



Ausschuss zur
gesundheitlichen
Bewertung von
Bauprodukten

Impact of „indoor air quality“ on health

**EnVIE Approach:
effects – exposures – causes/sources - policies**

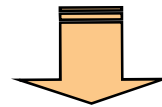


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**How to attribute diffusive health complaints to
measurable parameters in IAQ?**

**How to prove where there are only hints
- but comparable experiences?**

How to identify the relevant substances in IA?



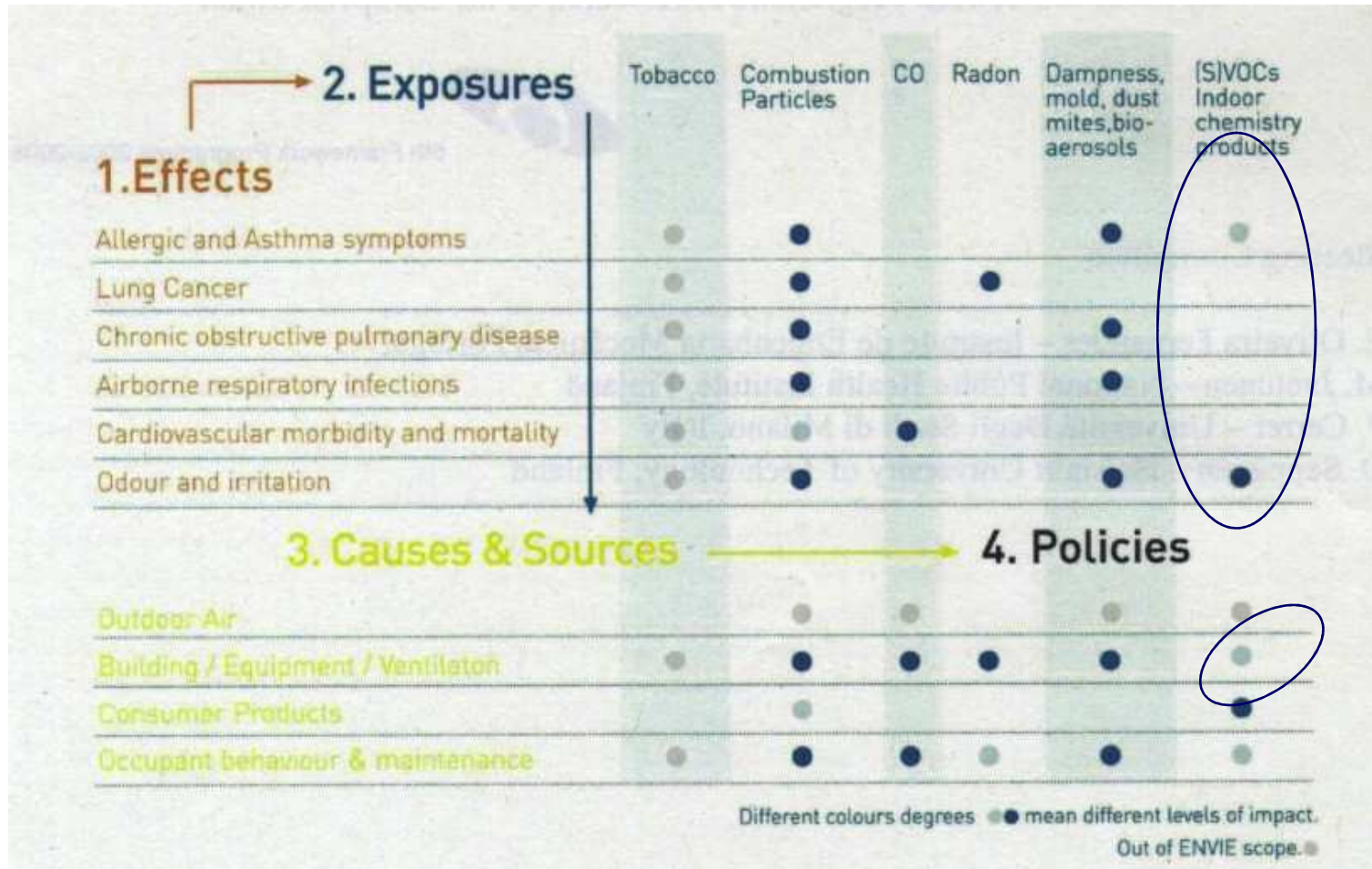
How to convince politicians to act?



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Questions to the workshop participants

1) To what part of the graphic can we contribute?





Questions to the workshop participants

2) Cause-effect attributions? Health-indicators? How to prove?

In 2006, also BMU wanted a basis of evidences for the need of regulatory measures concerning emission control of building products

Revision of literature in the past decade, are the conclusions of ECA Report 18 still valid?

→ R&D to Fraunhofer Institute ITEM

Human Health Effects of VOC and SVOC Emissions from Building Products – Overview on recent literature (past 10 years)

- **Controlled human exposure studies:**
 - about thresholds of odour and/or irritation
 - single substances
 - evidence that mixtures more potent
- **Epidemiologic studies and case reports:**
 - wide variety of settings and parameters checked – poor comparability, but indicators to justify reduction measures for emitting indoor products
- **Contribution to SHER opinion**



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Questions to the workshop participants

3) Steps of progress? Knowledge, practice and policies?

2000: AgBB proposal of emission reduction for building products

2001: 1st Hearing with relevant stakeholders on industry's side, regulators, scientists, labs, NGOs

2002 – 2004 Introduction period with collection of experiences for a broad range of products

2004: 2nd Hearing

2005 Insertion of AgBB scheme into approval requirements in building sector

Notification..

2007 International Conference,

.....steps towards harmonisation of evaluation in EU

Questions to the workshop participants

4) Main obstacles for improvement of IAQ?

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- Indoor environment in private homes is not a feasible object for regulatory measures..

Privacy, protected sphere

most obvious example: ETS!

How to protect children from smoking habits of surrounding adults?

- globalised market, improvement of awareness in EU may be overrun – control mechanisms?

- Energy-tightness of buildings



Questions to the workshop participants

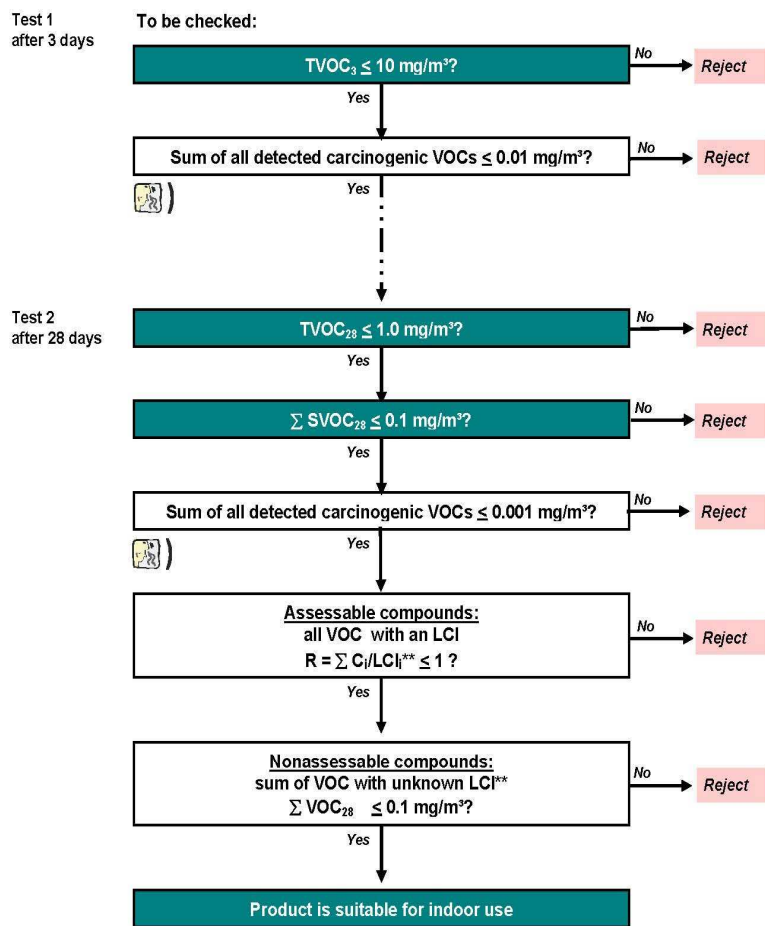
5) Most urgent proposals for EU policies and guidelines on IAQ?


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- Link between sustainable buildings and IAQ!
- Improvement of surveillance measures on the market for compliance with health standards and
- Emission reduction by source control



Fig. 1: FLOW CHART FOR THE EVALUATION OF VOC* AND SVOC*EMISSIONS FROM BUILDING PRODUCTS



 Generally accepted methods for sensory tests expected to be performed at this stage have yet to be agreed upon.

* VOC, TVOC: Retention range C₆ – C₁₆, SVOC: Retention range C₁₆ – C₂₂

** LCI: Lowest Concentration of Interest (German: NIK)

European Emission Test Standard prEN ISO 16000-9 to -11

UBA II 1.3 - AgBB
Sept. 2006

German Approach: Source control for chemical emissions with 3 fundamentals:

1. limits for the total amount of emissions– TVOC, TSVOC
2. assessment of toxicological relevance of emitted substances
3. limits for non-assessable substances (precautionary principle)



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Neighbourhood issues in UBA:

Recent publication of the German Environmental Survey IV..