

An tÚdarás Sláinte agus Sábháilteachta Health and Safety Authority EU Chemicals Strategy for Sustainability Conference

October 18th 2023

Welcome

CPC Environmental Protection Agency An Genioarthalizedet um Cheomitrul Comisibaci

EU Chemicals Strategy for Sustainability

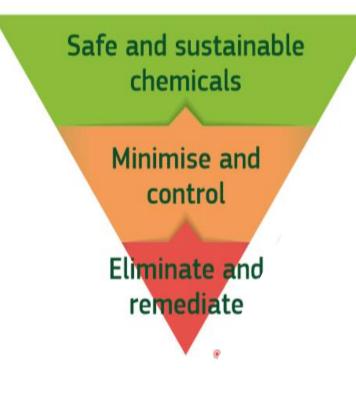
Update by Cristina de Avila, DG Environment, European Commission Dublin, 18 October 2023

#ChemicalsStrategy #EUGreenDeal



European Commission

European Green Deal Vision – towards a toxic-free environment



- Chemicals are produced/used in a way that maximises their benefits to society while avoiding harm to planet & people
- Production and use of safe and sustainable chemicals becomes the EU market norm and a global standard



Chemicals Strategy for Sustainability

Boosting innovation	Strengthening legislation for better protection	Simplification & coherence	Knowledge and science	Global
 Strategic R&I plan for chemicals and materials (Oct 22) Commission recommendation on safe and sustainable by design criteria (Dec 22) Research funding Taxonomy delegated acts (June 23) 	 Water Package (Oct 22) Eco-design regulation (Mar 22) Industrial Emissions (Apr 22) REACH restriction roadmap (Apr 22) CLP regulation (Dec 22) Maximum levels for food contaminants (Lead, Cadmium, Aug 22); PFAS (Dec 22) Toy safety regulation (July 23) 	 Horizontal proposal on (re-)attribution of technical work on chemicals to EU Agencies Horizontal proposal on improving access, sharing and re-use of chemical data Proposal for a basic regulation of the European Chemicals Agency 	 Strategic research and innovation plan for chemicals – Oct 22 European partnership for the assessment of risks from chemicals (PARC) – May 22 Indicator framework 	 Proposal of new hazard classes to UN Global Harmonised System for Classification – Jan 23 International Framework on Chemicals – Sep 23 Funding for developing countries Export ban on chemicals banned in the EU
	REACHEssential use			European Commission

Cosmetics product

REACH revision

1. Unaddressed risks

- New testing requirements for some polymers
- New testing requirements to assess endocrine disruption
- Request more granular information on use and exposure
- Increase information requirements (use and exposure, low tonnage substances, and modify for requirements higher tonnage substances)
- Include additional hazard classes in the Substances of Very High Concern
- Lower a safe level of a chemical by certain factor to address risks of unintentional co-exposures
- Set maximum tolerable level of risks for chemicals for which it is not possible to calculate a safe level
- Extend the requirements to conduct a Chemical Safety Assessment for low tonnage substances

2. Low efficiency of regulatory processes

- Extending the generic restrictions to additional hazard classes and to professional uses
- Simplification of the authorisation regime
- Introducing essential use concept and using it as a criterion for granting authorisation or derogation from restriction

3. Insufficient compliance

- Establish a European Audit Capacity
- Provide a mandate to OLAF on illicit chemicals
- Mandate ECHA to **revoke registration numbers** for persistently non-compliant registration dossiers
- Provide for the possibility for access to justice, collective redress and to claim compensation for damages related to non-compliance



Essential use

Linked to generic risk approach

The use of a most harmful chemical will only be allowed if:

- It is necessary for health, safety or it is critical for the functioning of society, and
- There are no alternatives that are acceptable from the standpoint of environment and health *In other words*:
- Decide whether the use of a chemical in a specific application (including the specific feature it provides) is essential or not
- Allows the use of substances with important societal value (protective equipment, climate neutrality..)
- Incentive to make use of safer alternatives where they exist

Commission guidance document



One substance one assessment

Make safety assessment processes

- simpler and more transparent
- faster as well as more consistent and predictable



Stakeholders are timely informed, have access to underlying data and can provide informatio

Initiation	Allocation	Data	<u>Methodologies</u>
 Synchronised and coordinated Assessments of groups of substances 	 Clear responsibilities Making best use of available resources and expertise Good governance and cooperation 	 Easily findable, accessible, interoperable, secure, of high quality Shared and reused by default 	 Coherent To the extent possible harmonised Hazard assessment centralised under CLP Regulation

One substance, one assessment



One substance, one assessment

Horizontal proposal on attribution of tasks to EU Agencies

- More than 50 tasks identified for attribution primarily to ECHA but also to EEA and EFSA
- Efficiency gains from the attributions to Agencies,
- Resources required for Agencies will increase compared to today

Proposal for a basic regulation of the European Chemicals Agency

- Ensuring financing stability of ECHA
- Restructuring ECHA's committees to deal with increased workload

Horizontal proposal on improving access, sharing and re-use of chemical data

- Making data on chemicals held by EU institutions available at one place
- Allowing for re-use of chemical data across legislation and institutions
- Mechanism for notification of studies
- Mechanism to allow authorities to generate data in particular situations
- Increase use of academic data in regulatory decision making
- Indicator framework





Export ban

- Chemicals strategy for sustainability: « ensure that hazardous chemicals banned in EU are not produced for export, including by amending legislation as needed »
- Objectives: increase protection human health and environment globally and apply uniform measures in all EU countries
- Regulation 649/2012 concerning export and import of hazardous chemicals (Rotterdam Convention on Prior informed consent) (PIC)
- Commission launched a study collecting information for impact assessment
- Public consultation went from 8 May to end of July 2023
- Proposal planned in 2024



Thank you

EU Chemicals Strategy for Sustainability

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EU Chemicals Strategy for Sustainability Conference

October 18th 2023

Chemicals and the Environment The European Environment Agency's perspective

Jeanne Vuaille / EU Chemicals Strategy for Sustainability Conference / 18-10-2023

The European Environment Agency



- 7 programmes
- 2 where chemicals are work area:
 - Biodiversity, Health and Resources
 - Climate change, Energy and Transport



Copenhagen, DK

The European Environment Agency and Eionet network



- Data and information collection
- Assessments
- Knowledge generation
- Science-policy interface: support policy-making processes



Chemicals and the Environment



Indicators

European

Agency

Environment

European Environment Datahub Agency



European

environment and health atlas EU Chemicals Strategy for Sustainability





European environment and health atlas

European Environment Agency

Chemicals Data - Emissions

Emissions Occurrence

- Industrial emissions to air
- Industrial emissions to water
- National emissions of persistent organic pollutants
- Environmental pollutants placed on the market (HFCs, ODS)



European Environment Datahub Agency



Chemicals Data - Occurrence

Emissions

Occurrence

- Occurrence in water, sediment and biota

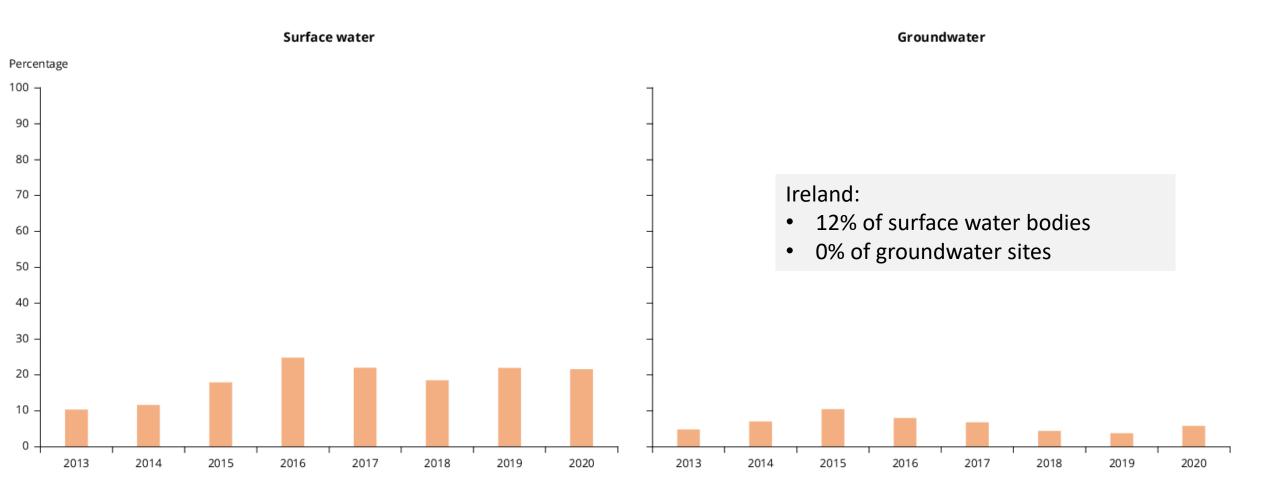
- Human Biomonitoring from EU research partnerships





EEA indicators

Pesticides in rivers, lakes and groundwater in Europe



European Environment Agency

EEA briefings

BRIEFING

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BRIEFING

Managing the systemic use of chemicals in Europe

Chemicals are embedded in practically every single manufactured good in the EU. On the one hand, chemicals play a key role in ensuring quality of life and offer new solutions to deliver the green and the digital transitions. On the other, our increasing reliance on chemicals leads to serious problems. From creating adverse health effects to contributing to the climate crisis, chemicals come with a cost — so much so that we have now exceeded the planetary boundary for chemical pollution. Where do we go from here? This briefing describes the systemic use of chemicals across Europe's current systems of production and consumption. Moreover, it discusses key policy measures foreseen in the European Green Deal's Chemicals Strategy for Sustainability that offer significant potential to ensure consumer safety, cut pollution and clean up material flows.

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https://www.eea.europa.eu/publications/managing-the-systemic-use-of

HBM4EU initiative 2017 - 2021



Coordinating and advancing human biomonitoring in Europe

- Co-funded under Horizon 2020
- 30 countries, EEA and European Commission
- Bridging research and policy worlds



HBM4EU – Risk of PFAS in humans



- Overall exceedance of health-based guidance values: 14.3 %
- Immunotoxicity
- Developmental toxicity
- Effects on reproduction and fertility
- Liver damage
- Decreasing trend for PFOS and PFOA concentrations



European Environment Agency

HBM4EU dashboard

HBM4EU results and EEA products - Risk of BPA in humans



Human exposure to Bisphenol A in Europe

Bisphenol A (BPA) is a synthetic chemical that has been used in high volumes for decades and is known to harm human health. People are exposed to BPA mainly through diet due to BPA being present in a range of materials commonly used in packaging for food and beverages. This briefing presents the latest information on human exposure to BPA in Europe. It also highlights potential health risks resulting from people being exposed to unsafe levels of BPA.

Published 14 Sep 2023 — Last modified 28 Sep 2023 — 20 min read — Photo: © Tai's Captures on Unsplash

PDF

Source: Based on human biomonitoring data from the HBM4EU Dashboard (HBM4EU, 2022d)

https://www.eea.europa.eu/publications/p eoples-exposure-to-bisphenol-a/



European Environment Age

PARC - Partnership for the Assessment of Risks from Chemicals



- Publicly funded: from countries and the EU
- Duration of 7 years from 2022
- 29 countries including Ireland
- 3 European agencies: EEA, EFSA, ECHA

- Next-generation chemical risk assessment New data, knowledge, methods and tools, expertise and networks
- Research to support identified gaps Impacts of chemicals on health and wellbeing Impacts of chemicals in ecosystems
- Long-term objective: mainstream HBM across Europe EU representativity Regular reporting



Chemical Indicator Framework under the CSS



'Develop a framework of indicators to monitor the drivers and impacts of chemical pollution and to measure the effectiveness of chemicals legislation'

(by 2024).

- Development led by DG ENV
- Technical development: ECHA-EEA as co-lead
- Collaboration across DGs and Agencies
- Indicators: progress towards policy objectives



European Environment Agency

Chemical Indicator Framework

Indicator	Indicator	Indicator
EU trends in the use and risk of chemical	EU trends in the use of more	Pesticides in rivers, lakes and groundwater
pesticides	hazardous pesticides	in Europe
-33% since the baseline period 2015-2017	-21% since the baseline period 2015-2017	22% of surface waters with pesticide levels above safe effect thresholds in 2021
Source: European Commission	Source: European Commission	Source: European Environment Agency
Indicator	Indicator	Signal
Hazardous substances	Industrial releases to air	PFAS
in marine organisms in European seas	and water	in European seas
	and water -92% of nonylphenol and nonylphenol ethoxylates to water between 2010 and 2021	in European seas PFAS pose a risk to marine organisms and human health according to data collected between 2001 and 2021



Zero Pollution Monitoring Assessment



Last modified 28 Nov 2022 — 4 min read

PDF

- Health and ecosystems impacts
- Contribution of production and consumption to environmental pollution



Zero Pollution Monitoring Assessment

Indicator Pesticides in rivers, lakes and groundwater in Europe 22% of surface waters with pesticide levels exceeding safe effect thresholds in 2021 Source: EEA	Indicator Oxygen consuming substances in European rivers Source: EEA	Indicator Nutrients in freshwater in Europe Source: EEA	Indicator Percent of sewage meeting treatment requirements in EU Source: EEA
Indicator Nitrates in groundwater in Europe Source: EEA	Assessment Ecological and chemical status of water bodies Source: EEA	Assessment Groundwater Chemical Status	Assessment State of Water



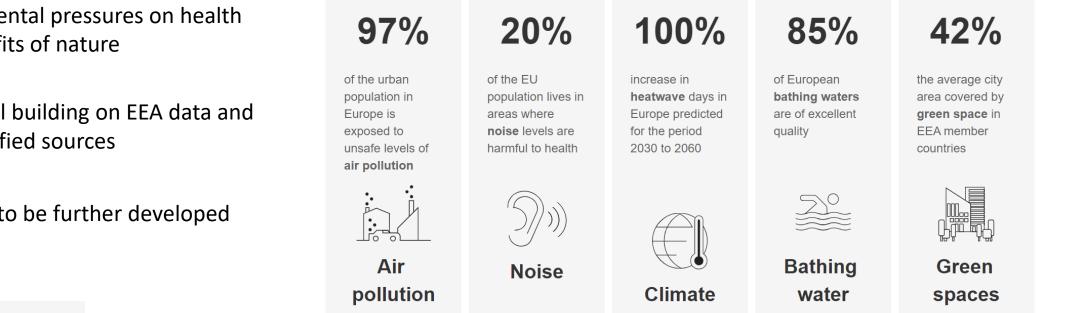
European Environment Agency

- Deliverable under the Zero ٠ Pollution Action Plan
- Environmental pressures on health ٠ and benefits of nature
- Public tool building on EEA data and ٠ other verified sources
- First step to be further developed ٠



European environment and health atlas

Healthy environments support healthy lives. EEA's European Environment and Health Atlas presents information on how pollution and other environmental risks affect the health and well-being of Europeans. You can view inequalities in the distribution of environmental risks to health across Europe and check the quality of the environment where you live, work and play.



http://discomap.eea.europa.eu/atlas

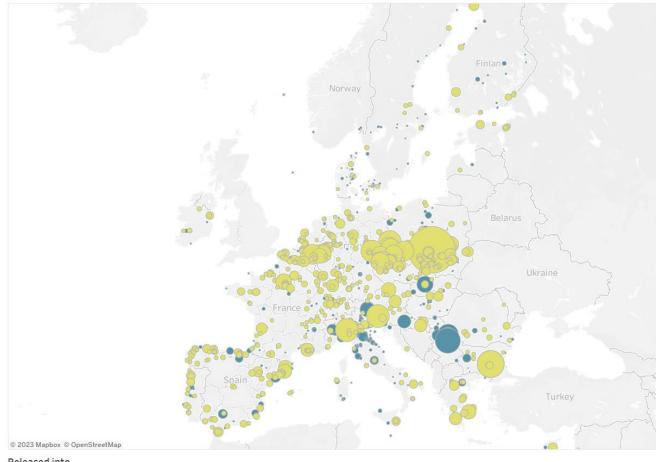


European Environment and Health Atlas

Chemicals

Emissions from facilities

Mercury and compounds (as Hg) released to air & released to water latest available year 2017-2021



Country

Pollutant on map

Arsenic and compounds (as As)
Cadmium and compounds (as Cd)

- $\odot\,{\rm Chromium}$ and compounds (as Cr)
- $\odot\,\text{Lead}$ and compounds (as Pb)
- $\odot\,{\rm Mercury}$ and compounds (as Hg)
- Nitrogen oxides (NOX)
- Particulate matter (PM10)
- ○Sulphur oxides (SOX)

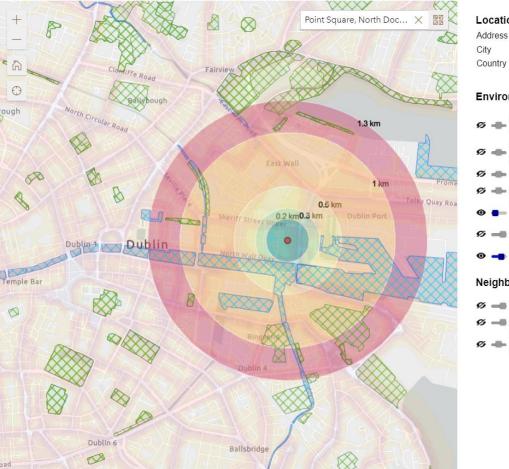




European Environment and Health Atlas

Check your place

Get an overview of the quality of the environment where you live, work, study, commute or play. Click on the map or enter an address and the results will be shown in the right-hand panel. You can show/hide layers by clicking on the eye icons and use the slider to manage the layer transparency. For additional details about the variables and thresholds used, check out the section Additional information below the map.



Location InformationAddressPoint Square, Dublin 1, DublinCityDublinCountryIreland ()

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Environmental Quality



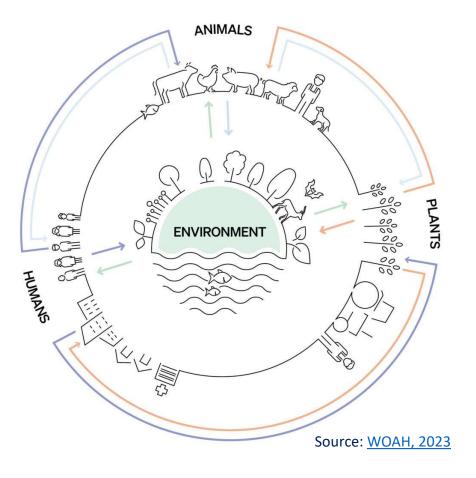
 Image: Second Strategy Walking Control (Second Strategy Walking Cont



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- Collaboration across disciplines
- Interagency task force on One Health: EFSA, ECDC, EEA, ECHA, EMA
- Knowledge base for more integrated assessments
- Greater attention to **the role of the environment** e.g. antimicrobials and AMR genes; chemicals in waters and soils
- Environmental monitoring: occurrence and transfer

• Focus on **both communicable** and **non-communicable diseases**





- Health risk assessments for vulnerable groups
- Chemicals and climate change impacts on health
- Burden of Disease for chemicals: HBM4EU prioritized chemicals
 - First EU-wide data on health effects of chemicals
- **PFAS** in textiles
- TBC:
 - Collecting all EU HBM data in a central database
 - Early Warning System
 - Chemicals indicator framework to be maintained and further developed



Air pollution and children's health

While air pollution affects everyone, children and adolescents are particularly vulnerable because their bodies, organs and immune systems are still developing. Air pollution damages health during childhood and increases the risk of diseases later in life, yet children can do little to protect themselves or influence air quality policies. Until air pollution overall is reduced to safe levels, improving air quality around child-centric settings like schools and kindergartens can help reduce their exposure.

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Thank you

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Questions and Answers

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