry and other stakeholders gave their opinion and advice, broad implementation seems a question of time. The REHVA member organisations and the many European and national interest groups should combine their forces to convince the national regulators responsible for the regulatory framework to make use of these standards. It is the only way we can develop a strong European market for EPB related technology, systems and products. Making energy efficiency measures for buildings more cost-effective and competitive at the EU and global market.

What will this mean for the future? More harmonisation of the EPB assessment procedures which will have an impact on the harmonisation of the product and system requirements for energy relevant products used for buildings and their HVAC systems.

Under the European Eco-design Directive most relevant energy using products to be applied in buildings are already covered by a product regulation. This regulation requires the product to meet a certain minimum energy performance threshold, which is to be upgraded in the coming years (typically every 5 years). This regulation does not only set the energy performance requirements but also requires the product to have a label (product declaration) where these and other essential requirements have to be reported. Additional the Eco-design regulation refers to European or ISO standards describing the measurement and assessment procedures to obtain the required product data. If no standards available the EU-regulation includes, for the time being, this information. The measurement data which are the basis of these product declarations have to be published in a public data base. These public data are again essential input for the assessment procedures described in the EPB standards mentioned before.

This coupling of two EU directives, the EPBD (Energy Performance Buildings Directive) and the Eco-design Directive connects product declarations to finally Building Energy Performance certificates. It accommodates the holistic building and system approach. Energy saving technologies, systems and products can be can now be awarded at a level playing field. Where transparency, regarding the assumptions and very often needed simplifications of assessment procedures, stimulates innovation. Also, transparency regarding the overall performance parameters (like the levels Indoor Environmental Quality) and other boundary conditions such as the outdoor climate data and the to be used primary energy factors and assessment procedures to reward sustainable energy use. The overarching EPB standard EN-ISO/52000-1 includes all these essential issues to be considered and refers to the total set of EPB standards where these issues are worked out in full detail.

Having these standards available is a first step, implementing them needs dissemination actions at the level of building regulators as well in our professional community. REHVA is involved in supporting this dissemination process in Europe. The EPB-Center where REHVA is a stakeholder and where the current expertise is concentrated is expected to support this process. REHVA member organisations and their members are in a strategic position to implement the assessment procedures nationally and convince their national regulators that using the CEN EPB standards is the most promising way to support reliable building energy performance rating which will stimulate innovation at the same time. ■

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