

Energy efficient HVAC and EU regulations



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During the last few years, European legislation related to energy and environmental issues has increased drastically. For example, the number of annually published regulations related to environment is now about three times higher than twenty years ago. This growing trend will continue at least in the near future, and some forecasts indicate that in 2050 we will have ten times more published new EU regulations than in 1990.

Much of this legislation is, directly or indirectly, related to building services and HVAC systems and products. This all means that HVAC professionals must be aware about the new regulations. This is huge “headache” mainly to manufacturers of products, because much of the legislation is targeted to products, or to components and substances in these products. But awareness is also necessary among other stakeholders: system designers, teachers, professional building owners, scientists – actually we all need to get more familiar with the new legislation.

European legislation is a big challenge also to REHVA, who has a very important role to inform HVAC professionals about all new issues affecting our profession and industry. In this mission, REHVA has prepared webpages on EU regulations. These webpages were a result of the initiative from our supporters and opened in May 2011.

These pages can be found at <http://www.rehva.eu/en/eu-regulations> – more about the pages can be found in my article further in this issue.

The main focus of this issue is in air-conditioning systems and products. In different parts of Europe, “air conditioning” can mean many different things. In the EPBD, “air conditioning system” *means a combination of the components required to provide a form of indoor air treatment, by which temperature is controlled or can be lowered.* This definition is interesting and leaves much space for different interpretations. But we must keep in mind that no definition can describe air conditioning so that all system variations in Europe are covered. In cold climates, “air conditioning systems” typically are centralized and include typically ventilation, cooling and also heating. Most systems in Central or South Europe are totally different. And the variety of systems for controlled indoor air is growing all the time.

So, the content of this issue is not restricted to certain types of systems or products, so also contributions looking “out of scope” can also be justified. At least one common feature can be found: the aim towards more energy-efficient technologies, without adverse effects on quality and safety of our indoor environment. Air conditioning should also be studied in a broader perspective: we may talk about products, but our customers – end users – are not really interested in products as they are, but what can be achieved by using these products in buildings and HVAC systems: health, well-being, safety – in other words, quality of life.