

Experts are concerned about unhealthy indoor air in European buildings
REHVA position paper on indoor air quality

We, REHVA's experts of indoor air technology, representing of the scientific community, engineers, academics, industry, building owners, and facility managers would like to draw the attention of the European Commission to the wide range of negative effects caused by deteriorated indoor air in European buildings. Indoors, people are exposed to various pollutants, which cause a wide range of diseases like asthma, allergy and heart disease and many other minor health problems. A poor indoor environment and poor indoor air quality in particular also reduces productivity, performance at work and learning in schools.

Already in 2009, the EnVIE¹ project, funded by DG Sanco, reported that we lose about 2 million disability adjusted life years annually (DALYs) in EU-27 due to exposure to various pollutants indoors. The conclusions of this report also underlined the need for an integrated approach to tackle effectively poor IAQ, through a Green Paper aiming at: coordinating future policies with existing legislative tools; promoting a dialogue among all relevant stakeholders; and contributing to the holistic view needed for the management of the built environment.

We point out that – on average - European people spend 90 % of their life indoors, and are exposed, most of the time, to pollutants either from indoor or outdoor sources. Existing technologies allow to effectively protect people from the pollutants from outdoors (like particles from combustion processes) and as well pollutants from indoor sources (with better control of moisture damages and with low emission materials and consumer products). This is why we call for the consideration of indoor air quality policy actions in the context of the European Year of the Air.

During last decade, energy efficiency of buildings has gained a lot of attention due to EU ambitious energy efficiency targets. However, building energy use related legislation has been developed without paying enough attention to indoor air quality. The binding goals for energy savings have not been complemented with binding requirements of indoor air quality. The statement in the EPBD recast directive that indoor air quality cannot be compromised needs further regulatory actions to be realised. There is a great danger that energy is saved while the indoor air quality is deteriorated, causing health problems and loss in productivity in work. Although we strongly support the target of nearly zero energy buildings by 2020, proper requirements for indoor air quality shall be set to ensure that energy efficiency initiatives do not jeopardize indoor air quality, and thus the health of building inhabitants.

Recently, the HealthVent² project report revealed the lack of regulations on indoor air quality and ventilation at European level, and that national regulations do not exist or are not harmonised, and in many cases not properly formulated. For example, current ventilation regulations and practices in the EU do not properly address the connection between outdoor and indoor pollution and the

¹ <http://www.envie-iaq.eu/>

² www.healthvent.byg.dtu.dk/

problems it causes. During the HealthVent launch event held in the European Parliament on 20 February 2013, experts pointed out that air cleaning strategies are needed, with adequate design and proper maintenance of ventilation systems, when World Health Organization (WHO) air quality guidelines are not fully complied with.

The lack of harmonisation between the national ventilation regulations prevent progress on indoor air quality as well as engender increased costs to the construction industry. The work done by the WHO and the CEN is important but not sufficient. In addition, there is significant scientific evidence on the health benefits of improved indoor air quality through source control, ventilation technology and adequate filtration of incoming air.

In light of these findings, there is an urgent need for concrete actions at EU level to promote harmonisation and improve indoor air quality in EU buildings.

In the context of the 2013 Year of the Air, REHVA calls upon the European Commission to follow the recommendation of the EnVIE report to develop a Green Paper on indoor air quality to launch the policy debate and assess the different policy options to fully tackle indoor pollution, and include the indoor air quality issues in the directives related to air quality.

In addition the Commission should:

- Develop health based ventilation guidelines to control exposure to pollutants from indoor and outdoor sources, indoor moisture and ensure comfortable indoor temperature and mandate regular inspection and maintenance for all ventilation systems;
- Integrate Indoor Air Quality into the EU Climate Action agenda, the implementation and future evolution of the Energy Performance of Buildings Directive EPBD and Eco-design and energy labeling directives.
- Take concrete measures to effectively implement the priorities set out in the 7th Environment Action Programme, and in particular provisions on indoor air quality.

REHVA experts remain at your disposal for further information and consultation

Brussels, 24 October 2013

On behalf of REHVA Indoor Air Quality Experts

Sincerely yours



Jan Aufderheijde
REHVA Secretary General



Professor Karel Kabele
REHVA President

REHVA, the Federation of European Heating, Ventilating and Air-conditioning Associations represents 100 000 experts in 26 European countries is an independent, non-commercial professional organization established in 1963 with headquarters in Brussels, see www.rehva.eu