European Commission

European Committee of the Regions

Zero Pollution Stakeholder Workshop

“Reducing health inequalities through zero pollution”

Day 2, 15 June 2023

Agenda

9:30	**Session 3:** Examining the impact of demographic factors on pollution
11:00	*Break*
11:15	**Session 3:** Examining the impact of demographic factors on pollution (continued)
11:45	**Session 4:** Outlook of the zero pollution and health agenda for 2030
12:45	Conclusions and next steps

Reducing health inequalities through zero pollution

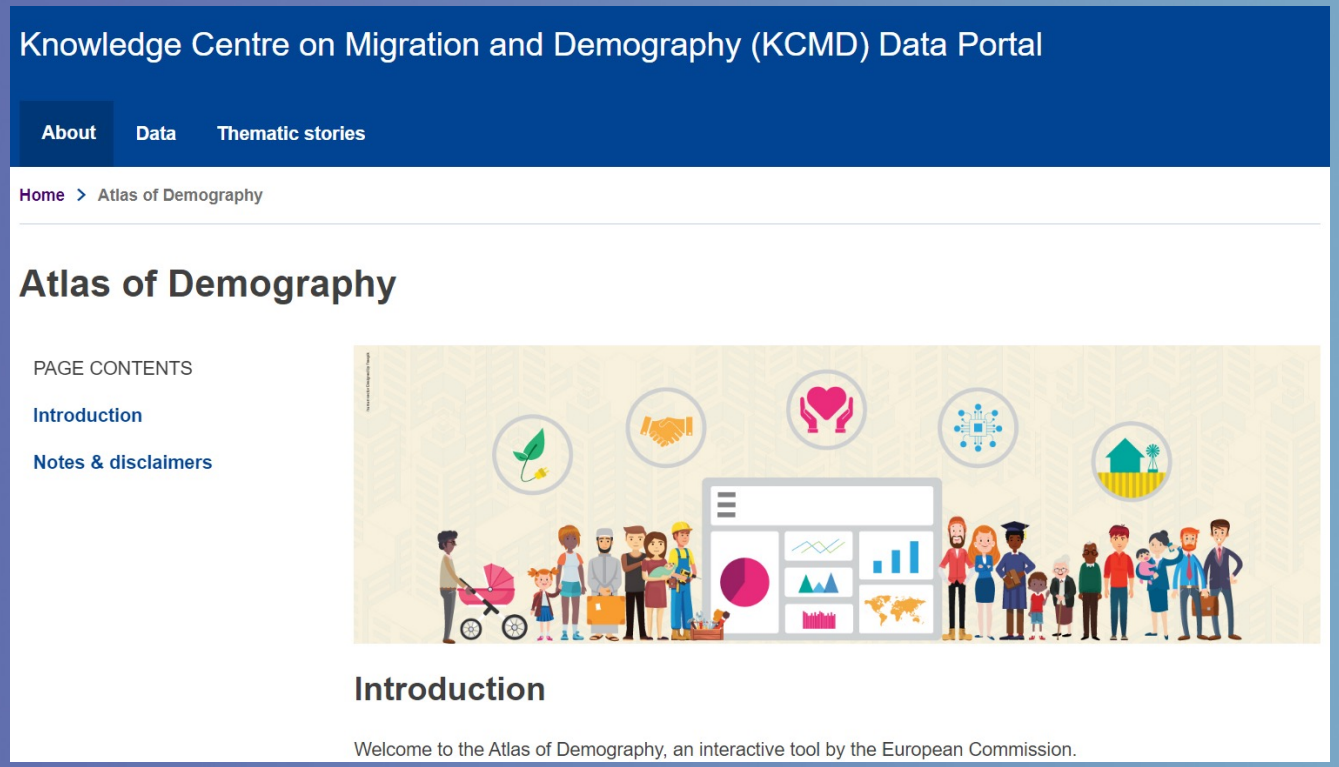
Session 3: Examining the impact of demographic factors on pollution

JRC E5; JRC C5; JRC D3; JRC D2

- JRC, 15 June 2023

European Commission

Session 3: Examining the impact of demographic factors on pollution



Atlas of Demography

- Based on official statistics and projections from Eurostat/EEA/GESIS and data produced by JRC
- Interactive maps and charts
- Thematic stories

European Commission

Session 3: Examining the impact of demographic factors on pollution

EUROPEAN COMMISSION

Brussels, 12.5.2021
COM(2021) 400 final

COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS

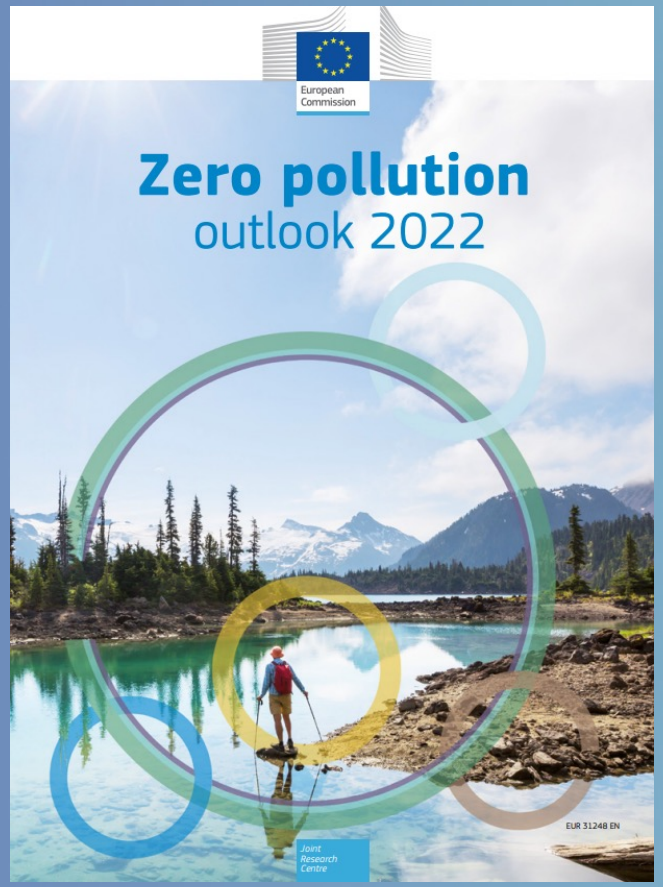
Pathway to a Healthy Planet for All
EU Action Plan: 'Towards Zero Pollution for Air, Water and Soil'

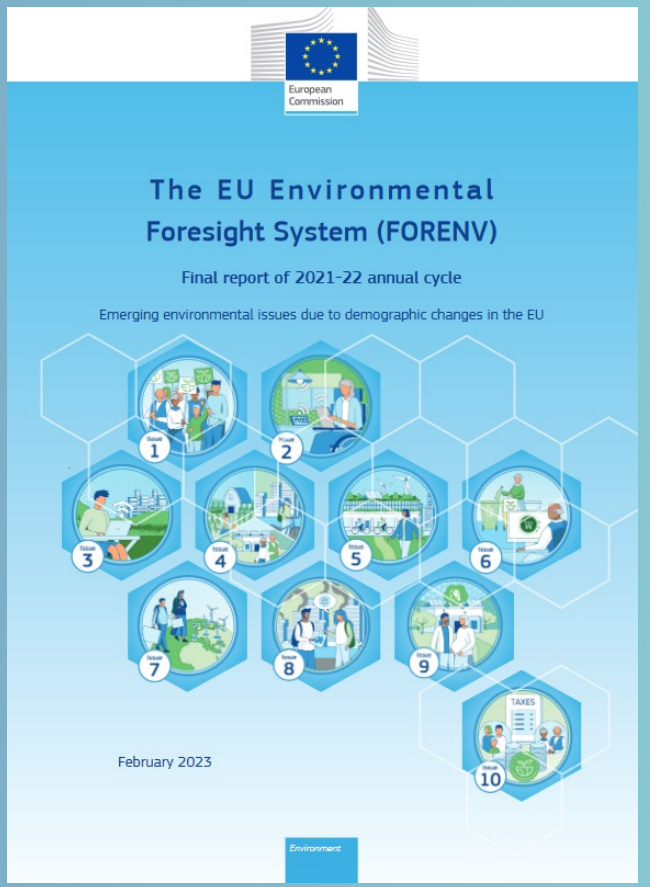
{SWD(2021) 140 final} - {SWD(2021) 141 final}

ANNEX 1 - LIST OF ACTIONS

N°	ACTIONS	Timetable
	IMPROVING OUR HEALTH AND WELL-BEING	
Flagship 1	**Reducing health inequalities through zero pollution** Regularly feed pollution monitoring and outlook data into the Cancer Inequalities Registry and the Atlas of Demographys.	as from 2022

EN **EN**





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Session 3: Examining the impact of demographic factors on pollution

Air pollution

Soil pollution

Water pollution

European Commission

Session 3: Examining the impact of demographic factors on pollution

Air pollution

Session 3: Examining the impact of demographic factors on pollution

Air pollution

European Commission

Session 3: Examining the impact of demographic factors on pollution

Soil pollution

Session 3: Examining the impact of demographic factors on soil pollution

Soil pollution

European Commission

Break (15 minutes)

Session 3: Examining the impact of demographic factors on pollution

- JRC, 15 June 2023

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ZERO POLLUTION TALKS

COFFE BREAK - we will reconvene at 11:15

Subscribe to the newsletter

Register for the first **ZP Talk:**
Zero Pollution and the European Year of Skills

Session 3: Examining the impact of demographic factors on pollution

Water pollution

Session 3: Examining the impact of demographic factors on water pollution (continued)

Water pollution

European Commission

Thank you !

Session 3: Examining the impact of demographic factors on pollution

- JRC Unit E5, C5, D3, D2

European Commission

Session 4:
Outlook of the zero pollution and health agenda for 2030

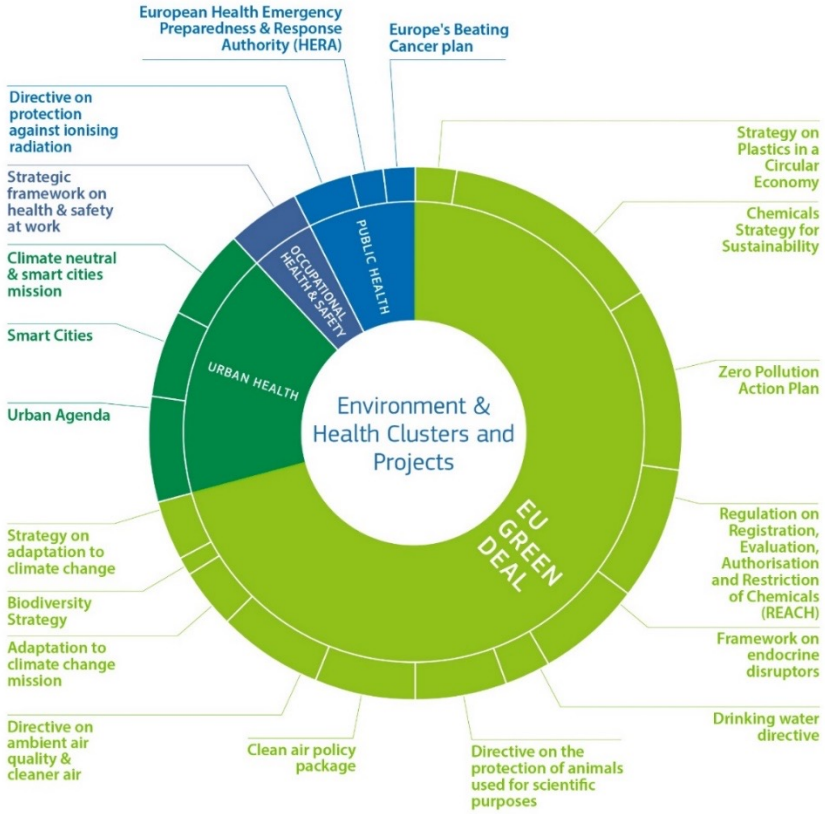
The EU Framework Programme for Research and Innovation on Environment and Health

15/6/2023

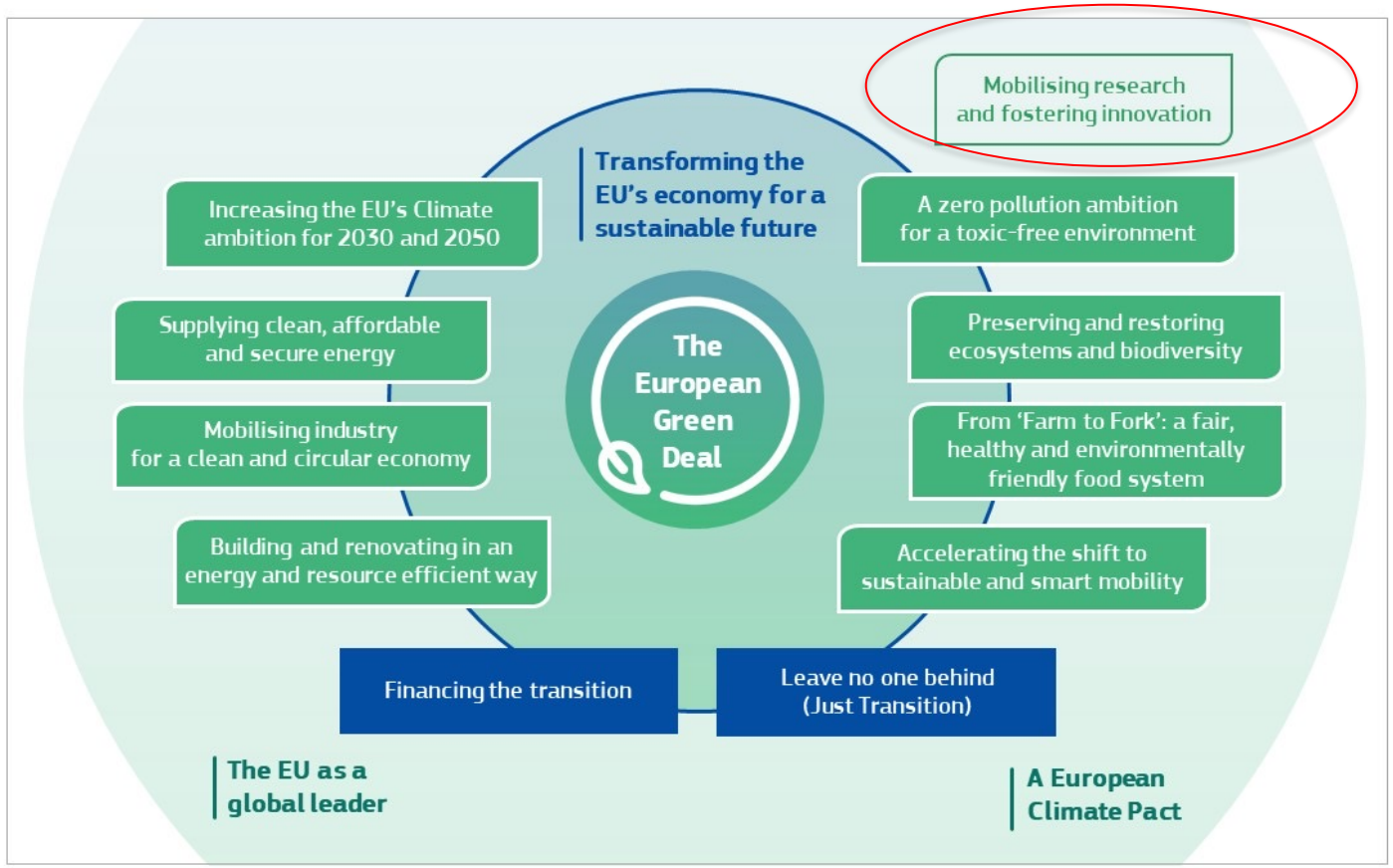
DG Research & Innovation


EUROPEAN
GREEN DEAL
URBAN HEALTH
Environment
& Health
OCCUPATIONAL
HEALTH &
SAFETY
PUBLIC HEALTH

Policy framework for Environment and health research



The EU Green deal



EU Research Policy Framework

HORIZON EUROPE

EURATOM

SPECIFIC PROGRAMME: EUROPEAN DEFENCE FUND

Exclusive focus on defence research & development

- Research actions
- Development actions

SPECIFIC PROGRAMME IMPLEMENTING HORIZON EUROPE & EIT*

Exclusive focus on civil applications

Pillar I EXCELLENT SCIENCE

- European Research Council
- Marie Skłodowska-Curie
- Research Infrastructures

Pillar II - €53.5 billion GLOBAL CHALLENGES & EUROPEAN INDUSTRIAL COMPETITIVENESS

Clusters

- Health – €8.25 billion
- Culture, Creativity & Inclusive Society
- Civil Security for Society
- Digital, Industry & Space
- Climate, Energy & Mobility
- Food, Bioeconomy, Natural Resources, Agriculture & Environment

Joint Research Centre

Pillar III INNOVATIVE EUROPE

- European Innovation Council
- European Innovation Ecosystems
- European Institute of Innovation & Technology*

WIDENING PARTICIPATION AND STRENGTHENING THE EUROPEAN RESEARCH AREA

- Widening participation & spreading excellence
- Reforming & Enhancing the European R&I system

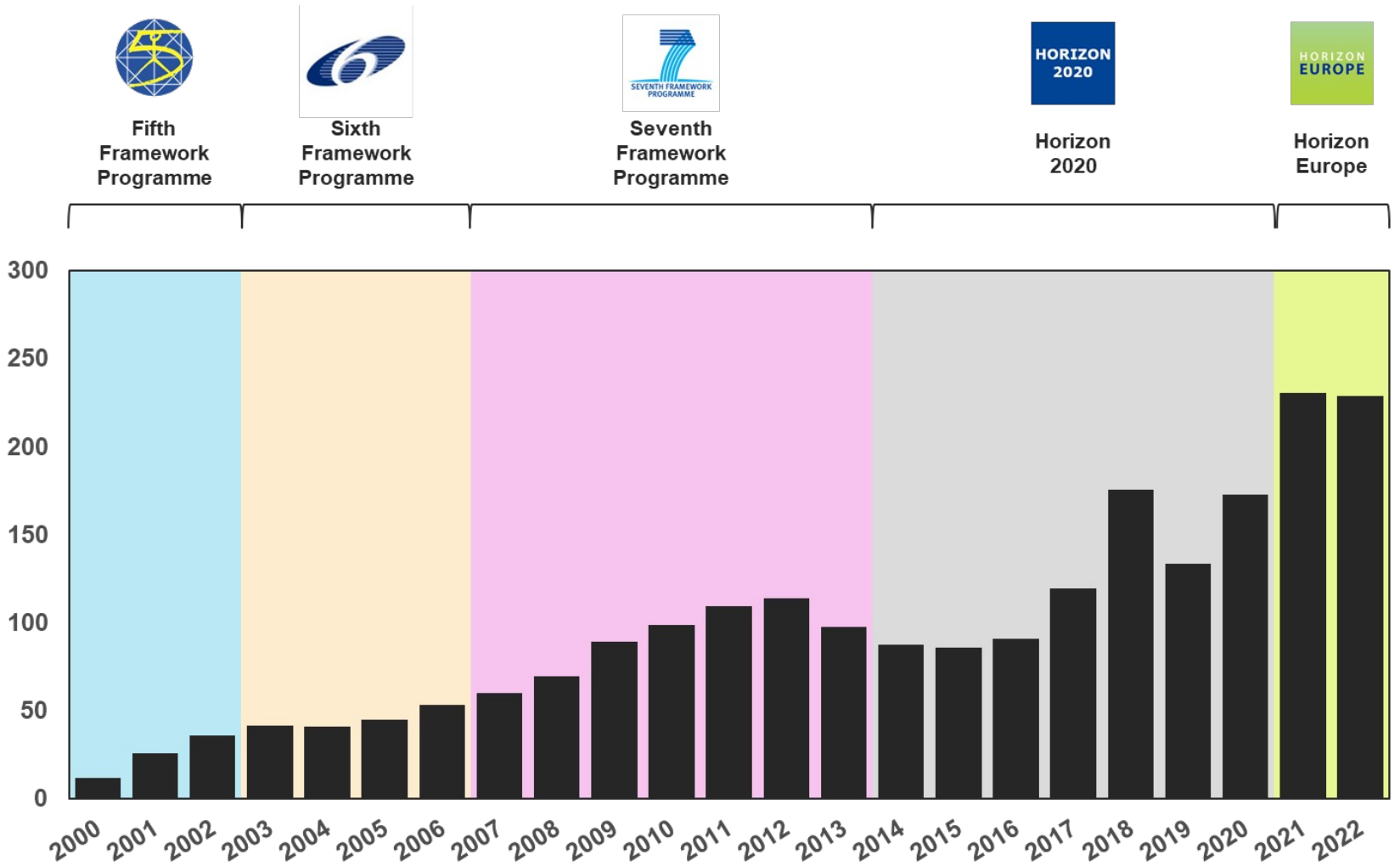
EURATOM

- Fusion
- Fission
- Joint Research Center (JRC)

* The European Institute of Innovation & Technology (EIT) is not part of the Specific Programme

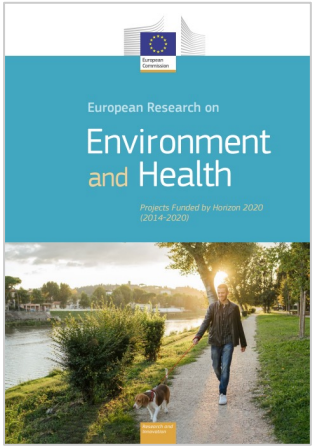
European Commission

Funding in EU Environment & Health research



700 projects; €3 bn EU contribution

[E&H website]



[Project catalogue]

[Factsheet]

Main Environment and Health research areas

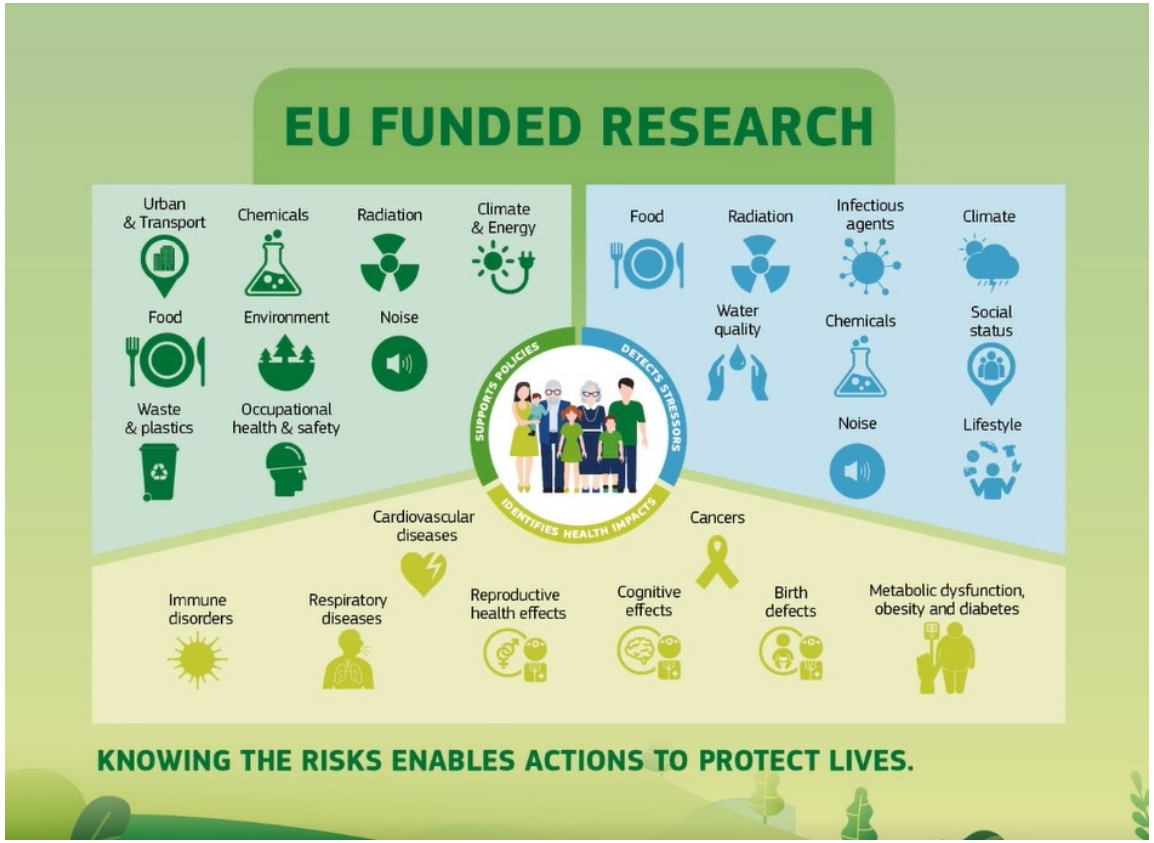


Figure 2a

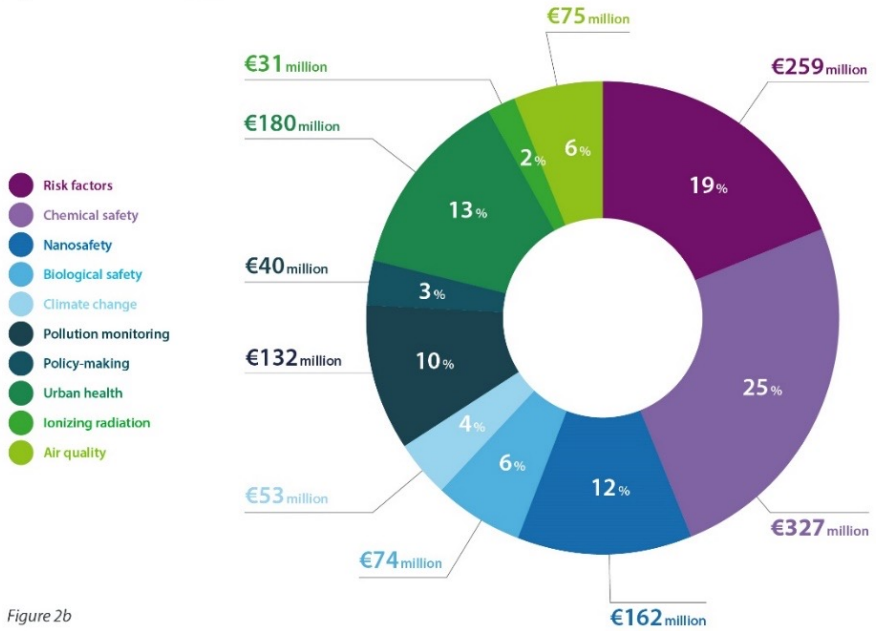


Figure 2b

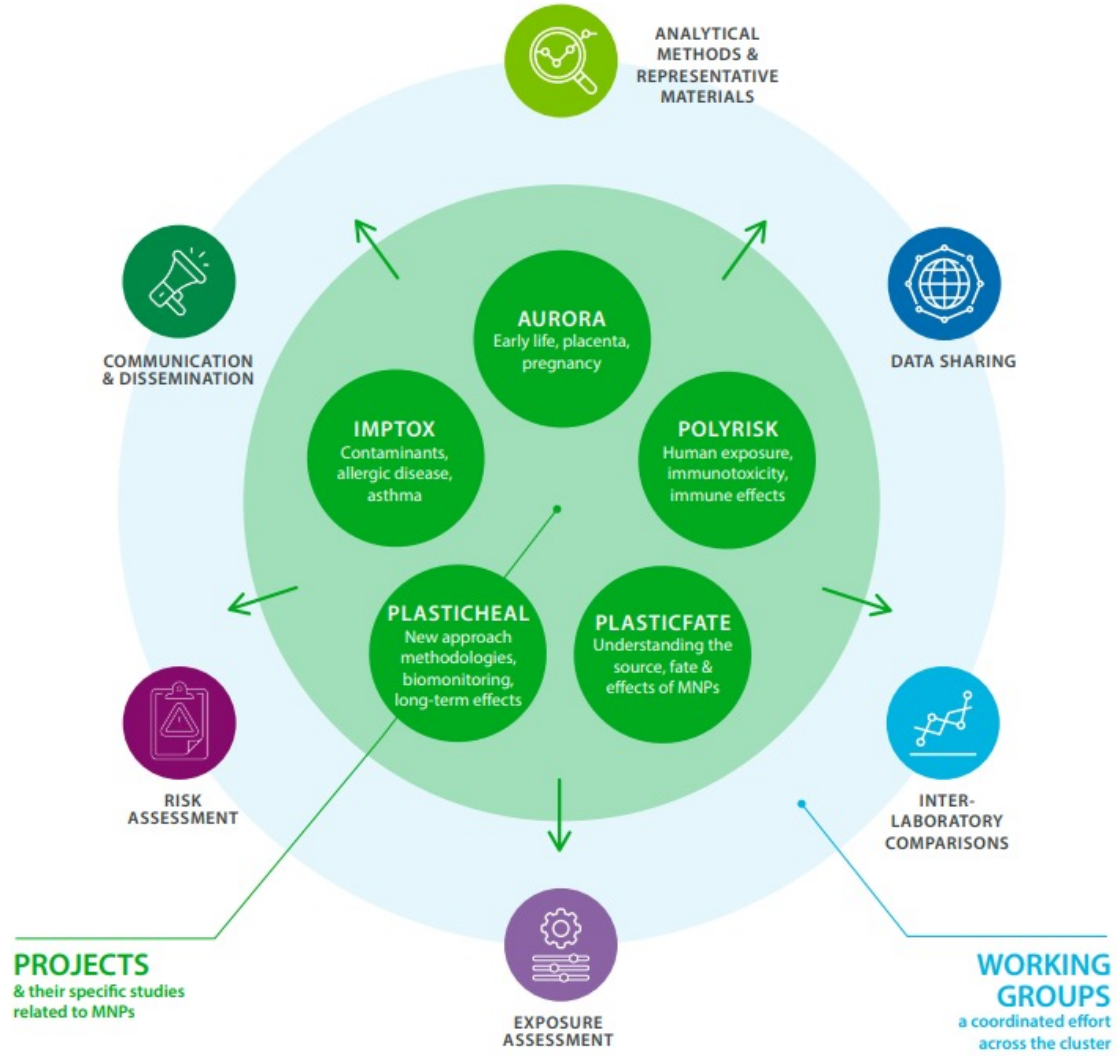
Clusters of projects on Environment & Health

Environment & Health Clusters of Projects

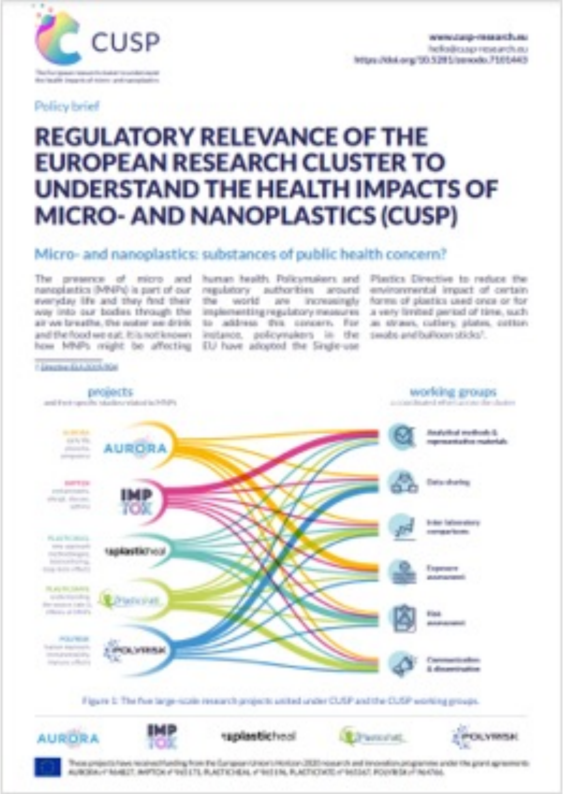
		PROJECTS	BUDGET (in million)	COUNTRIES	RESEARCH GROUPS
Clusters under Horizon 2020	EURION[1]	8	€49	19	70+
	EHEN[2]	9	€105	24	120+
	CUSP[3]	5	€30	22	70+
	Urban Health[4]	6	€30	26	90+
	Green Deal Health[5]	6	€51	23	70+
	ASPIS[6]	3	€60	16	60+
Clusters under Horizon Europe	IDEAL[7]	6	€47	23	100+
	Climate Change & Health[8]	6	€59	28	100+
	CLUE-H[9]	4	€29	18	60+

[1] European Cluster to Improve Identification of Endocrine Disruptors
[2] European Human Exposome Network
[3] European research cluster to understand the health impacts of micro- and nanoplastics (MNPs)
[4] Urban Health Cluster
[5] The Green Deal Health Cluster
[6] Animal-free Safety assessment of chemicals: Project cluster for Implementation of novel Strategies
[7] Cluster on Indoor Air and Health
[8] Cluster on Climate Change and Health
[9] Cluster on Electromagnetic fields Exposure and Health

CUSP Cluster



Policy Briefs



European Commission

Newsletters

European Human Exposome NETWORK

The world's largest project network studying the impact of environmental exposure on health

NEWSLETTER

ISSUE #4
May 2023

Understanding and addressing policy challenges - join us on 1st June 2023!

Welcome

It's been a busy start to 2023 for all the European Human Exposome Network (EHEN) projects. In addition to progressing our research activities and holding annual meetings, we have also prepared progress reports for our funder, the European Commission (EC). All projects and the EHEN board also had review meetings with the EC to assess progress and outputs so far. These reports and meetings provide a chance to reflect and highlight areas for improvement going forward.

One current focus is organising the EHEN annual meeting for the network partners at the end of May, and the public event taking place on 1st June 2023 in Leuven, Belgium and online. We'll be joined by representatives from the World Health Organization and the EC Directorate-General for Environment and for Research and Innovation. We hope to see you there!

In this issue of the newsletter, we share more on the public event and introduce our new blog series. You can also read progress updates from each project, as well as hear about the latest news, events, publications and toolbox development from across EHEN.

We welcome any feedback on this newsletter so please do not hesitate to contact us.

Peter Hoet and Sylvain Sebert,
EHEN Coordination Team

INSIDE THIS ISSUE

EHEN Event "Exposome Research: Understanding and Addressing Policy Challenges"

Latest News and Events

EHEN Blog Series

The Projects' Progress

Publications and Project Findings

126 Research groups
24 Countries
9 Large-scale projects
106 Million euros from the European Commission

[EHEN newsletter #4]

Issue 4 - May 2023

CUSPNEWS

FAREWELL / FOREWORD

Ramping up for results

As Alba Hernández (PlasticHeal) passes the CUSP chair to Rudolf Reuther (PlasticsFatE), significant progress has been made in researching the risks of micro- and nanoplastics on human health. Notable achievements include organizing a workshop series on human risk assessment and launching the first CUSP Policy Brief. Ongoing initiatives on inter-lab comparisons, true-to-life materials, and human biomonitoring continue to advance knowledge in the field. Looking ahead, Rudolf Reuther, the new CUSP chair for 2023, envisions an intensified research phase, tackling challenges in methodology validation and development with real test materials and systems.

Discover more about the plans for the year in progress in his introduction on page 2

WORKING GROUPS & PROJECT UPDATES

Uniting global expertise

CUSP researchers have been busy advancing research across all six working groups. Read more about the upcoming interlaboratory comparison which promises to be the largest initiative of its kind hosted by the pre-standardisation platform VAMAS. Look inside our newsletter to learn more about this massive initiative, the progress in our working groups and the latest news from our five projects.

Read more starting from page 4

EVENTS AND ANNOUNCEMENTS

CUSP members will gather in Utrecht from Sep. 12th to 14th for the cluster's third annual meeting. During this event, they will review the achievements of the past year and plan future activities. Find out more about the meeting and a series of interesting conferences, all taking place in the months to come.

Read more starting from page 17

MEET OUR SCIENTISTS

... and discover the motivations that fuel their work as you delve into their inspiring stories.

This time we talked to Tatjana Parac-Vogt, a bio-inorganic scientist from KU Leuven and Runyu Zou from the University Medical Center Utrecht, an expert in the field of environmental epidemiology and exposome science.

Discover more about their personal research journeys on page 21

[CUSP newsletter #4]

Urban Health Cluster

NEWSLETTER #2

Thursday, 22 December 2022

Welcome to the 2nd Urban Health Cluster Newsletter!

Urban health refers to the wellbeing and health of people living in cities. It focuses on the link between common chronic health conditions and the urban environment. The six projects forming the Urban Health Cluster (ENLIGHTENme, eMOTIONAL Cities, HEART, RECETAS, URBANOME, WELLBASED) aim to enhance collaboration and promote the importance of including health and well-being in urban related strategies and polices.

In this edition you will learn about the Cluster's progress, the Annual Meeting held in October 2022, the first Joint Policy Brief and the UHC projects' activities to disseminate the Cluster's scope.

You may follow UHC online:
Website: https://www.urban-health.eu/
Twitter: @ClusterUrban
LinkedIn: Urban Health Cluster

Kind regards,
The editorial team

Our latest news

Annual Meeting | 27-28 October, 2022

Cluster's second annual meeting in hybrid format

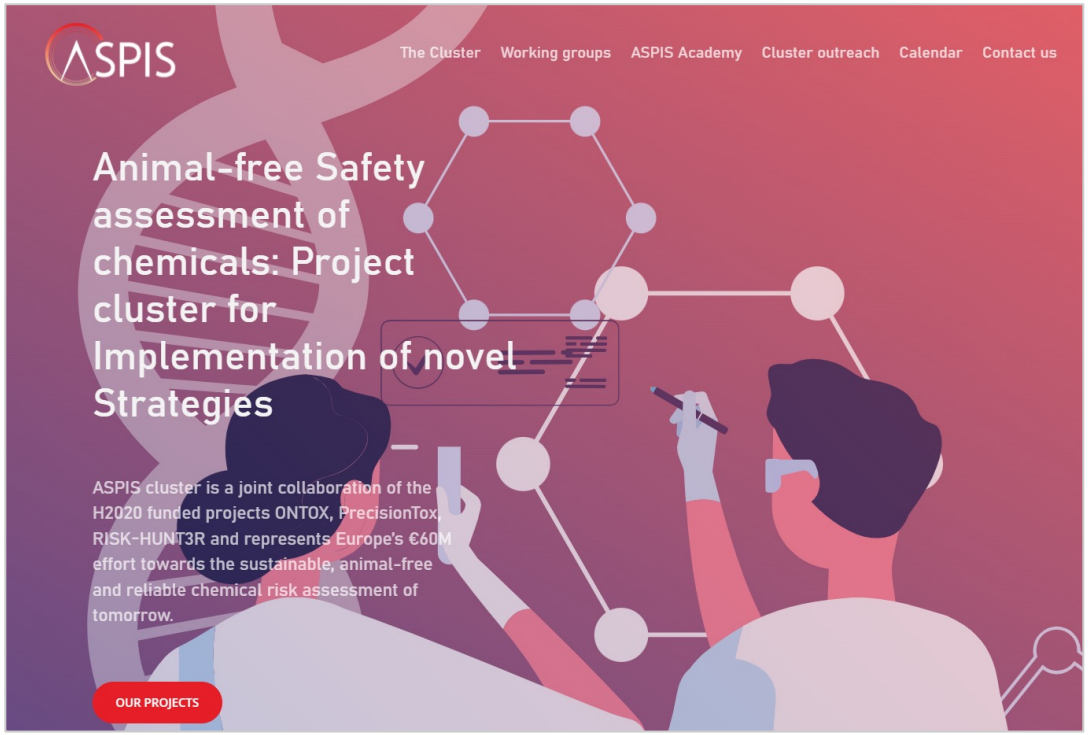
The Urban Health Cluster held its second annual meeting in Valencia, Spain on October 27-28, 2022. Representatives from the European Commission (DG RTD & HaDEA), project coordinators and consortia members the of the six H2020 projects, representatives of European Initiatives and Networks, met for the second annual Urban Health Cluster.

The meeting advanced the urban health agenda through discussions of the **technical aspects of urban health research and the translation of these research areas into policy and actions**. Cluster members reviewed progress over the past 18 months and prepared for the next phase through Working Groups' sessions on science translation, health determinants

[UHC newsletter #2]

European Commission

Website



[ASPIS website]

[IDEAL website]

European Commission

Feedback to policy

European Commission

Horizon Projects Supporting the Zero Pollution Action Plan

2. Reducing health inequalities through zero pollution

The aim of this flagship is to feed pollution monitoring and outlook data regularly into the Cancer Inequalities Registry ([5]) and the Atlas of Demography ([6]). By 2024, an assessment will be carried out of the need to have an inequalities registry identifying trends, disparities and inequalities across the EU regions also for other pollution-related diseases, to help target interventions at EU, national and local levels. This registry would enable people to compare how much pollution affects their health across the different regions where they live, study and work.

The flagship is supported by the recently published briefing from the European Environment Agency on cancer and pollution ([7]), which shows that pollution causes over 10 % of all cancer cases in Europe, which are therefore preventable.

The Commission–UNEP policy dialogue identified an urgent need for a shift from the generation, production and use of harmful chemicals that pose a risk to human health and the environment towards the sound management of chemicals in key sectors.

2.1. Projects' highlights

The following Horizon 2020 projects have been identified as having contributed to the abovementioned goals.

- **HBM4EU** ([8]) (the European Human Biomonitoring Initiative), co-funded by the European joint programme on rare diseases, provided harmonised monitoring data on the European population's exposure to chemicals and gathered evidence on health effects in by age group and gender, taking into account also other factors such as socioeconomic status, lifestyle, diet and environmental conditions. The work started within HBM4EU will be continued by the Partnership on Chemical Risk Assessment(PARC) ([9]).

Zero Pollution Stakeholder Platform - Actions

Find out how the flagship initiatives and actions of the Zero Pollution Action Plan are being implemented.

The Zero Pollution Action Plan set out 9 flagship initiatives listed below and 33 actions (see the list here). Active stakeholder involvement will be essential to implement them. We will provide you with regular information on their implementation through the Action Tracker on this page and through the newsletter.

If you are interested in contributing to any of these initiatives, please register for the newsletter.

The Zero Pollution Stakeholder Platform also developed a Work Programme for 2022 to 2024, as discussed at the first meeting of the Platform. Updated information on the activities listed in the Work Programme is available here.

— **Flagship 9 - Consolidating the EU's Knowledge Centres for Zero Pollution (Ongoing - advanced)**

Status: Ongoing (advanced)

From 2021 onwards, the Commission will consolidate the roles of the European Environment Agency (EEA) and the Commission's Joint Research Centre (JRC) as the EU's Knowledge Centres of Excellence for Zero Pollution Monitoring and Outlook, and bring together relevant players in the Zero Pollution Stakeholder Platform to exchange also on best available data and inform the public, in particular through the upcoming Air Quality Index App.

Timing / key deliverables

2021: Air Quality App launched
2022: First ZP Monitoring and Outlook Report
2024: Second ZP Monitoring and Outlook Report

Sources of additional information

- The ~~Urban~~ Health Cluster and the Indoor air quality and health cluster (~~kick off~~ October 2022) will provide evidence on the health impacts of pollution in urban areas including air/indoor air and light pollution. The European Human Exposome Network will advance the understanding of the health impacts of global exposure to environmental factors covering also air and noise pollution and chemical risk factors. The European Research Cluster to Understand the Health Impacts of Micro- and Nanoplastics aims at filling in the knowledge gaps in this research area.

Feedback to policy: success stories

Health introduction

This section of the zero pollution monitoring assessment examines available knowledge and trends in pollution and associated impacts on health. In addition to this summary assessment page there are sub-sections providing more detailed analysis of air pollution, noise pollution, water pollution, chemical pollution and soil pollution impacts on health. A collection of 'Signals' is also provided which highlight emerging issues and other available knowledge on pollution and health.

Recently, the EU Horizon European Human Biomonitoring Initiative (HBM4EU) yielded data on human exposure to chemicals from harmonised human biomonitoring studies across Europe. The data provide a picture of how chemicals burden the body and impact health. Some of the emerging data from this project are presented here to illustrate the value of human biomonitoring in assessing risks from chemicals to humans. The recently initiated Partnership for the Assessment of Risks from Chemicals (PARC) will further build on HBM4EU experiences and results.

Brussels, 13.2.2023
COM(2023) 71 final

2023/0033 (COD)

Proposal for a

DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

amending Council Directive 98/24/EC and Directive 2004/37/EC of the European Parliament and of the Council as regards the limit values for lead and its inorganic compounds and diisocyanates

{SEC(2023) 67 final} - {SWD(2023) 34 final} - {SWD(2023) 35 final} -
{SWD(2023) 36 final}

Coherence with scientific research

Lead and diisocyanates were priority chemicals addressed under the EU human biomonitoring programme (HBM4EU) funded by Horizon 2020[56], a joint effort of 30 countries, the European Environment Agency and the European Commission, that ran from 2017 to 2021. It generated knowledge to provide insight into the safe management of chemicals and so protect human health. A dedicated project on occupational exposure to metals was carried out, with the results showing that exposure to several metals, including lead, occurs during the recycling of e-waste. A dedicated project was also carried out for diisocyanates, leading to a review of the current biomarkers used for biomonitoring diisocyanates, an assessment of the current levels in workers and the identification of research gaps[57].

European Commission

Ongoing Horizon Europe calls

- HORIZON-HLTH-2023-ENVHLTH-02-01: **Planetary health: understanding the links between environmental degradation and health impacts**
- **Closure: 13.04.2023**
- Tot: 30M€
- Project size: 5-6M€

- HORIZON-HLTH-2023-ENVHLTH-02-03: **Health impacts of endocrine-disrupting chemicals: bridging science-policy gaps by addressing persistent scientific uncertainties**
- **Closure: 13.04.2023**
- Tot: 40M€
- Project size: 6-7M€

- HORIZON-HLTH-**2024**-ENVHLTH-02-06-two-stage: **The role of environmental pollution in non-communicable diseases: air, noise and light and hazardous waste pollution**
- **Closure: 19.09.2023**
- Tot: 60M€
- Project size: 7-8M€

- HORIZON-HLTH-2023-CARE-04-03: **Environmentally sustainable and climate neutral health and care systems**
- **Closure: 13.04.2023**
- Tot: 20M€
- Project size: 4-6M€

- HORIZON-HLTH-2023-ENVHLTH-02-04: **Global coordination of exposome research**
- **Closure: 13.04.2023**
- Tot: 3M€
- Project size: 3M€

European Commission

Forward looking

Strategic Plan 2025-2027

European Commission

Conclusions and next steps

Thank you for joining us!

Register now for the first ZP Talks

Zero Pollution and the European Year of Skills

Keep in touch:

ENV-ZERO-POLLUTION@ec.europa.eu, zero.pollution.stakeholders@technopolis-group.com

https://ec.europa.eu/environment/zero-pollution-stakeholder-platform_en