

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

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

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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

51

Number of countries
with own sales companies

6,600

Employees

1,100 MEUR

R12 Turnover
Annual net sales

26

Own production
facilities in 17 countries

132,000

Annual
customer visits

2007

NASDAQ
OMX Nordic Exchange

>143

New products
released for sale 2023/24

135

Countries
exported to

Mission

We create better air.
Everyday. Worldwide.



Vision

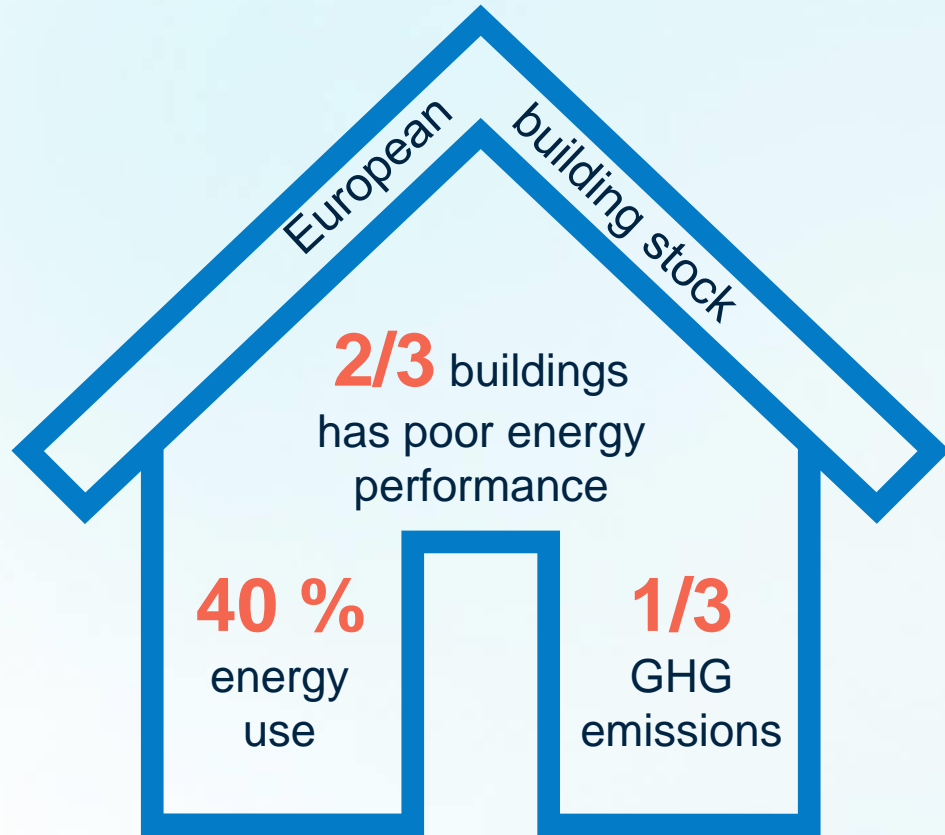
We will be your most efficient
and helpful partner in mastering
your indoor air quality challenges.



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

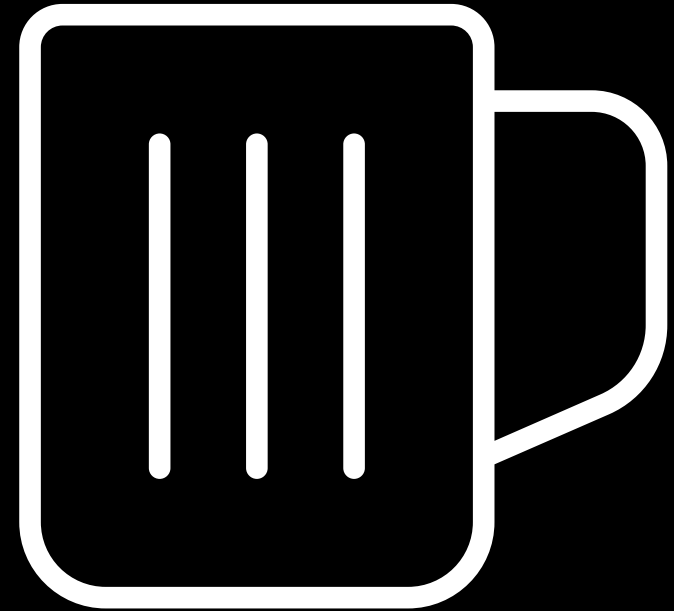
For the first time ever, the EPBD sets mandatory IEQ requirements:

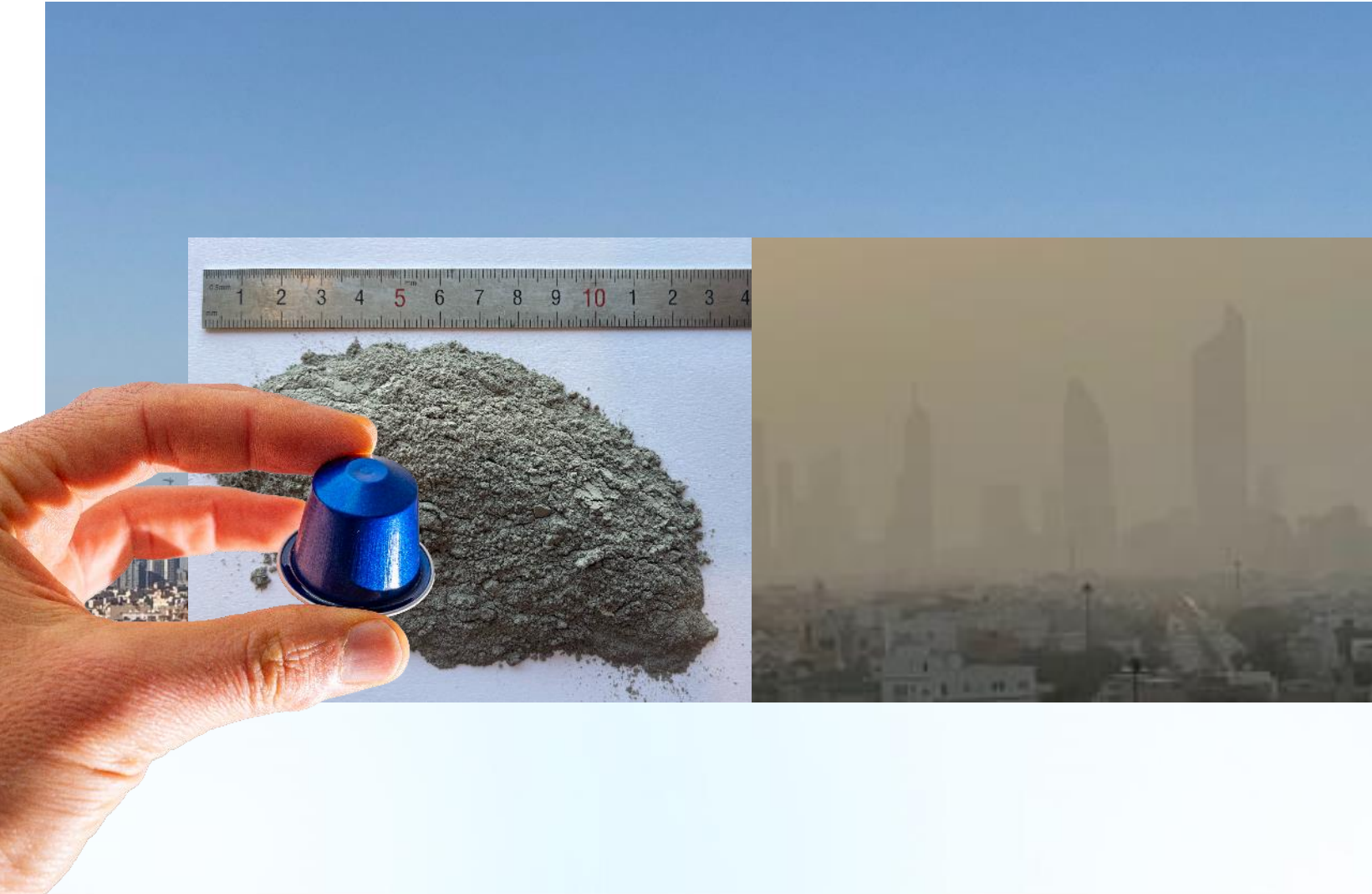
- Member States obliged to ensure **adequate IEQ standards for a healthy indoor climate**
- EPDs must include **recommendations for optimal IEQ**
- **BACS must have minimum IEQ functions:**
>290 kW buildings from 2024 and >70 kW buildings from 2029
- **SRI with focus on IEQ:** mandatory from 30 September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

You are what you breath

Why does the EPBD need IAQ requirements?

We inhale half a litre
of air with each breath.

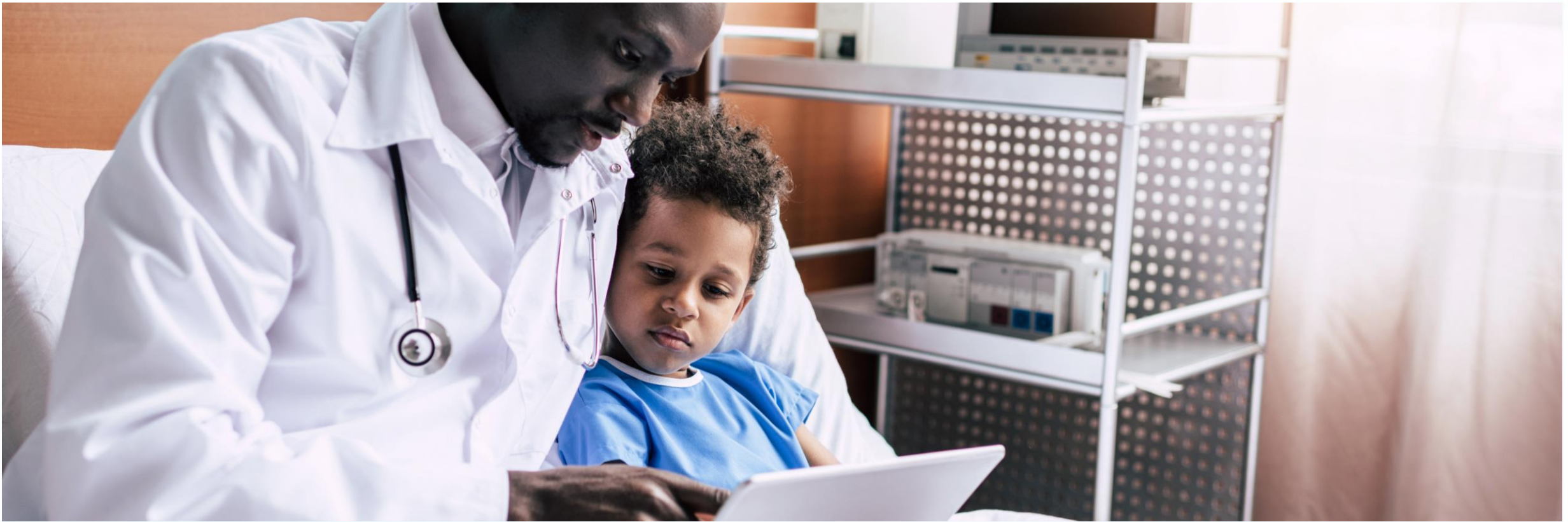






Are we inhaling
clean and fresh air?

The false feeling of comfort of “just opening the windows”



Consequences?



Sickness → 150,000 premature deaths



Absence & Productivity → € 260 B GDP loss



Energy → up to 26 % savings unutilised

What's the remedy? Air needs to be

Stale

Unconditioned (RH %)

Contaminated

Stagnant

Stuffy (CO₂ level)

Healthy buildings



Pleasant



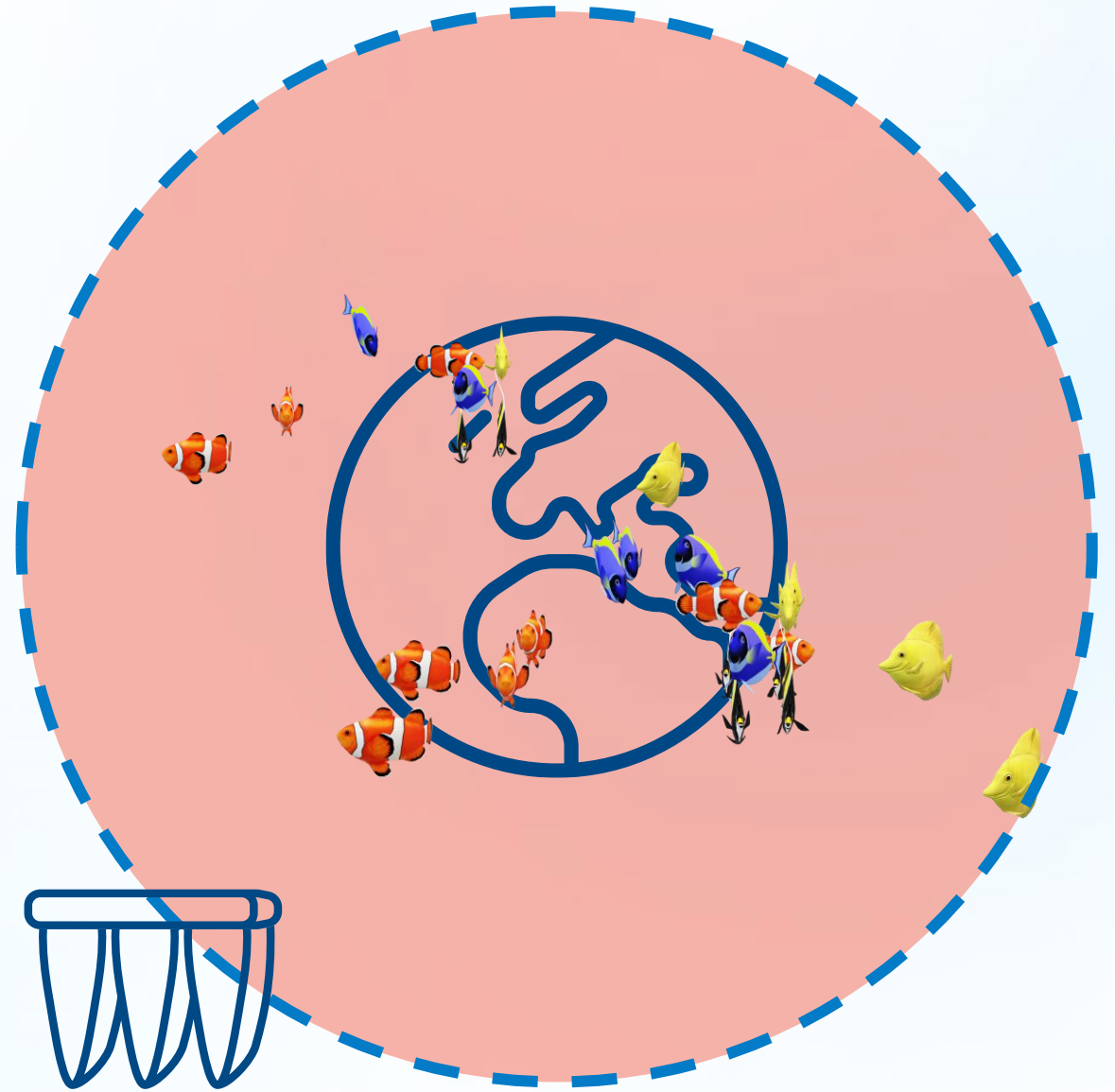
Safe



Energy Efficient

Ventilation & Filtration

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

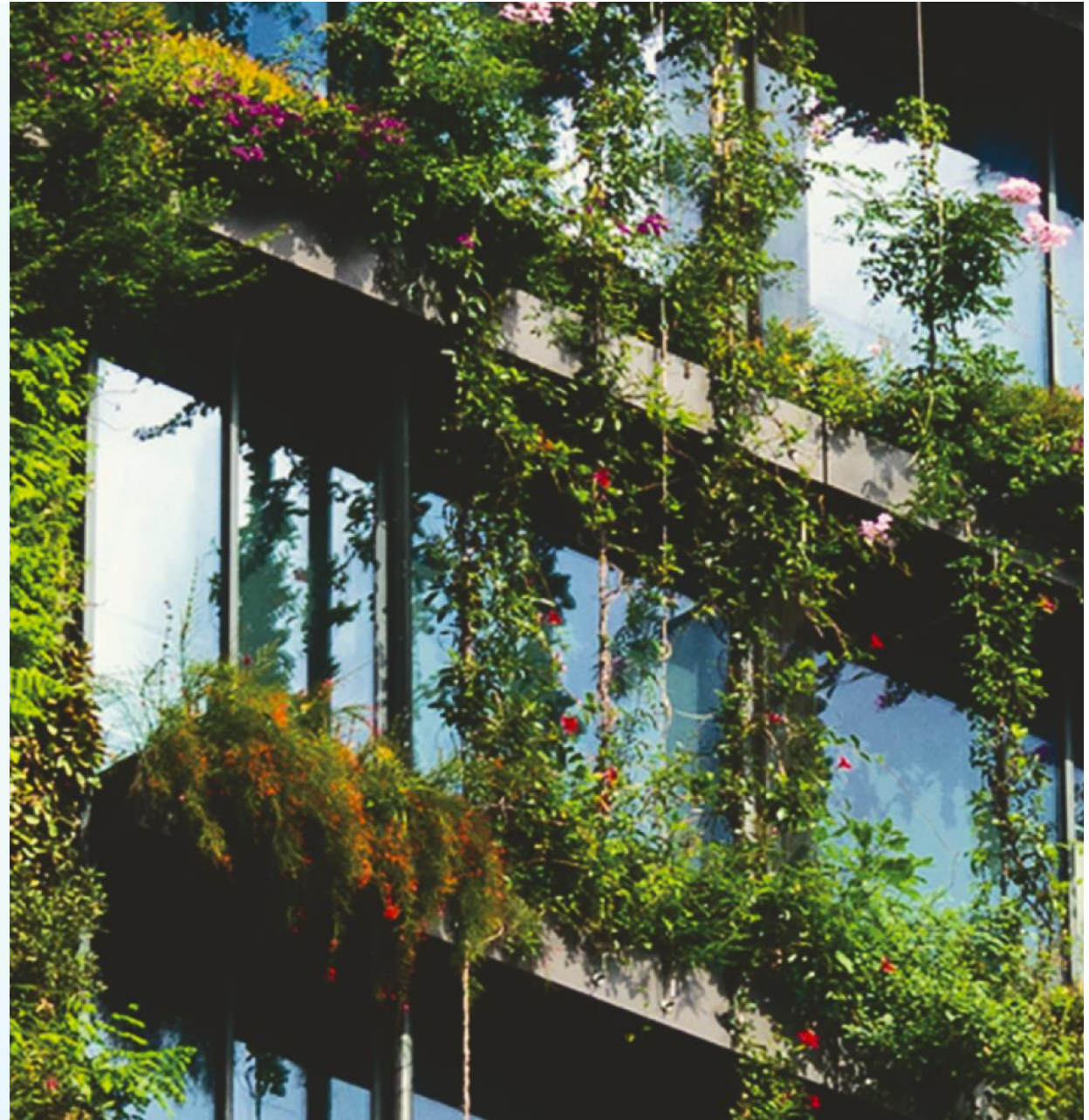


The usual from Member States

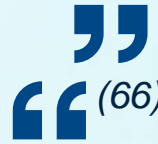
What are our concerns on the implementation?
(Spoiler: it's in the title)

A Member States' responsibility

- Transposition deadline
29 May 2026
- But will they do it right?..



What even is IEQ?: Lack of clarity

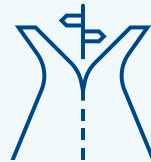


(66)

*'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 is tricky: opportunities for some (such as lighting),
but also, a possible cause of deviation between Member States*

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?

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

Reminder

For the first time ever, the EPBD sets mandatory IEQ requirements:
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• EPDs must include **recommendations for optimal IEQ**

• **BACS must have minimum IEQ functions:**
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• **SRI with focus on IEQ:** mandatory from 30 September 2029

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...





Thank you!

Stay in touch!

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Thank you!

Do you have any questions?
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AMCA European Fan Symposium 2024