

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

  - 3. Cost, value and risk

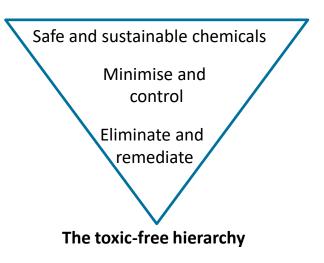
- Indoor air quality
- Time out of thermal comfort rang
- Lighting
- Acoustics

# **European Green Deal: Zero pollution ambition Chemicals Strategy for Sustainability - Towards a Toxic-Free Environment**

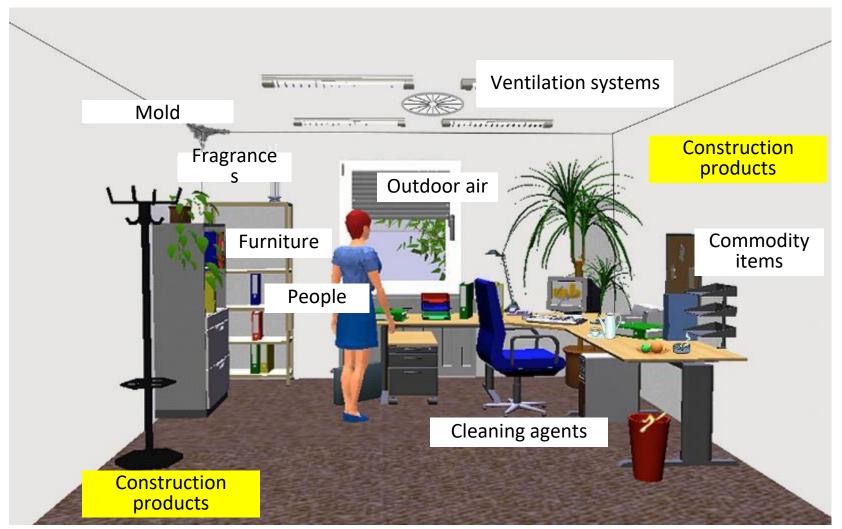
**Aim:** To protect the citizens and the environment against hazardous chemicals and to foster the development of safe and sustainable chemicals

### **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?

Important to
evaluate the whole
emission, not only
parts of it and to
include criteria for
single substances
and sum
parameters

Identify all substances:
Substances with reference values (LCI);
Carcinogens;
Other substances

R-value:
cumulative effects
of substances with
LCI;
TVOC (total VOC);
TSVOC (total
SVOC);
Sum of substances
without reference
values

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's 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

# Umwelt Bundesamt

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

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