

German Environment Agency

Umwelt 
Bundesamt

Environmental Aspects in Public Procurement in Europe

Toxic-Free Procurement

Dr. Johanna Wurbs

Section III 1.3 Ecodesign, Environmental Labelling,
Environmentally Friendly Procurement

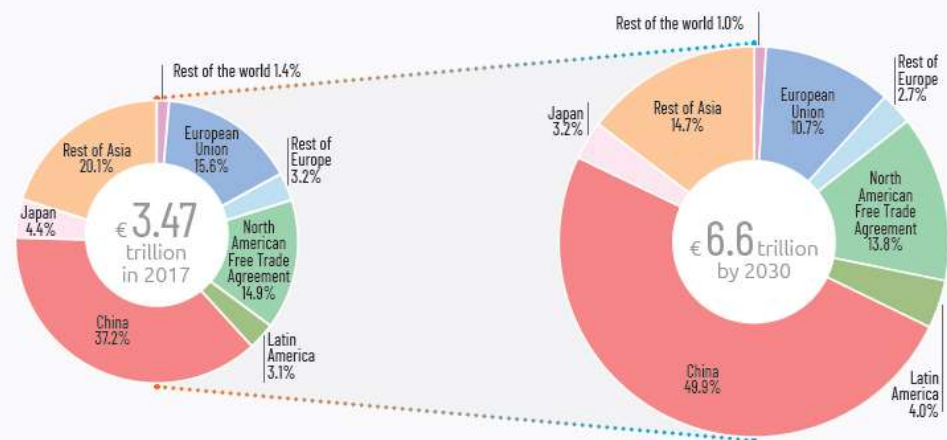
Starting Point: Use of more and more chemicals

Must read:

UN Environment: Global Chemicals Outlook II

From Legacies to
Innovative Solutions
Synthesis Report (2019)

Figure 4 Projected growth in world chemical sales (excluding pharmaceuticals), 2017-2030
(adapted from European Chemical Industry Council 2018, p. 34)



Global chemical sales (excluding pharmaceuticals) are projected to grow from EUR 3.47 trillion in 2017 to EUR 6.6 trillion by 2030. Asia is expected to account for almost 70 per cent of sales by then.

Source: Global Chemicals Outlook II

- Amount of produced chemicals doubles circa every 15 years, Shifting to Asia
- Chemicals:
Chemicals for industrial production, biocides, plant protection

Environmental Pollution caused by Chemicals

Chemicals facilitate to produce a lot of helpful products.

But: Chemicals / Emissions also cause problems by pollution

- Pollution of water, soil and air
- Pollution of workers
- Pollution of consumers via food, drinking water, indoor air



Foto: wastewater from leather industry / B. Zietlow



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Per- and polyfluoroalkyl substances in blood plasma – Results of the German Environmental Survey for children and adolescents 2014–2017 (GerES V)

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Regulations and Policy Goals on Chemicals

United Nations

- Binding Conventions: Stockholm (POPs), Basel (waste), Rotterdam (PiC), Minamata (mercury)
- Voluntary Agreements: SAICM-Process,



12.4 By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, ...

→ Not successful

European Union

- Regulations on Chemicals and Industrial Production: REACH, CLP, Biocides, Pesticides, Detergents, Industry Emissions,
- Regulations in certain Articles: RoHS (Electronics), Toys, Tyres,

Green Deal: Towards zero-pollution for a toxic free environment	Timetable
Chemicals strategy for sustainability	Summer 2020
Zero pollution action plan for water, air and soil	2021
Revision of measures to address pollution from large industrial installations	2021

Chemicals in Public Procurement

Case 1:

Use of chemicals because of their toxic properties

- Weed control
- Pest control (insects, bedbugs, rats, mice)
- Desinfection
- Wood protection
- ...

Case 2:

Use of „classical chemical products“ (mixtures)

- Detergents
- Paints / Varnishes
- Lubricants
- Deicing chemicals (e.g. airports)
- Fire extinguishing agents
- ...

Case 3:

Use of chemicals during the production process (emissions) or additives (in articles)

Production

- Textiles / Leather: Dyeing, Finishing
- Metals extraction (e.g. Gold)
- Production of pulp in paper mills
- ...

Product additives

- Flame retardants, plasticizer

Case 1: Pest control, weed control, material protection - Examples of research and guidance (UBA)

Approaches: 1) avoidance or 2) appropriate use of the chemicals.

- Website [Biozid-Portal](#) of UBA (in German, mainly for Consumers)
- Non-Chemical Alternatives for Rodent Control ([NoCheRo](#)), research on rodent control measures are contaminating fish
- Conference and Information on [Pesticide-Free Communities](#) (in German)
- Ongoing research project on „Biocides in Procurement“



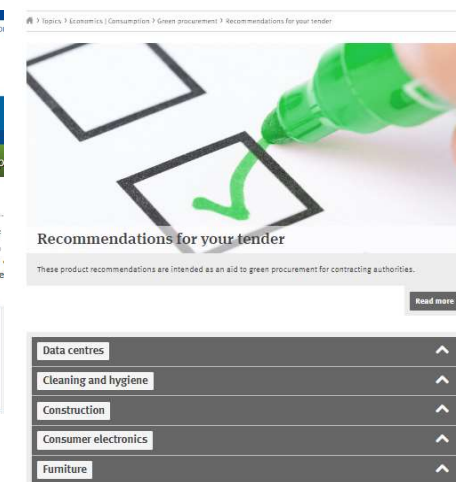
In two European workshops, the necessity and relevance of traps as adequate non-chemical alternatives in rodent control were discussed with different stakeholders from industry and authorities to scientific community. As a result, a draft guidance on the assessment of efficacy and animal welfare impact of traps was developed. Further background information on this initiative is provided below.

Case 2 and 3: critical (toxic/dangerous) chemicals in products and production processes – Guidance

Approaches: 1) avoidance/replacement (e.g. CMR-substances)
2) reduction of use or emissions

- Ecolabel, if they
 - consider the whole life cycle of the product
 - assess all environmental impacts
 - stakeholder consultation
 - have a third party certification
 - **criteria refer to the purchased product**

- GPP-Guidance Documents
 - from the European Union
 - from Environment Agency (UBA)
 - from ...



Thank you very much for your attention!

Dr. Johanna Wurbs

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www.beschaffung-info.de (German)

<https://www.umweltbundesamt.de/en/topics/economics-consumption/green-public-procurement> (English)