

Für Mensch & Umwelt

Umwelt 
Bundesamt

Limiting Health Impacts of Construction Products / 20th April 2021

The EU policy context and needs for action

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WHO Guidelines for Indoor Air Quality (2010)

Zsuzsanna Jakab, Director of the World Health Organization's Regional Office for Europe:

“Clean air is a basic requirement of life. The quality of air inside homes, offices, schools, day care centres, public buildings, health care facilities or other private and public buildings where people spend a large part of their life is an essential determinant of healthy life and people’s well-being.”

The European Green Deal – transformative policies

Climate neutrality by 2050

Energy decarbonisation
and universal access

Clean and circular
economy

Building and renovation



Zero pollution ambition for a
toxic-free environment

Biodiversity strategy

Farm to fork: sustainable
food systems

Sustainable and smart
mobility

European Green Deal: A renovation wave for Europe

Aim: Double the current annual renovation rate of the building stock by

- improving the enforcement of existing instruments
- adapting current instruments
- creating new incentives

Key principles:

- Energy efficiency first
- Affordability
- Decarbonisation and integration of renewables
- Life-cycle thinking and circularity
- **High health and environmental standards**
- Tackling the twin challenges of the green and digital transition together
- Respect for aesthetics and architectural quality

Level(s) - The European framework for sustainable buildings

Aim: To improve the sustainability of buildings and to provide a EU-wide approach for assessing the environmental performance of buildings using existing standards



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3 Thematic areas each with its own set of indicators

1. Resource use and environmental performance
2. **Health and comfort** $\implies$ – Healthy and comfortable spaces
3. Cost, value and risk
 - **Indoor air quality**
 - Time out of thermal comfort rang
 - Lighting
 - Acoustics

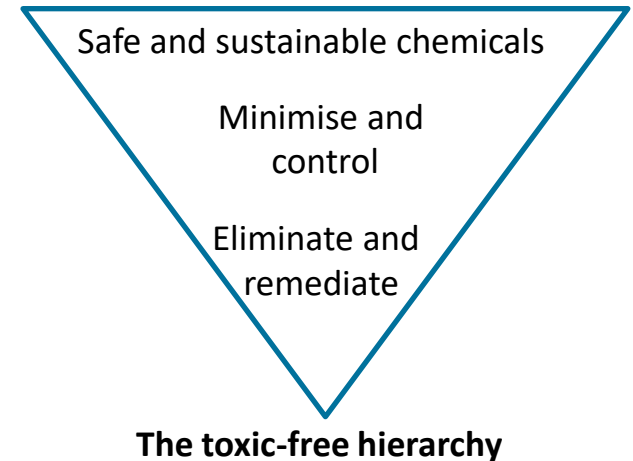
European Green Deal: Zero pollution ambition

Chemicals Strategy for Sustainability - Towards a Toxic-Free Environment

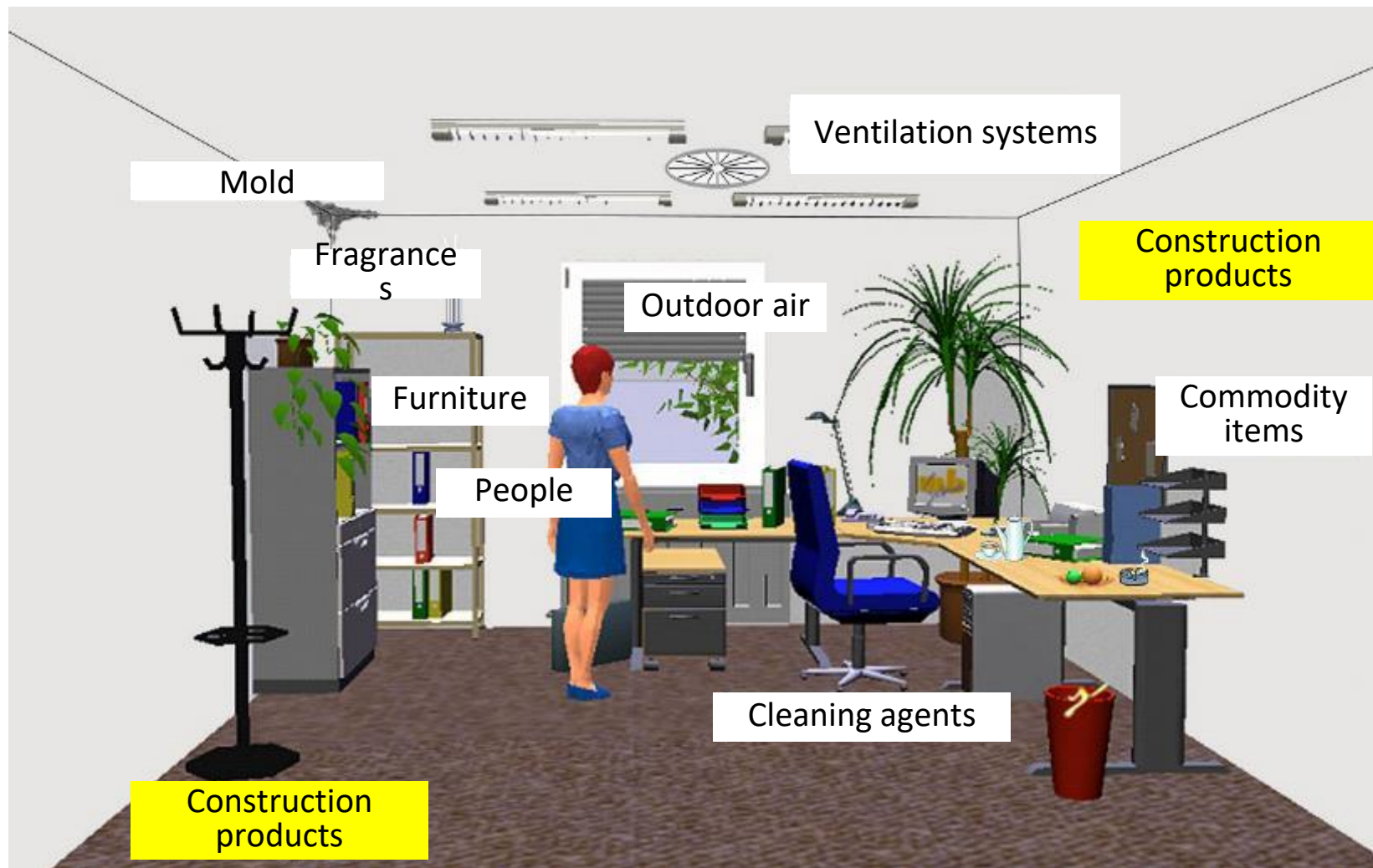
Aim: To protect the citizens and the environment against hazardous chemicals and to foster the development of safe and sustainable chemicals

Proposed actions relevant for this conference

- Ensure non-toxic material cycles by limiting chemicals of concern in products
- Assess chemical mixtures

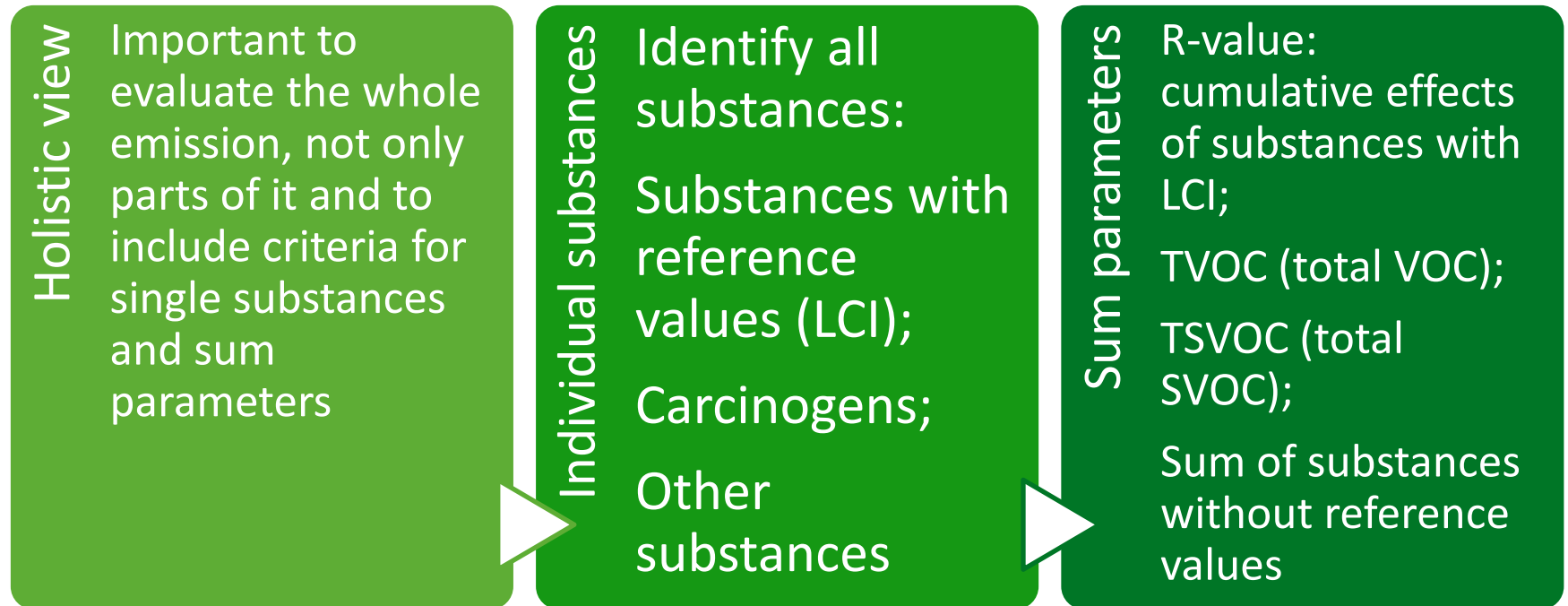


Sources of indoor air pollution



Birgit Müller, HTW Berlin, modified

How can volatile organic compounds (VOC) emissions be assessed?



LCI: lowest concentration of interest

R-value: sum of all individual substance concentration / LCI ratios
(each measured substance concentration divided through its LCI)

SVOC: semi-volatile organic compounds

Call for harmonised criteria for a reliable emission declaration of construction products

Milestones

EN 16516 “Construction products: Assessment of release of dangerous substances – Determination of emissions into indoor air” published since 2018

EU-LCI harmonisation activity for common health-based reference values ongoing

German activities

Lunch Briefing in Brussels: Roadmap for Healthy Buildings - 1st Step: Harmonisation of Health Criteria for Construction Products (2017)

German EU Council Presidency (2020)

Informal virtual meeting of the Working Party Technical Harmonisation (Construction Products) Conference “Construction Products – Fit for the Future”

<https://data.consilium.europa.eu/doc/document/ST-13596-2020-INIT/en/pdf>

<https://cpr-conference.de/live-stream/live-stream-en/>

Views of the Member States on the VOC questions

EN 16516 provides a good basis for performance declarations under the CPR. Results of the **EU-LCI** activity are unanimously welcomed.



Member States' Wish List:

- Include the declaration of VOC emissions under the CPR
- VOC classes compatible with a high level of protection for all building users
- VOC classes with at least three performance levels
- An informative assessment in the form of a pictogram with colour scale for consumers
- Class criteria: At least EU-LCI, R-value, CMR, TVOC, ambitious benchmarks for formaldehyde
- Fast implementation of the VOC emission classes.

CPR: Construction Products Regulation

CMR: Substances classified as carcinogenic (C), mutagenic (M) or toxic for reproduction (R)

Conference Aim

To revitalise the discussions on a harmonised communication of VOC emissions from construction products by focusing on a specific proposal.

Conference Outline

20. April

- Current policy framework
- State-of-the-art knowledge in the area of construction products emissions into indoor air and their evaluation

21. April

- Discussion on a specific proposal for VOC classes and ways of implementation



**International Online
Conference
Limiting Health Impacts of
Construction Products
Regarding VOC
20.-21.04.2021**

Looking forward to your contributions towards a common solution for good indoor air quality in buildings

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