Health & Comfort

With focus on aerosols, IAQ and comfort. At the same time, we are aware of EU policy actions like the Green Deal, Renovation Wave, Fit for 55 by 2030 and Repower EU plan which are the drivers for the ongoing EPBD (2018) revision expected to be published beginning 2023. The updated draft EPBD provides more attention to health and comfort. In the renovation wave program, there is a focus on tackling energy poverty and worst-energy performing buildings towards healthy housing.

By referring in EPBD Annex 1 to EN16798-1 there is an incentive to include an IEQ performance indicator in the EP Certificate and by doing so, include the energy use of absent or underperforming building systems in the EP. In the expected EPBD this is still softly addressed in art.4 (related to MEPS), and in art.6 (New Buildings) IEQ issues shall be addressed. Annex 1 art.2 says: … indoor, conditions, and in order to optimise health, indoor air quality and comfort levels defined by MS's. We hope that this language will stay, or even better, become stronger. We all know that the health costs due to poor IEQ in buildings is much higher than the energy use possibly related to a better IEQ!

The current situation in Europe, the high fuel prices and shortages due to Europe's dependency on Russian fuel supply and the war in Ukraine requires many people to accept lower thermal comfort levels during this winter season. In many countries the government advises or requires lower temperatures in buildings during the winter. This will lead to thermal discomfort at workplaces and in houses where people cannot afford the high fuel prices. This will affect productivity at workplaces and may cause health issues in residential buildings. Compensation with higher activity levels (think of the elderly) and more clothing is not always possible. Working behind the computer keyboard as many persons do, will be hindered by lower temperatures of the hands and fingers.

Saving on fuel cost and at the same time ask for better ventilation to avoid high COVID-19 infection risk levels is also a challenge. In many existing situations like in schools heat recovery systems are not present or designed for higher ventilation rates. At the same time school building management is confronted with high energy costs and the requirement to install CO_2 sensors in classrooms to stimulate better (often natural) ventilation. These are challenges which are easier to cope with if during the last 10–20 years school building operators had been more responsive on the widely reported poor IEQ in school buildings.

But we have to be realistic, these reduced comfort levels and higher costs are small offerings compared to the suffering of the people of Ukraine. ■

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