

Efficient and Healthy Buildings: the road ahead for IAQ/IEQ in improving quality of life

Dominik Flikweert, Head of Public Affairs EMEA Brussels, 26 June 2024, for the **European Lighting Forum**

Roadmap

- 1. What does the EPBD mandate for IEQ?
- 2. Why does the EPBD need IAQ requirements?
- 3. What are our concerns on the implementation?

IAQ by Design, not Demand



About Systemair

1974

Founded in Skinnskatteberg, Sweden

1,100 MEUR

R12 Turnover Annual net sales

2007

NASDAQ OMX Nordic Exchange 51

Number of countries with own sales companies

6,600

Employees

26

Own production facilities in 17 countries

132,000

Annual customer visits

>143

New products released for sale 2023/24

135

Countries exported to



Systemair Group Presentation

Mission

We create better air. Everyday. Worldwide.



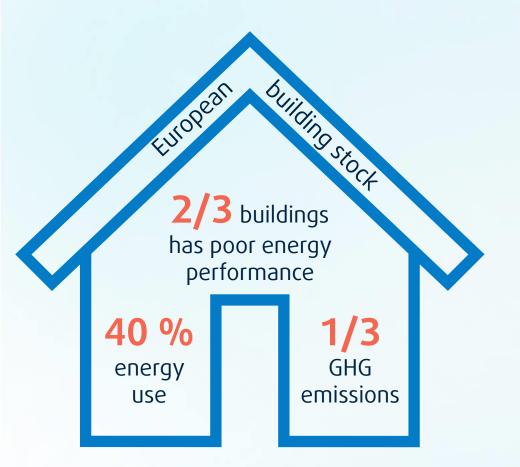


Fostering Healthy Buildings

What does the Energy Performance of Buildings Directive (EPBD) mandate for IAQ / IEQ?



Continued focus on energy efficiency...



- New and more stringent energy performance requirements
- Renovation Passports
- Renovation strategies for Member States
- And more...



... with comfort, health, and wellbeing

For the first time ever, the EPBD sets mandatory IEQ requirements:

- Member States obliged to ensure adequate IEQ standards for a healthy indoor climate
- EPDs must include recommendations for optimal IEQ
- BACS must have minimum IEQ functions:
 >290 kW buildings from 2024 and >70 kW buildings from 2029
- SRI with focus on IEQ: mandatory from 30 September 2029



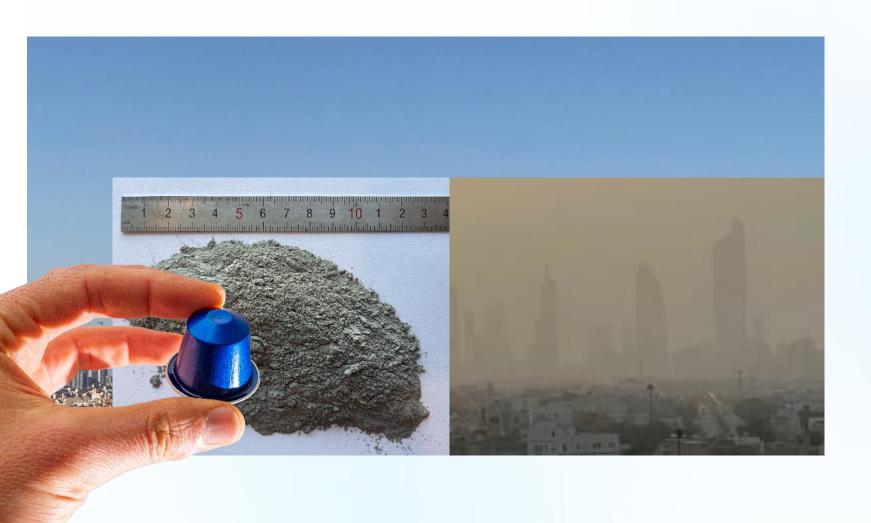
You are what you breath

Why does the EPBD need IAQ requirements?

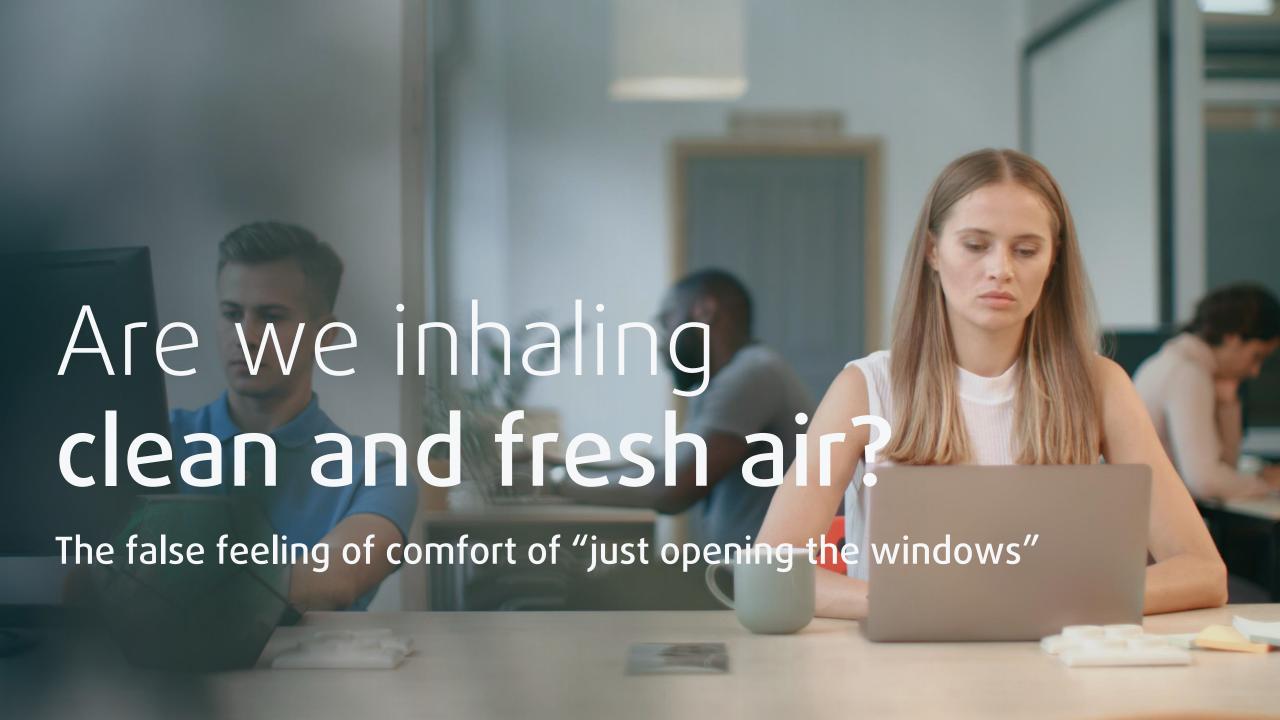


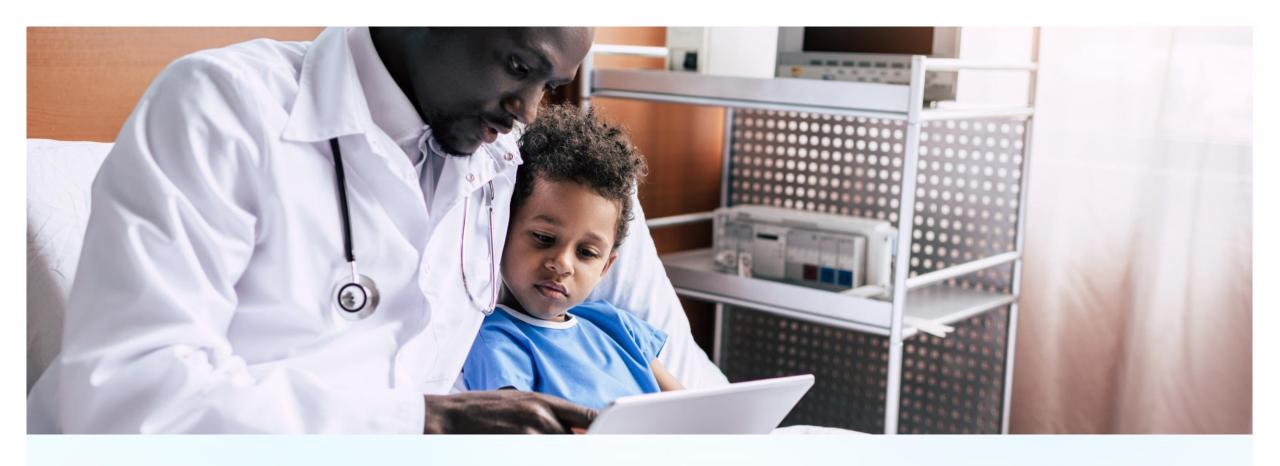
We inhale half a litre of air with each breath.











Consequences?



Sickness → 150,000 premature deaths



Absence & **Productivity** → € 260 B GDP loss



Energy → up to 26 % savings unutilised



Source: WHO

What's the remedy? Air needs to be

Stale

Unconditioned (RH %)

Contaminated

Stagnant

Stuffy (CO₂ level)



Healthy buildings



Pleasant



Safe



Energy Efficient

Ventilation & Filtration



We are all part of the same aquarium and cannot buy a bigger one!



The usual from Member States

What are our concerns on the implementation? (Spoiler: it's in the title)



A Member States' responsibility

Transposition deadline29 May 2026

But will they do it right?..



What even is IEQ?: Lack of clarity



(66) 'indoor environmental quality' means the result of an assessment of the conditions inside a building that influence the health and wellbeing of its occupants, based upon parameters such as those relating to the temperature, humidity, ventilation rate and presence of contaminants.



- What kind of assessment?
- Influence how?
- Which parameters?
- 'Such as' is non-exhaustive?



Everything is so vague: are Member States good with that?



This could be positive for lighting

27 different EU requirements for the same?

Member States now must decide on:

- Which 'adequate IEQ standards'?
- What is a 'healthy indoor climate'?
- What recommendations in EPDs?

- For the first time ever, the EPBD sets mandatory IEQ requirements: Member States obliged to ensure adequate IEQ standards for a
- EPDs must include recommendations for optimal IEQ
- BACS must have minimum IEQ functions: 2290 kW buildings from 2024 and >70 kW buildings from 2029 SRI with focus on IEQ: mandatory from 30 September 2029

Risk of further market fragmentation, slowing down IEQ uptake!

- BACS: focus on non-residential, and what are 'minimum functions'?
- SRI: potential for IEQ but with many uncertainties

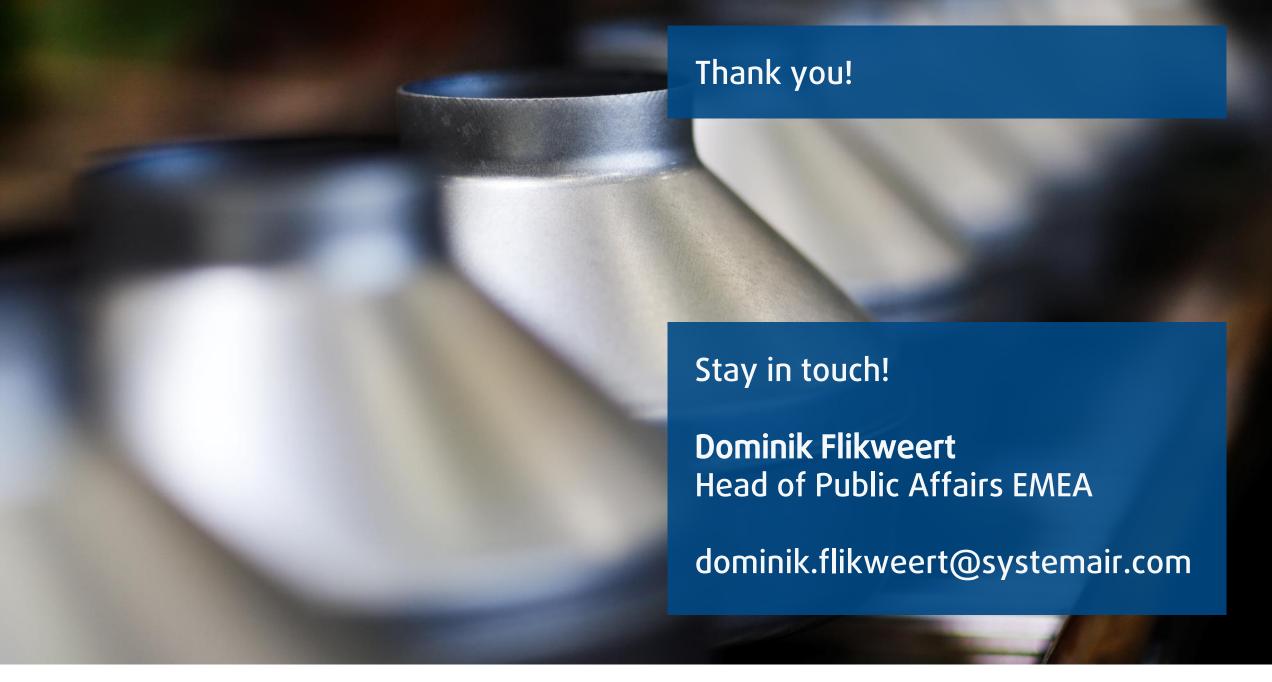


How to avoid market fragmentation?

- Commission Guidelines
 Clearly outlining IEQ recommendations
- Alignment between industries
 Avoid proliferation of manifestos, gain support from academia, speak with one voice
- Awareness raising
 Events and trainings for building institutes, investors, installers, suppliers, end-users...









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