

THE SUSTAINABILITY AND GREENING OF THE EU HEALTHCARE SYSTEMS

Interregional Group on Health and Wellbeing meeting







N HARM - EUROPE.ORG



THE TRIPLE PLANETARY CRISIS

The Earth is facing a triple planetary crisis that is threatening the well-being and survival of millions of people around the world

- Climate change
- Pollution and exposure to toxic chemicals
- Loss of biodiversity (can lead to increased infectious diseases)

The three planetary crises interact and threaten the future of humanity, about 24% of all global deaths are linked to environmental causes

CLIMATE CHANGE

- The IPCC estimates that global warming could reach 1.5°C between 2030 and 2052.
- Our relentless and unlimited extraction of resources from the Earth is having a devastating impact on nature, promoting climate change

Climate change is the greatest public health threat of the 21st century (The Lancet):

The climate crisis is a health crisis!



POLLUTION

There is evidence that <u>10% of cancer cases in Europe</u> are caused by pollution:

- Air pollution
- Radiation and ultraviolet radiation
- Exposure to chemicals such as lead, arsenic, asbestos, chromium, cadmium, acrylamide, pesticides, bisphenol A and polyfluorinated alkyl substances (PFAS)

Belgium has highest levels of PFAS chemical pollution in Europe

POLLUTION: PLASTICS AND MICROPLASTICS

Microplastic pollution is ubiquitous and recently found in:

- Clouds, suggesting contamination of "nearly everything we eat and drink" and negative interaction with the climate (<u>August 2023</u>)
- Human blood: the University of Amsterdam found microplastics in almost 80% of the people tested (May 2022)
- Human placenta, meconium, infant faeces, breast milk and infant food (<u>January</u> 2021).

While the impact of plastic and microplastics on human health needs to be further investigated, we already know that microplastics carry a variety of toxic substances like endocrine disruptors that could cause long-term effects on human health

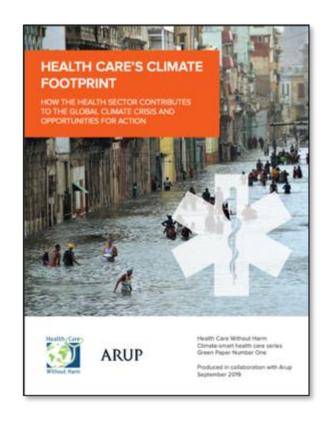
BIODIVERSITY LOSS

- Strong link between the biodiversity loss and the emergence of pandemics
- About 60% of human infections are of animal origin and, of all new and emerging human infectious diseases, about 75% 'hop' from animals species to humans
- The main direct cause of biodiversity loss is land-use change (mainly for large-scale food production) causing an estimated 30% decline in global biodiversity

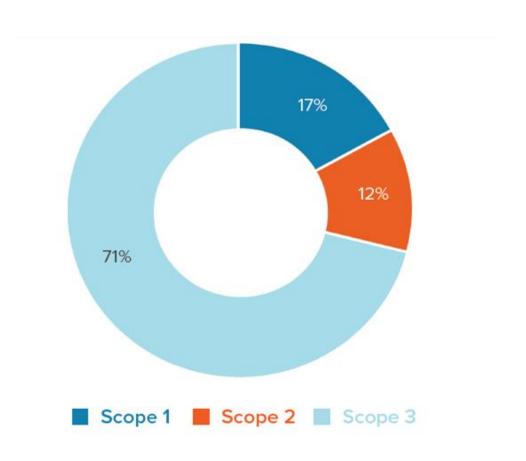
THE INTERACTION WITH THE HEALTHCARE SECTOR NO HARM-EUROPE.ORG

HEALTHCARE CLIMATE IMPACT

- The health sector is a major contributor to the climate crisis, producing 5.2% of global net emissions
- If the health sector were a country, it would be the fifth largest emitter on the planet
- If we don't act, healthcare sector emissions could triple by 2050



HEALTHCARE SECTOR EMISSIONS



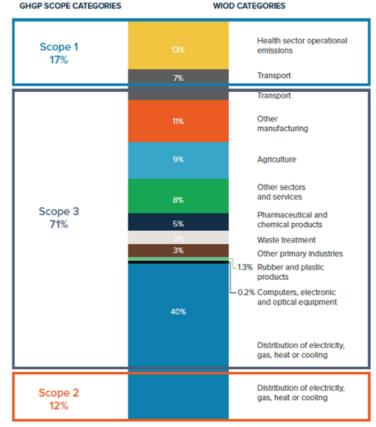
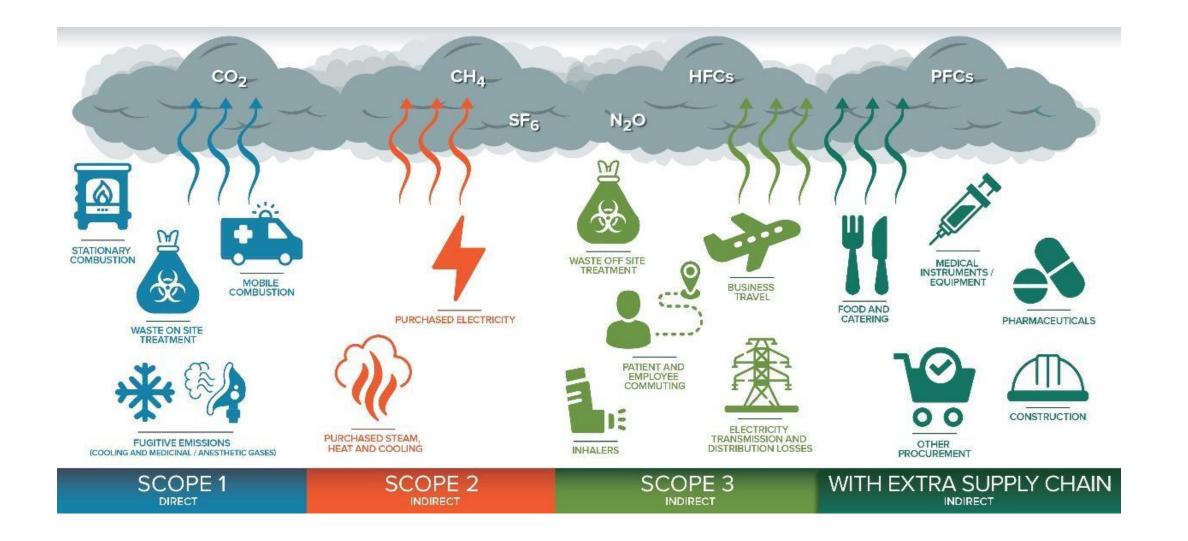
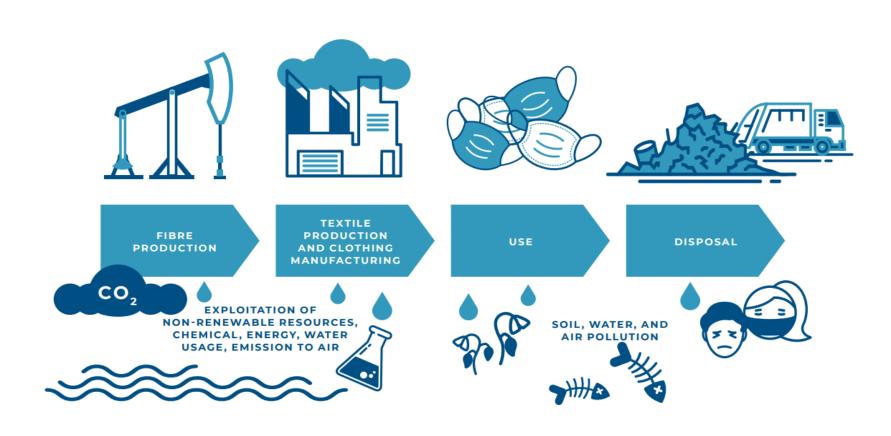


Figure 6a shows the proportion of WIOD emissions sources attributable to GHGP Scopes 1, 2 and 3.



A MODEL OF LINEAR ECONOMY



SINGLE-USE: EMISSIONS

Example: Emissions from cataract

UK: 182 kgCO2e

operations

 India: 6 kgCO2e -> efficient systems and reuse of equipment, with lower infection rate Read: Our over-reliance on single-use equipment in the operating theatre is misguided, irrational and harming our planet

SINGLE-USE: WASTE





















PLASTICS AND CHEMICALS IN HEALTHCARE





- Medical devices
- Intravenous tubing & bags
- Medical textiles
- Medical gloves
- Cleaning products
- Flooring



A MATTER OF CONCERN

- Patients are exposed to endocrine disrupting chemicals (e.g. phthalates, bisphenols) through medical plastics.
- Infants (especially premature babies) and children are particularly vulnerable.
- DEHP, a phthalate used to make IV bags and tubes more flexible, can increase mortality and the risk of breast cancer relapse.





PHARMACEUTICALS

771 different pharmaceutical agents or their metabolites have been detected in 75 countries on all continents.

- Incidence on Antimicrobial resistance (AMR)
- Harmful effects on animal and plant life
- Potential effects on human health



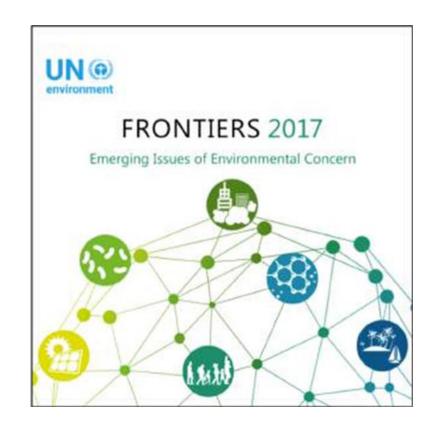
AMR: A GLOBAL THREAT

Currently

- 1.27 million deaths per year
- 33,000 in Europe
- 39% of drug-resistant infections are due to bacteria resistant to last resort antibiotics

By 2050, inaction would lead to

- 10 million deaths per year
- 390,000 in Europe
- The two most affected regions: Africa and Asia





TRANSFORM THE HEALTHCARE SECTOR

Through our programmes, projects and networks we aim to:

- Innovate medical practices
- Shift the culture
- Influence and transform global, European, and local policies



OUR ACTION NETWORKS



GLOBAL GREEN AND HEALTHY HOSPITALS

THE HEALTHCARE
PROVIDERS AT THE
HEART OF OUR
ORGANISATION



192 members in 25 countries across the WHO Europe region



OUR REACH





Hospital beds

>247K



OUR PROGRAMMES









CLIMATE-SMART HEALTHCARE

STRATEGIC GOAL

The European healthcare sector is transformed into a net zero carbon and climate-resilient sector that protects public health from climate change and accelerates the transition to a low-carbon economy.

ACTION AREAS







DECARBONISATION

Projects (Operation Zero, Race to Zero, Mentoring Programme) and case studies **RESILIANCE**

LIFE RESYSTAL

ADVOCACY

Healthcare professionals engagement in climate advocacy, with networking and training opportunities





CIRCULAR HEALTHCARE

STRATEGIC GOAL

European health systems drive markets towards toxic-free products that conserve finite resources, minimise waste, and contribute to an ethical supply chain and circular economy.

ACTION AREAS



GREEN CHEMISTRY

Identify opportunities to phase out toxic chemicals (PVC-free alternatives, safer disinfectants, procurement resources, working groups)



WASTE PREVENTION

Waste audits, pilot project to develop environmental maternal and pediatric units

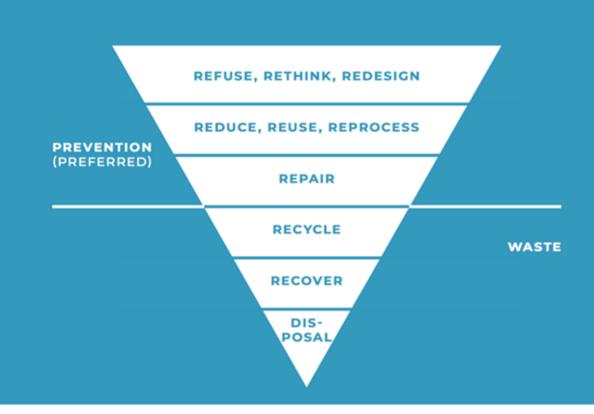


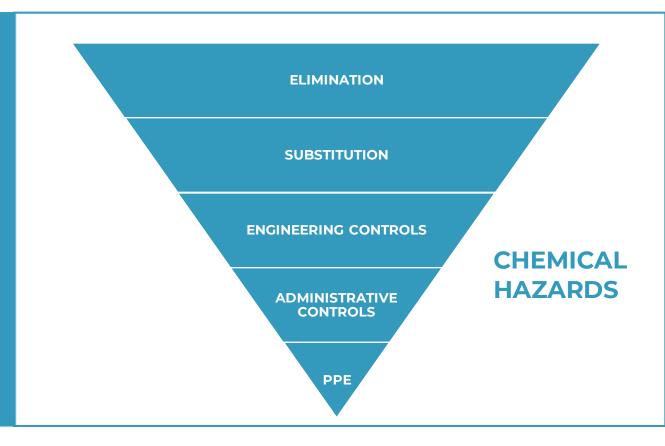
ADVOCACY

Global plastic treaty, EU Green Deal, Circular Healthcare training



OUR COMPASS





The waste hierarchy [Adapted from Zero Waste Europe's Zero-waste hierarchy]





SAFER PHARMA

STRATEGIC GOAL

Pharmaceutical pollution and its contribution to the development of antimicrobial resistance (AMR) is minimised.

ACTION AREAS



PHARMA POLLUTION

Awareness-raising campaigns
Involvement of pharmacists
Inventory of good practices





AMR

Report on AMR Education in Europe AMR EDUCare -Training doctors, pharmacists, nurses and managers



ADVOCACY

Members of high-level networks: One Health (EC), FAO Multi Stakeholder platform, EC Groundwater WG, EU pharma legislation



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THANKS FOR YOUR ATTENTION

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