Zero Pollution Monitoring Assessment 2022
Pollution and Health

Zero Pollution Stakeholder Conference / 14 December 2022

European Environment Agency

Overview of the EEA Zero Pollution Monitoring Assessment

Web report: https://www.eea.europa.eu/publications/zero-pollution

Summary
For policymakers - PDF

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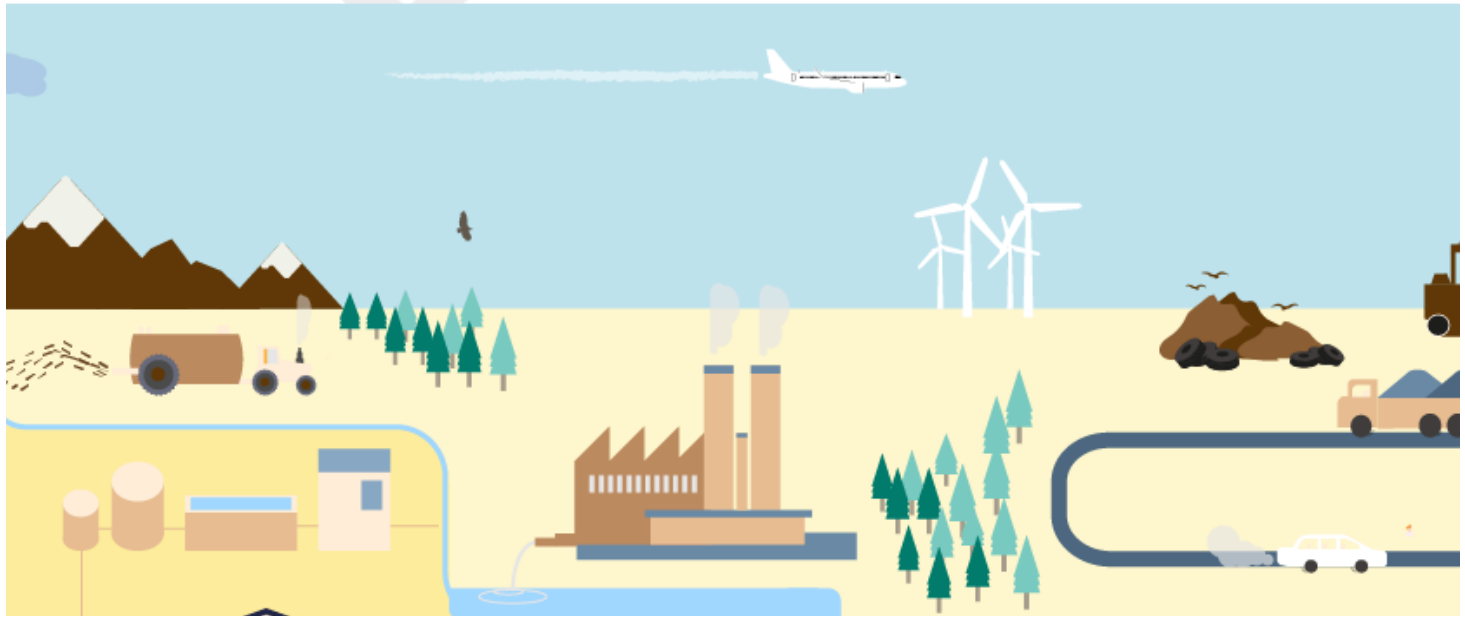
Structure of the report

Chapters of the zero pollution monitoring assessment 2022:

- **Production and consumption chapter and associated signals**
- **Ecosystems chapter and associated signals**
- **Health chapter and associated signals**
- **Zero pollution cross-cutting stories**

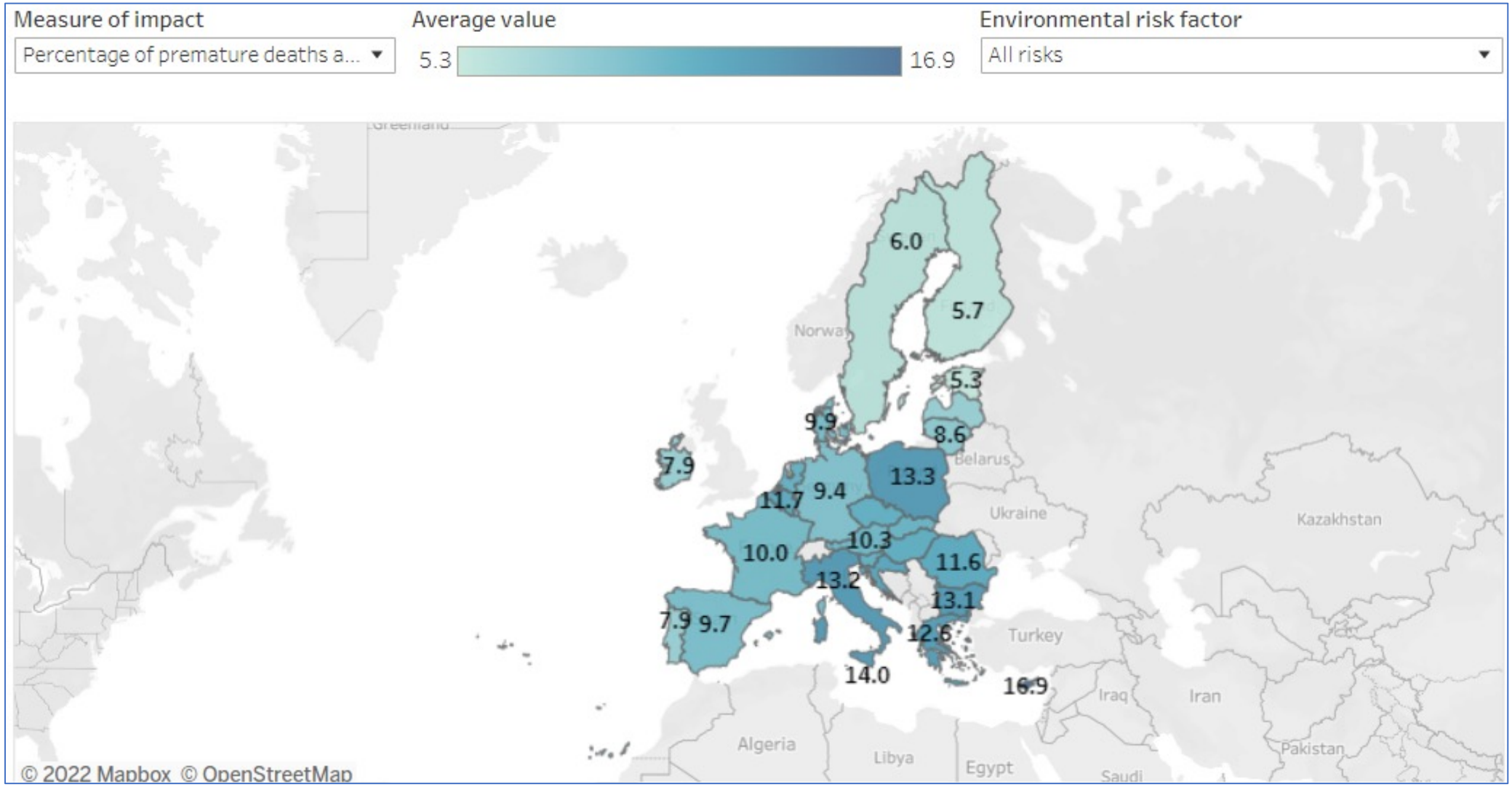


Sections of the **health** assessment:

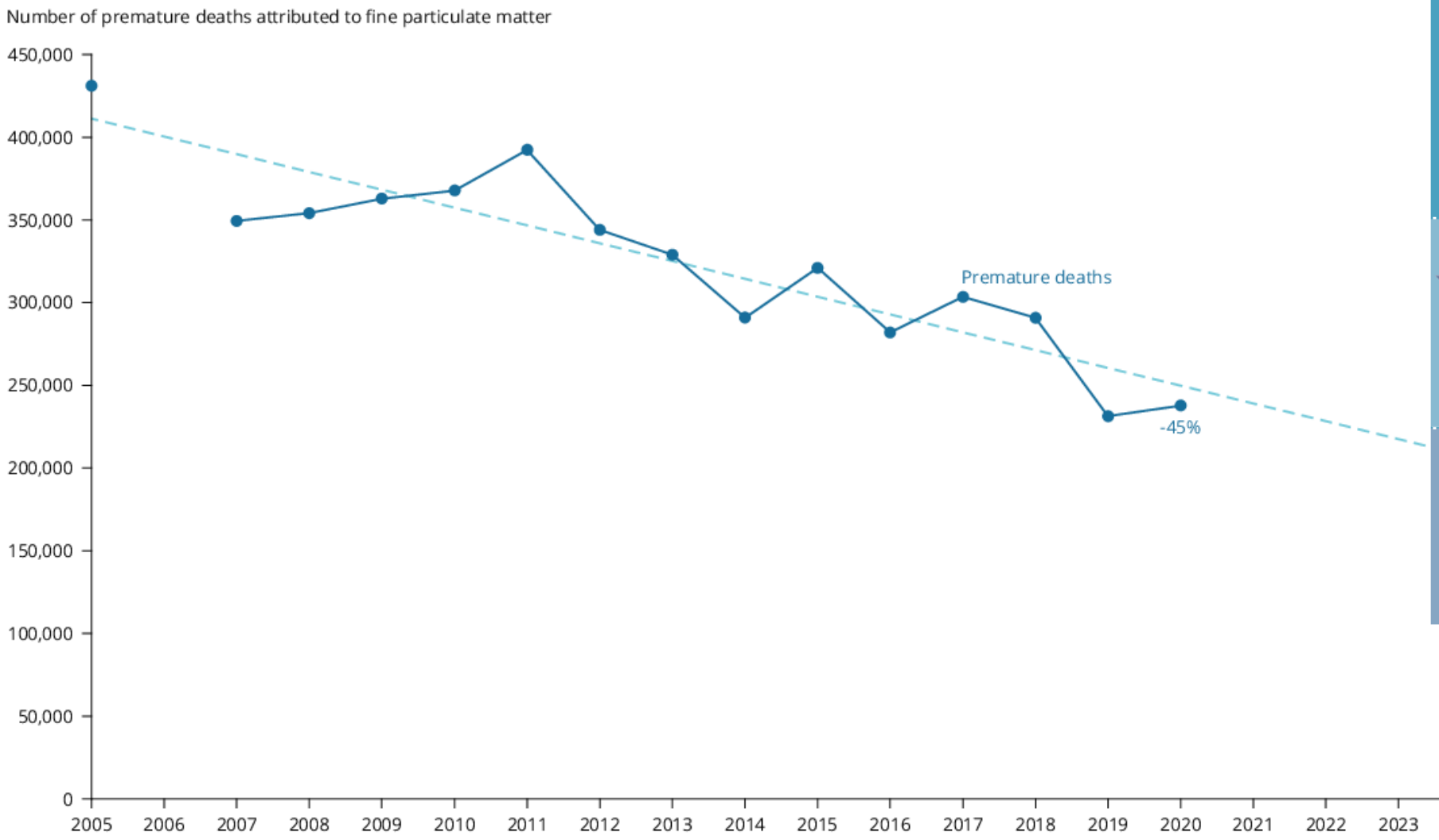
- Air pollution and health
- Noise pollution and health
- Water pollution and health
- Chemicals and health
- Soil pollution and health
- Health signals

Health – Burden of Disease for environmental risk factors (2019)

Percentage of premature death attributable to environmental risk factors in EU-27 countries



Air Quality – Trends in Premature Deaths to 2020



TARGET 1

Reduce the health impacts (premature deaths) of air pollution by 55%

Current position/trend (2020 data):

-45%
reduction

-55%

Distance to target: **on track**
Baseline year: **2005**

Link to air and health section

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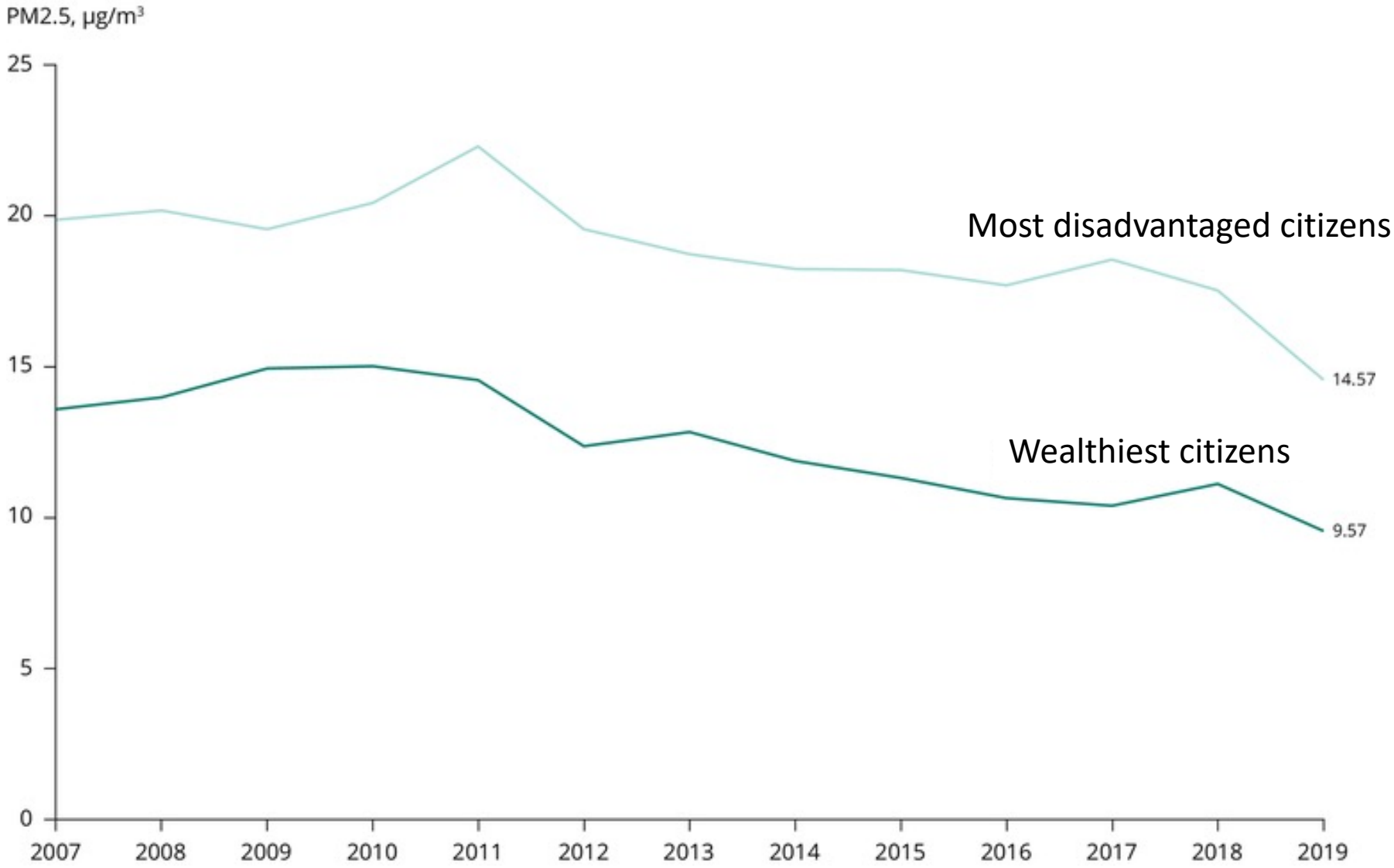
Zero Pollution – air and health – Inequality in exposure



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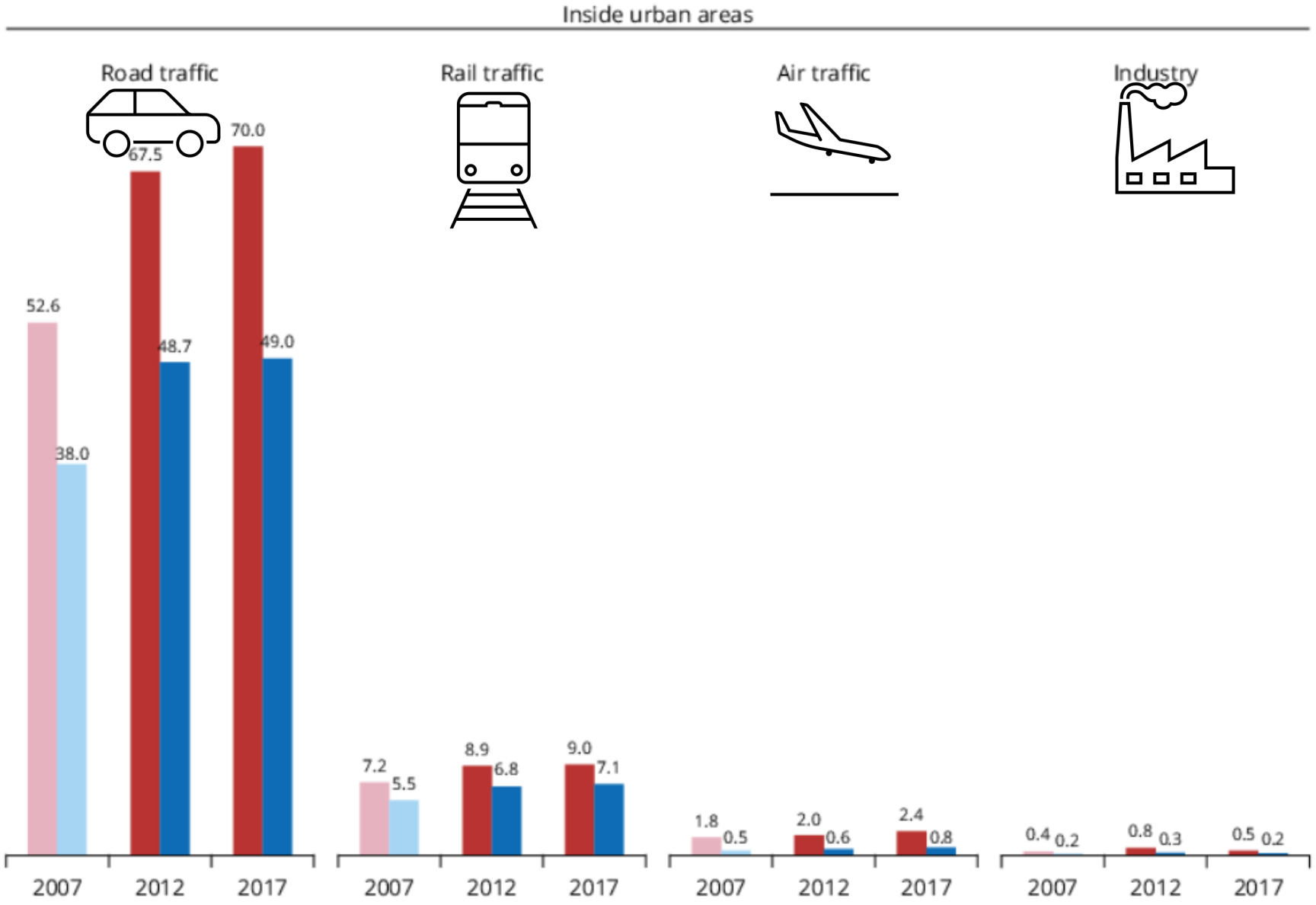
Noise – trends in noise levels

No. of people (millions) exposed above noise thresholds for day/evening/night (Red) and night (Blue)



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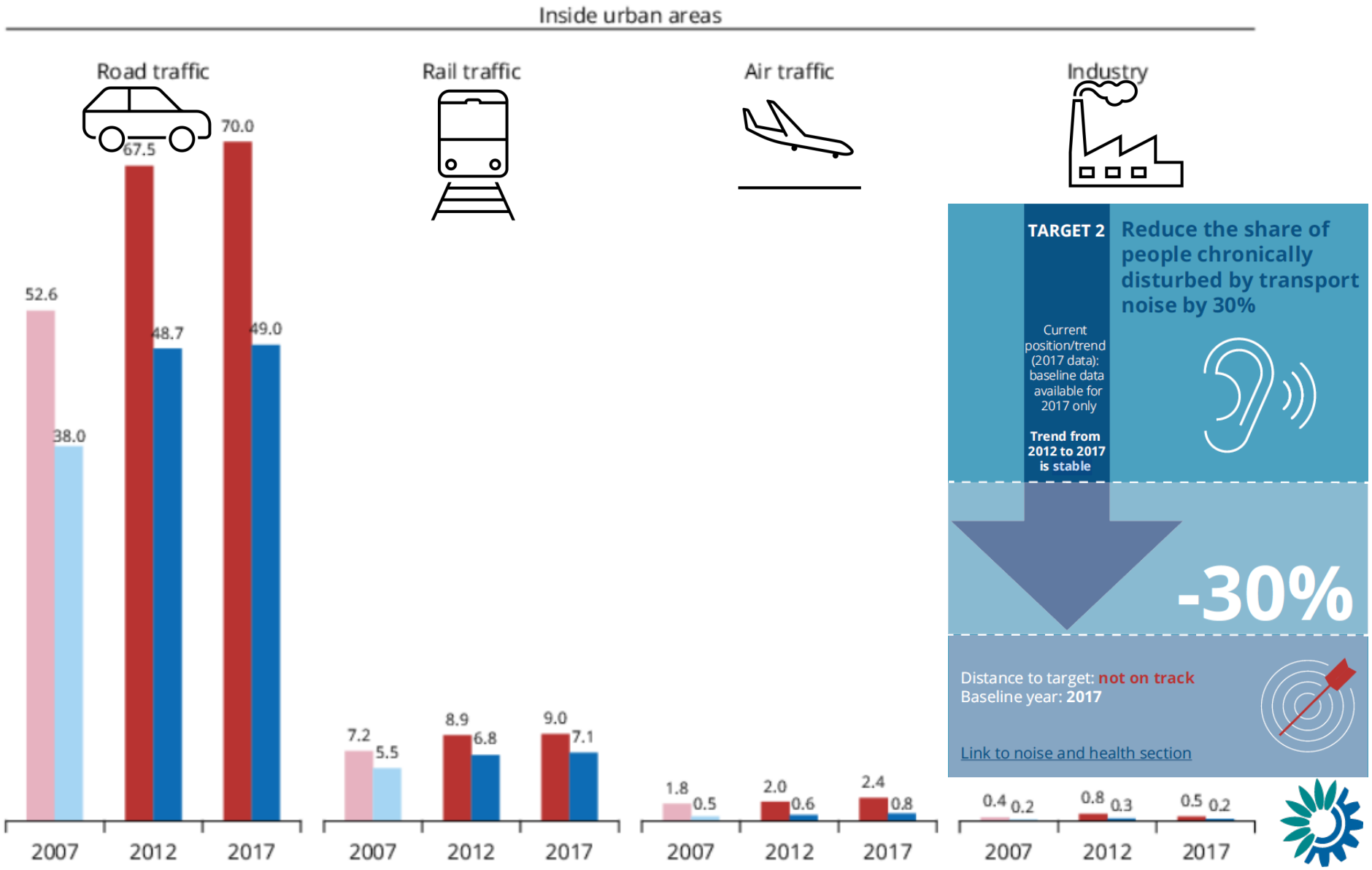
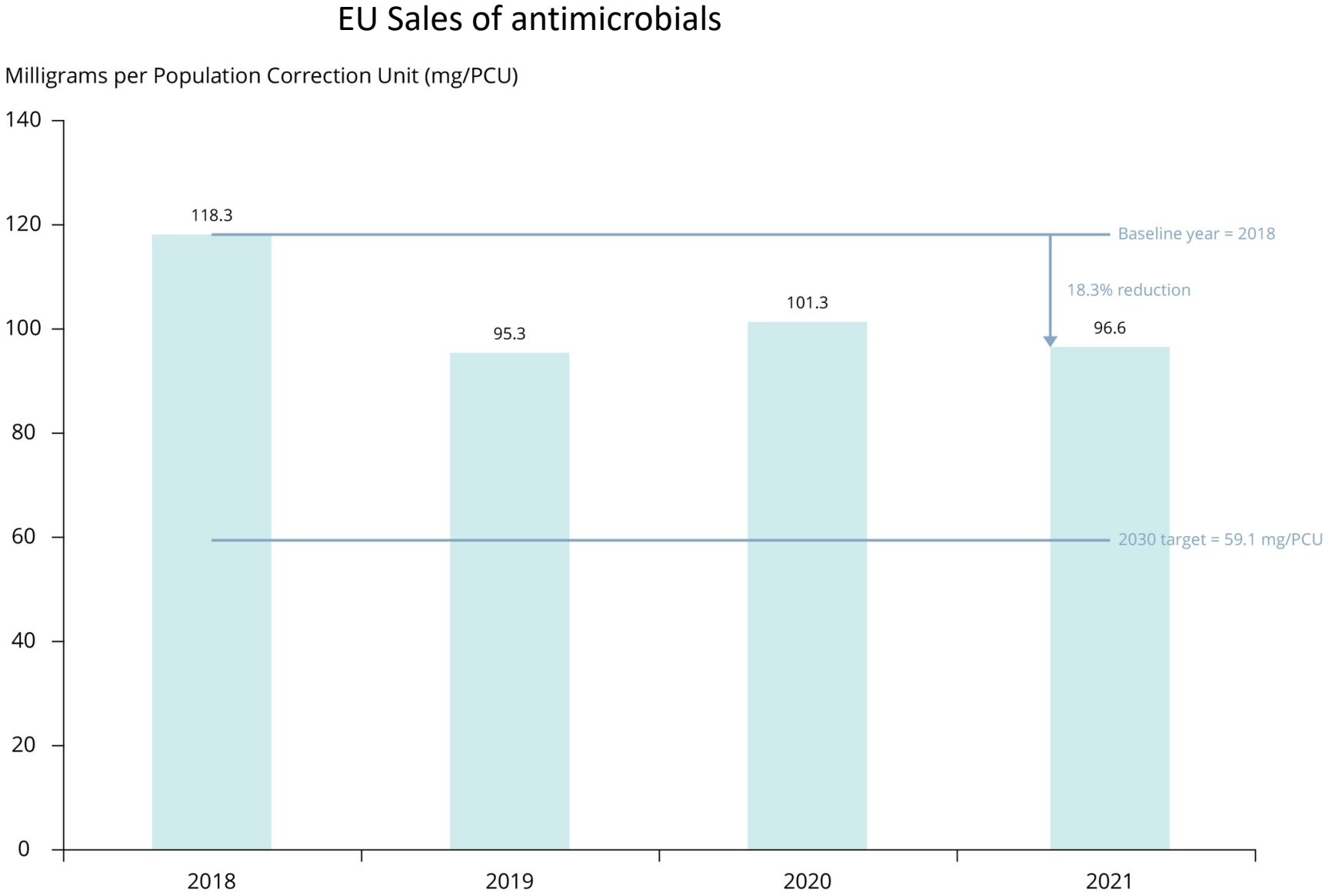


Zero Pollution – chemicals – Sales of antimicrobials



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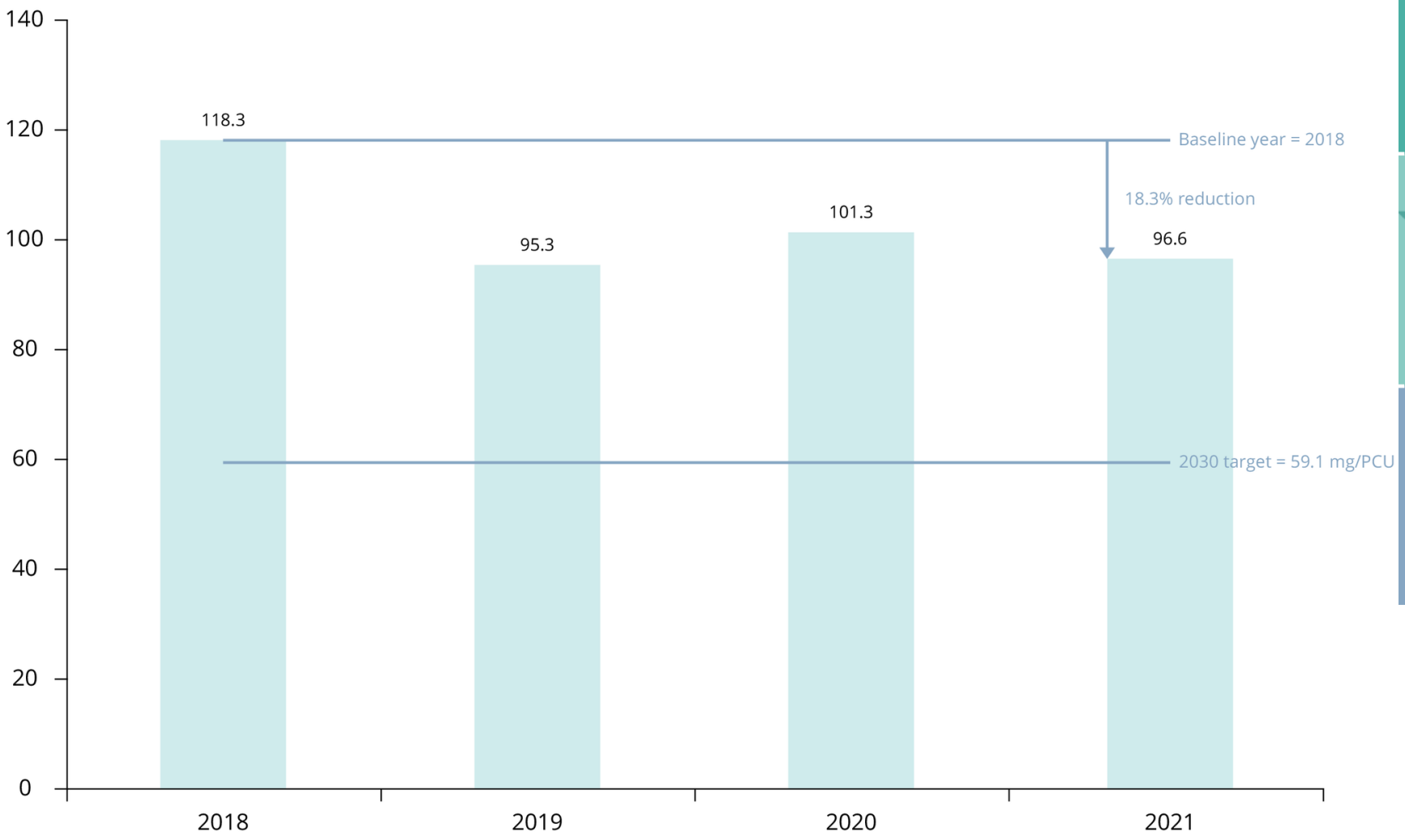
Zero Pollution – chemicals – Sales of antimicrobials

EU Sales of antimicrobials

Milligrams per Population Correction Unit (mg/PCU)



TARGET 4

Reduce the sale of antimicrobials for farmed animals and in aquaculture by 50%

Current position/ analysis: (2021 data)

-18.3%
reduction

-50%

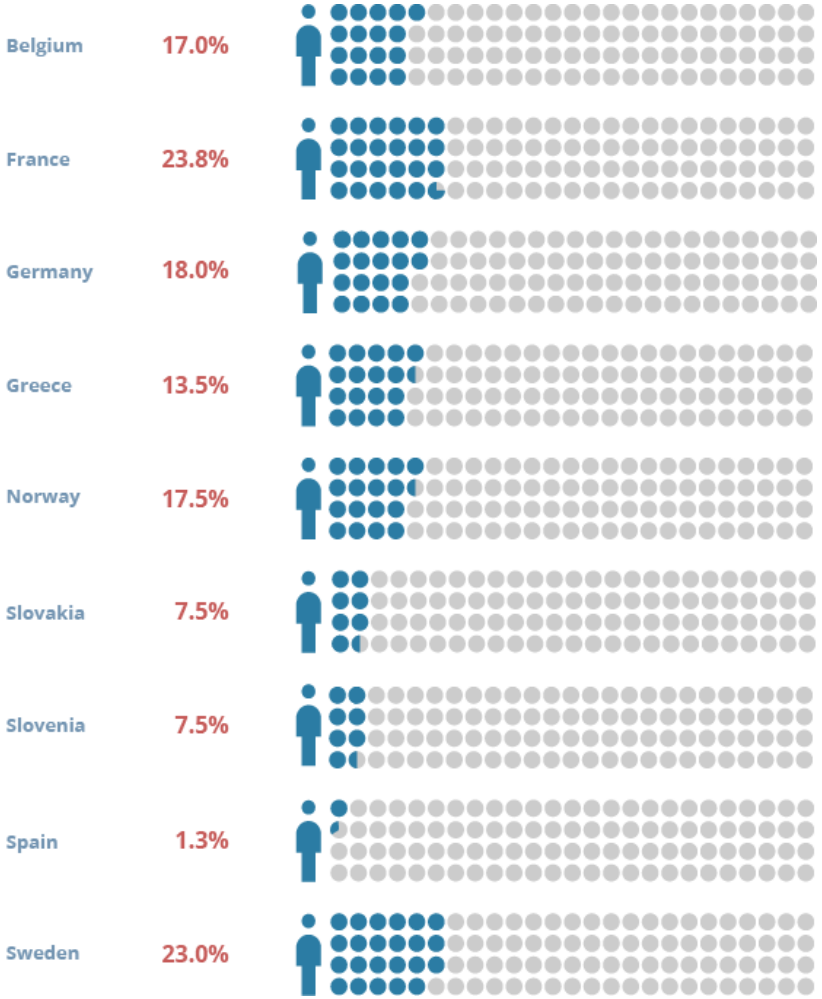
Distance to target: **on track**
Baseline year: **2018**

Link to chemicals and health section

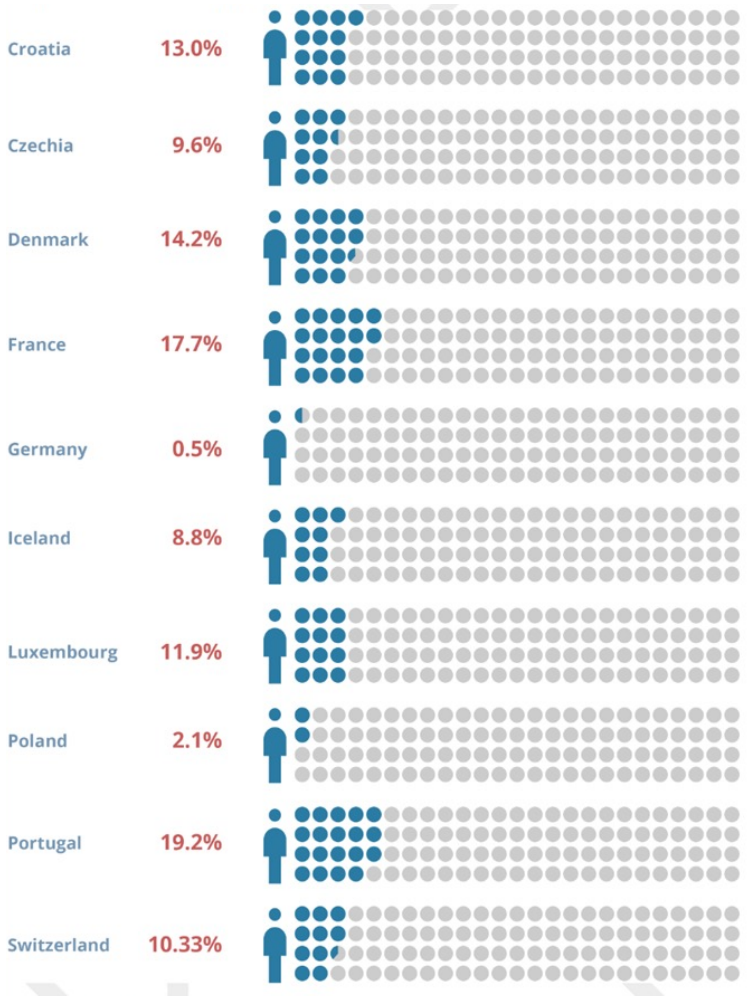
European Environment Agency

Chemicals – human biomonitoring results

PFAS - % of teenagers above guideline value, 2014 - 2021



Bisphenol S - % of adults above guideline value, 2014 - 2021



Phthalates - 17% of European children and adolescents are at risk from combined exposure to mixtures of phthalates

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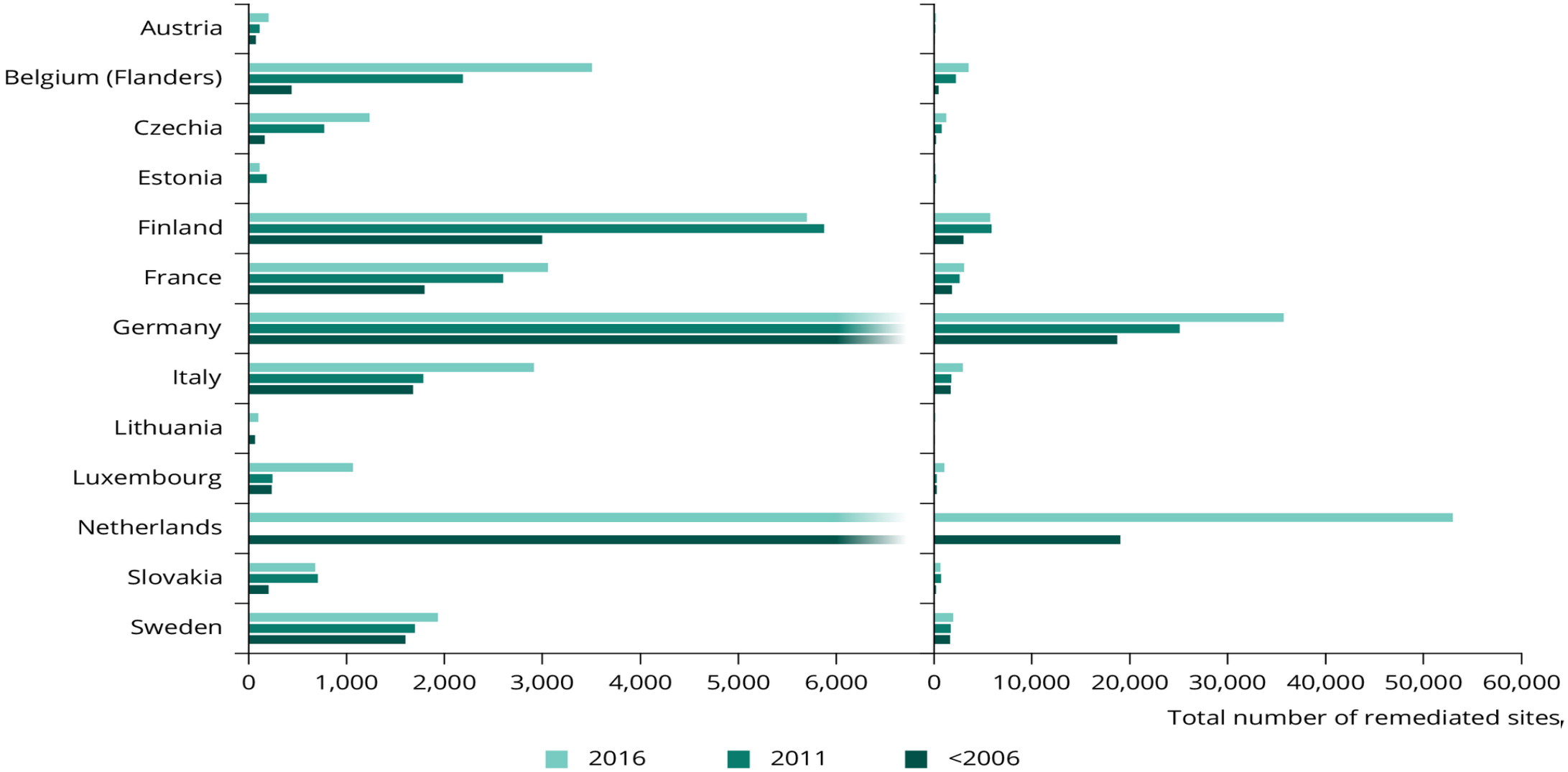
Soil – addressing contaminated sites

Number of remediated contaminated sites



Other issues

Emerging health risks from noise exposure

Anxiety

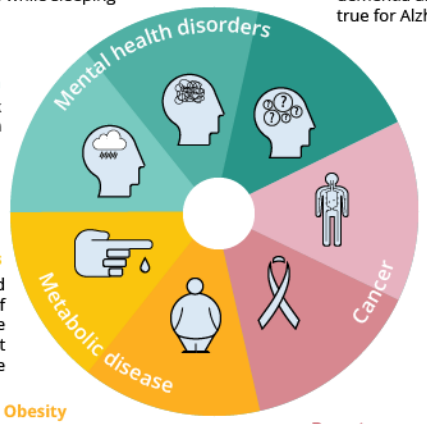
People may have greater chance of developing anxiety if exposed to railway noise levels that produce awakening reactions while sleeping

Dementia

Exposure to road or railway traffic noise may lead to higher risk of developing dementia and its subtypes. This is especially true for Alzheimer's disease

Depression

Transportation noise increases the risk of developing unipolar depression



Non-Hodgkin lymphoma

Long-term exposure to high levels of road traffic noise may increase the risk of developing a non-Hodgkin lymphoma

Diabetes mellitus

Exposure to noise from road, railway and aircraft can increase the risk of developing diabetes, with aircraft noise being the source with the most significant risk increase

Obesity

Exposure to road or aircraft noise can be linked to waist circumference increase. The highest risks are for people exposed to noise from multiple transport sources

Breast cancer

The risk of developing breast cancer increases with noise level for long-term exposures to road traffic and railway noise

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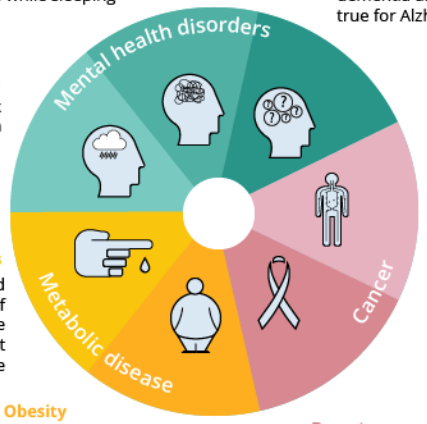

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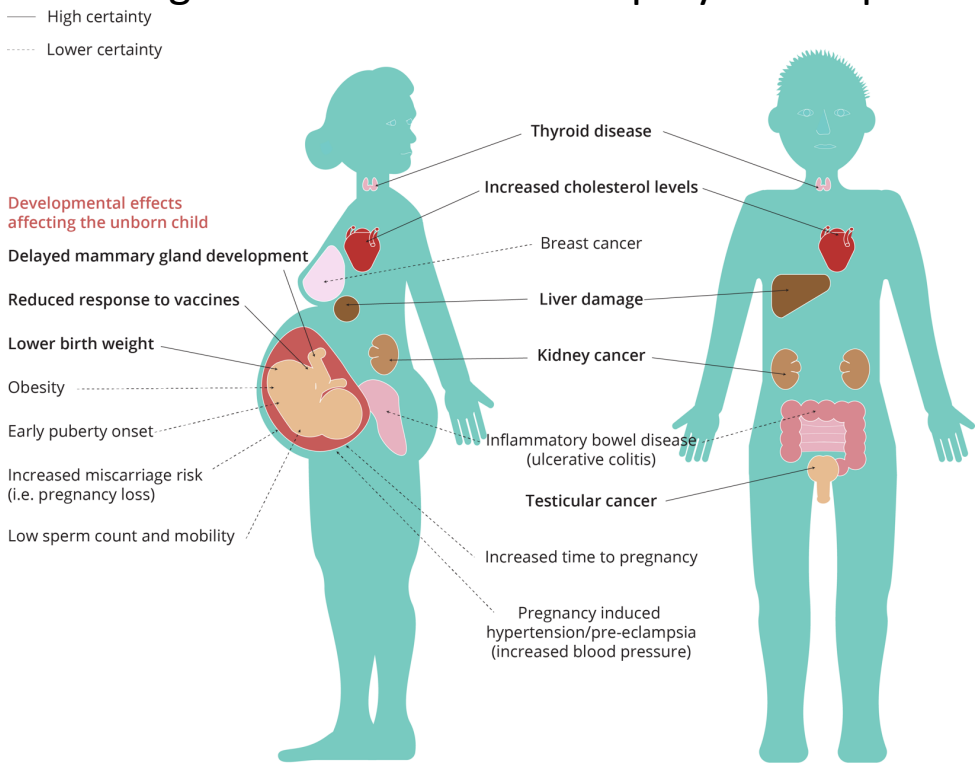
Growing evidence on PFAS ubiquity and impacts



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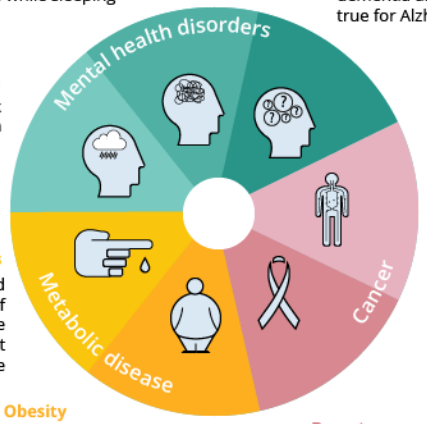

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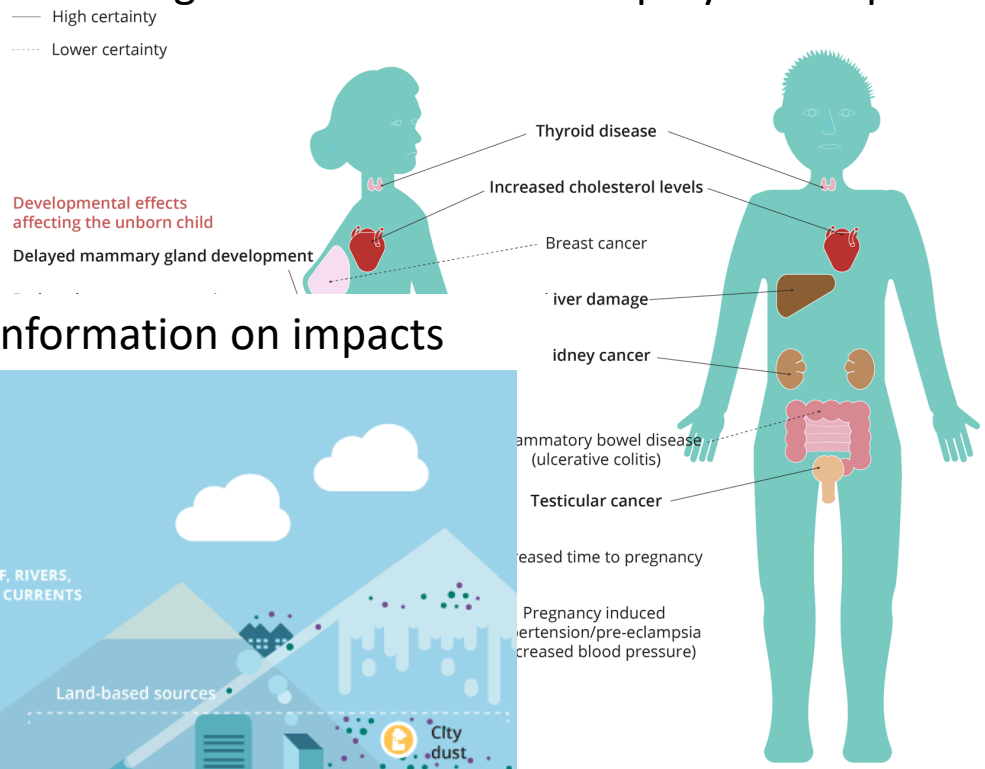
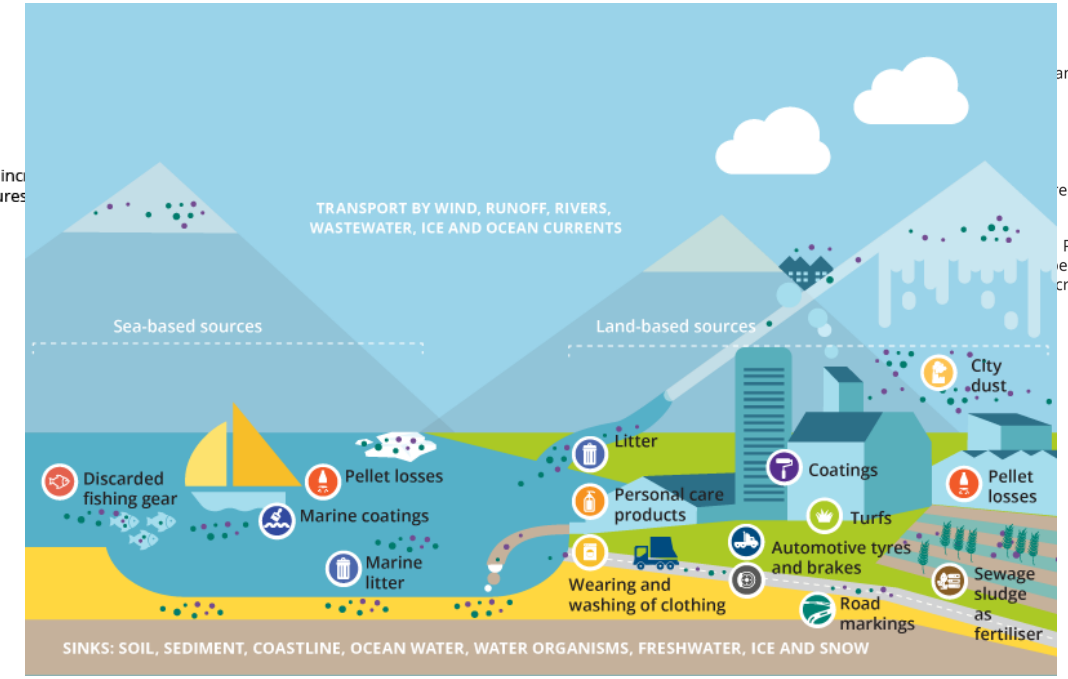


Plastics – need for information on impacts



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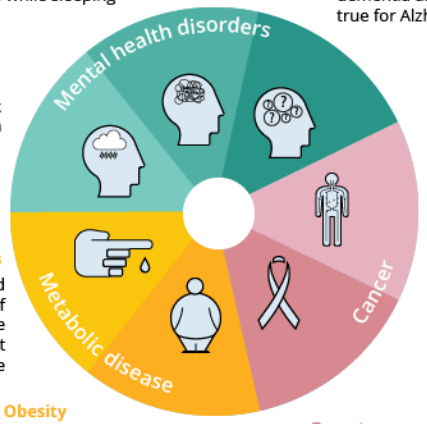

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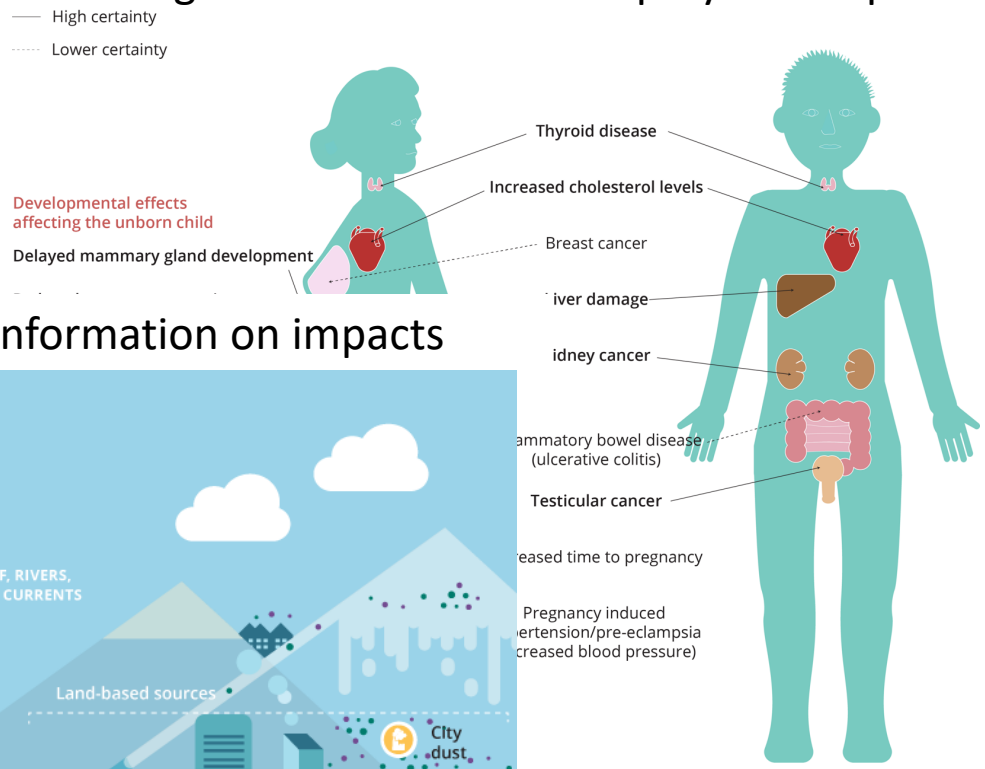

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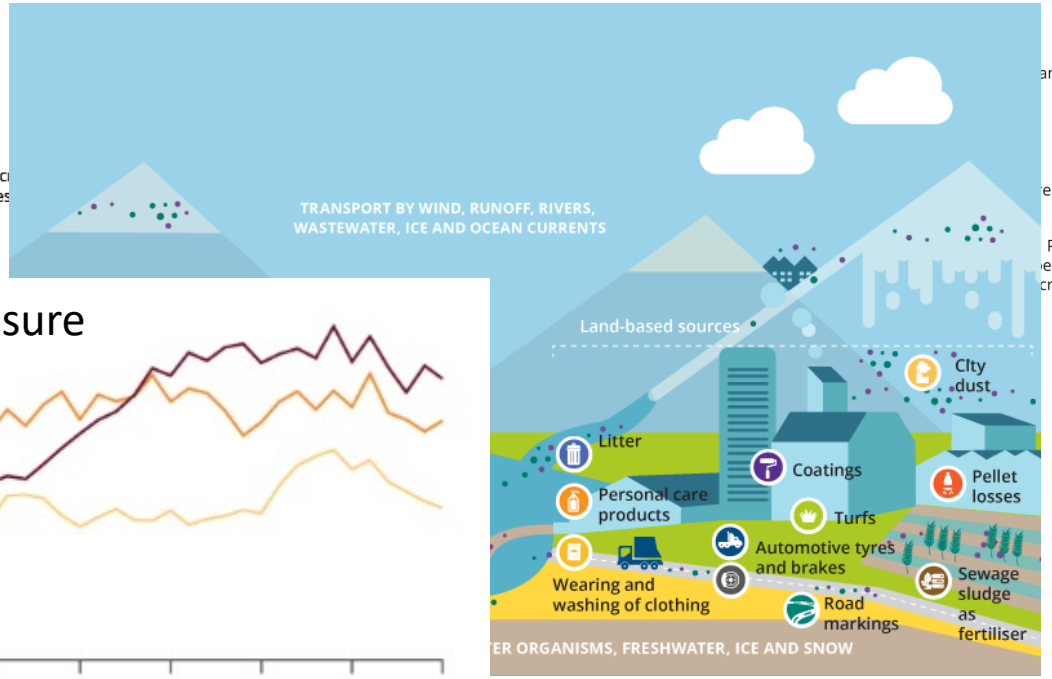
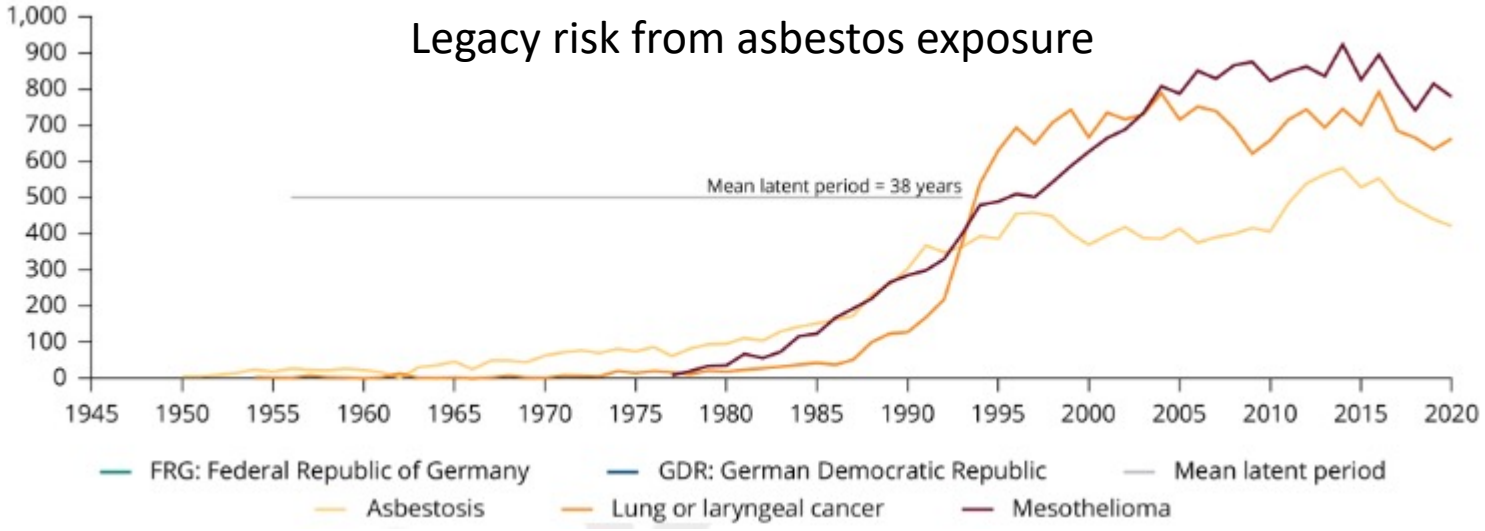


Legacy risk from asbestos exposure



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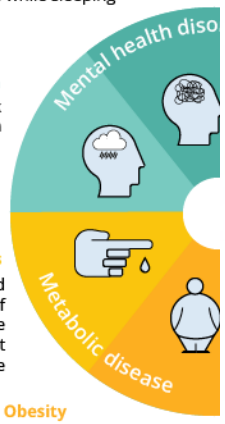
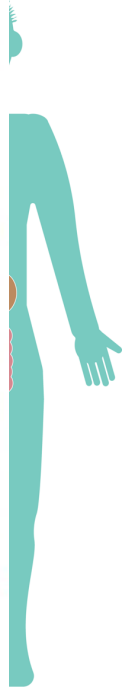


pacts



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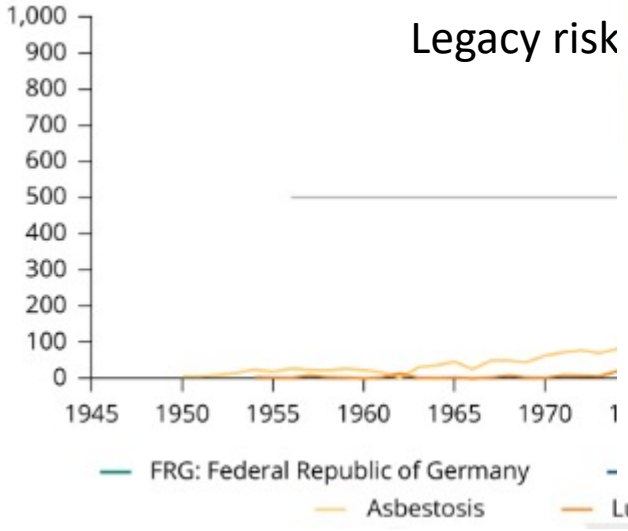
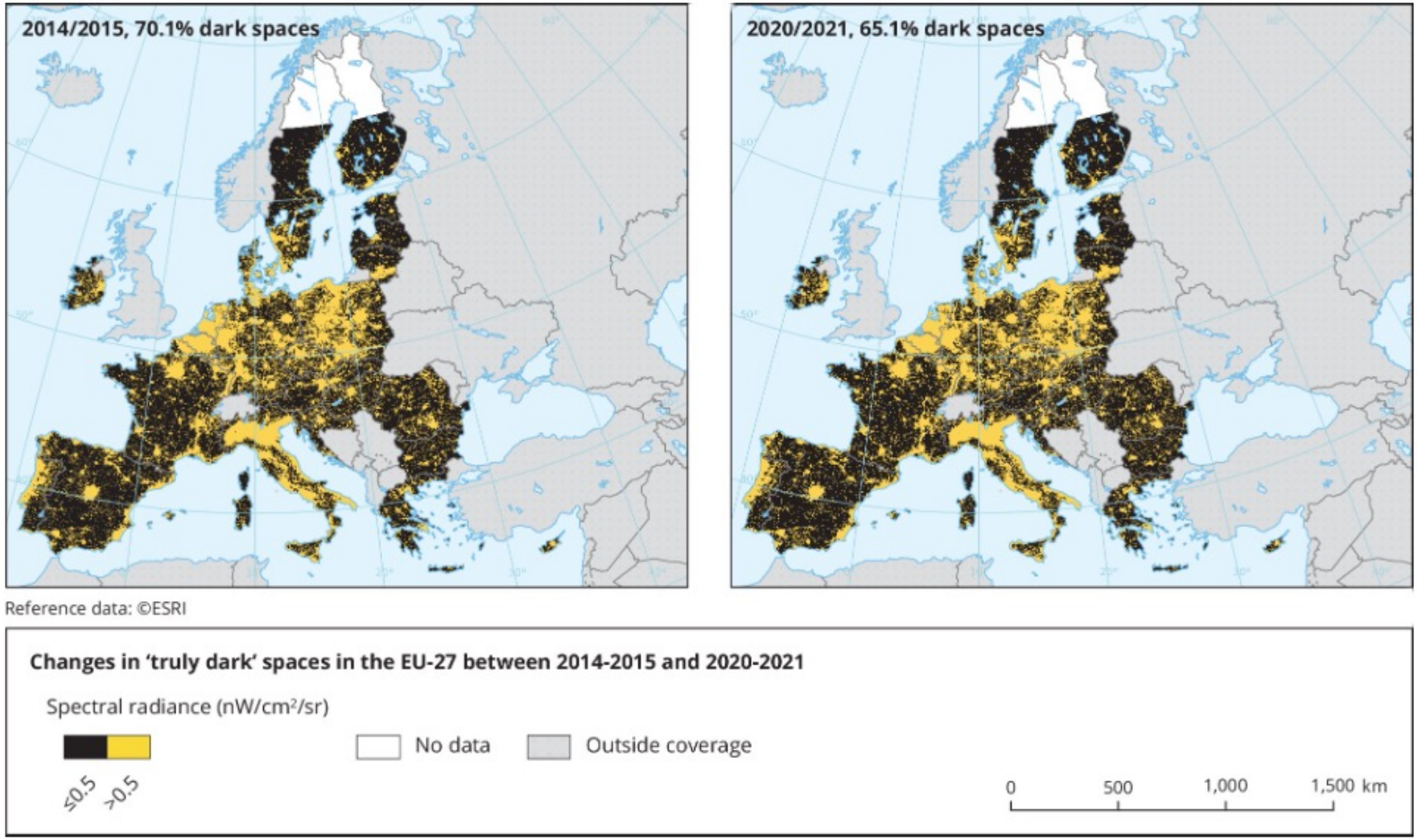


Map 1. Changes in 'truly dark' spaces in the EU-27 between 2014-2015 and 2020-2021

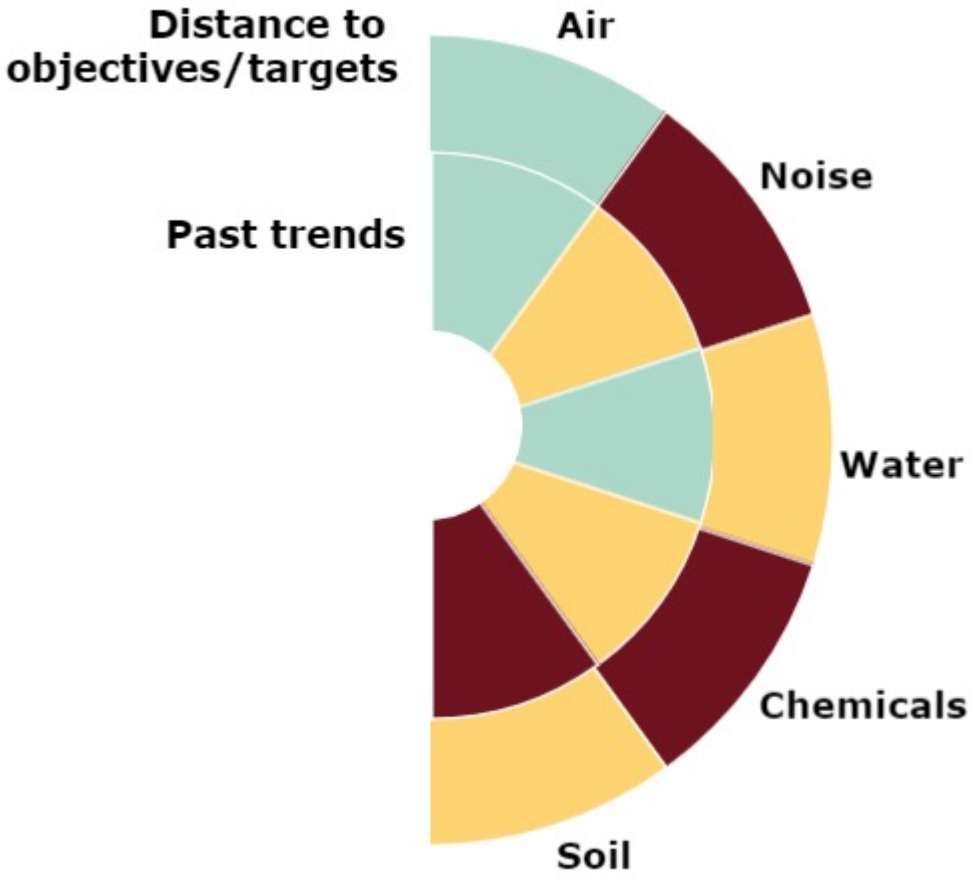


Conclusions?

So, where are we on the road to zero pollution impacts on health?

- Progress good in some areas
- No progress in other areas
- Some legacy issues still concerning – lead, asbestos
- Knowledge gaps remain – e.g. soil
- Compelling evidence on chemical risks
- Inequity remains an issue to be tackled

Summary: Zero pollution and health analysis



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Thank you

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