

Soil Pollution 20.10.21 @ 10:00 - 12:30





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#EUSOforum

EU SOIL **OBSERVATORY**

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sli.do CODE: **#EUSO** (also people in the WEBEX)

Encourage questions to be sent via WEBEX Chat or SLIDO.

If you want to intervene on WEBEX, raise your hand.

People can vote on questions in SLI.DO.

People in the WEBEX Session will be invited to deliver their question in person.







Soil Pollution

Parallel session 1a

SLIDO #EUSO

JRC D3 Team

EUSO Stakeholder Forum, 20 October, 2021



Objectives of the session

- To set the scene presenting ZPAP and soil-related issues from different angles from policy through Member States' administration to all stakeholders
- To call for contributions to the Clean Soil Monitoring and Outlook Report
- To create a Technical Working Group on Soil pollution within the EUSO
- To identify the chairs, co-chairs and the TWG Members
- To get involved, to commit and to perform the following tasks



Tasks of Technical Working Group on Soil pollution

- To provide support to the Clean Soil Monitoring and Outlook report
- To propose and establish the Table of Contents (ToC)
- To discuss the Contaminated Sites and Diffuse pollution issues
- To reflect on and to create the Watchlist (flux-diagram)
- To produce and to put together contributions from stakeholders
- To contribute to the First Draft of the Clean Soil Outlook
- To revise the final draft of the Clean Soil Outlook



AGENDA sli.do #EUSO 10:00 Parallel Session 1a: Soil pollution

Scope: Support to Clean Soil Monitoring & Outlook Report

Moderators: Piotr Wojda EC JRC/EUSO

| | Introduction and Scope: Piotr Wojda, EC JRC |
|---|--|
| | Zero Pollution Action Plan: Joachim D'Eugenio, EC ENV |
| | Soil pollution in the EU Soil Strategy: Bavo Peeters, EC ENV |
| | Zero Pollution Monitoring: Ian Marnane, EEA |
| | Bauhaus and soil pollution, Alessandro Rancati, EC JRC |
| | Clean soil outlook, context, structure, inputs watchlist and roadmap: Piotr Wojda, EC JRC |
| | Diffuse pollution – plastic & pesticides: Nicolas Beriot, Wageningen University & Research, NL |
| | Diffuse pollution – <i>metals</i> : Panos Panagos, EC JRC |
| | Contaminated sites: Frank Swartjes, EIONET Soil Pollution Working Group/RIVM, NL |
| | Common Forum (MS) Dietmar Müller-Grabherr |
| | NICOLE Johan de Fraye (Chair) |
| | REMTECH Marco Falconi |
| • | Contributions from the floor |

Questions and Discussion

Establishment of EUSO Soil Pollution Technical Working Group

Next steps & Conclusions



Stakeholders interventions

Setting the scene



Clean Soil Outlook

Framework, Timeline, ToC, Fluxdiagram



Zero Pollution Monitoring and Outlook Report

Context

- Integrated monitoring of pollution will substantially support better governance on zero
 pollution by offering new insights into overall pollution levels and impacts and
 by monitoring whether policy implementation is on track to achieve agreed objectives at
 EU and national level, also as part of the regular Environment Implementation
 Reviews and of the 8th EAP monitoring.
- The Zero Pollution Outlook will analyse synergies and trade-offs between different EU policies, help translate 'early warnings' into recommendations on pollutants of increasing concern based on the latest research findings (e.g. on ultrafine particles or light pollution).
- The first Zero Pollution Monitoring and Outlook Report is planned for end 2022.



Composition of the ZP M&O R

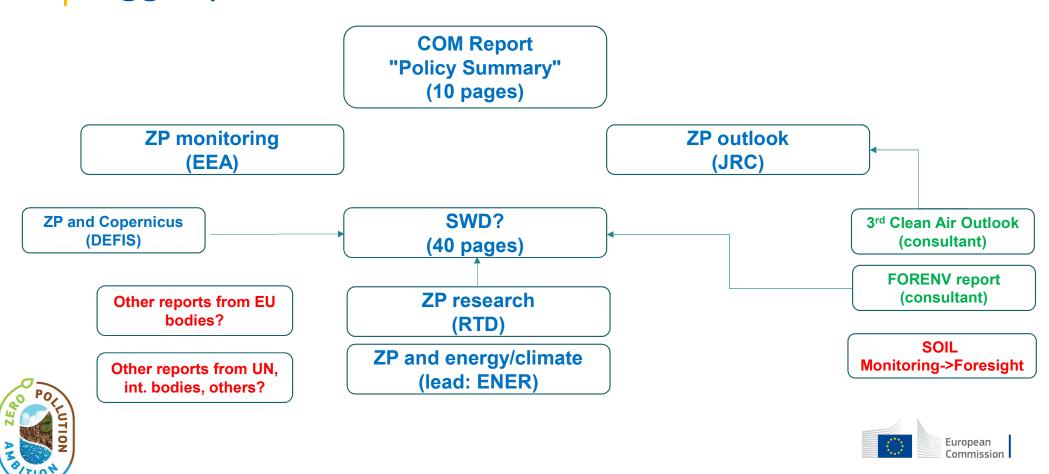
For 2022, first Zero Pollution Monitoring and Outlook planned with input from:

- Zero Pollution Monitoring Report
- Zero Pollution Outlook Report --> Clean Soil Outlook
- Zero Pollution foresight report
- Key results of pollution-related research
- Key results from the assessment of the final National Energy and Climate Plans
- Thematic / technical reports (e.g. Copernicus)





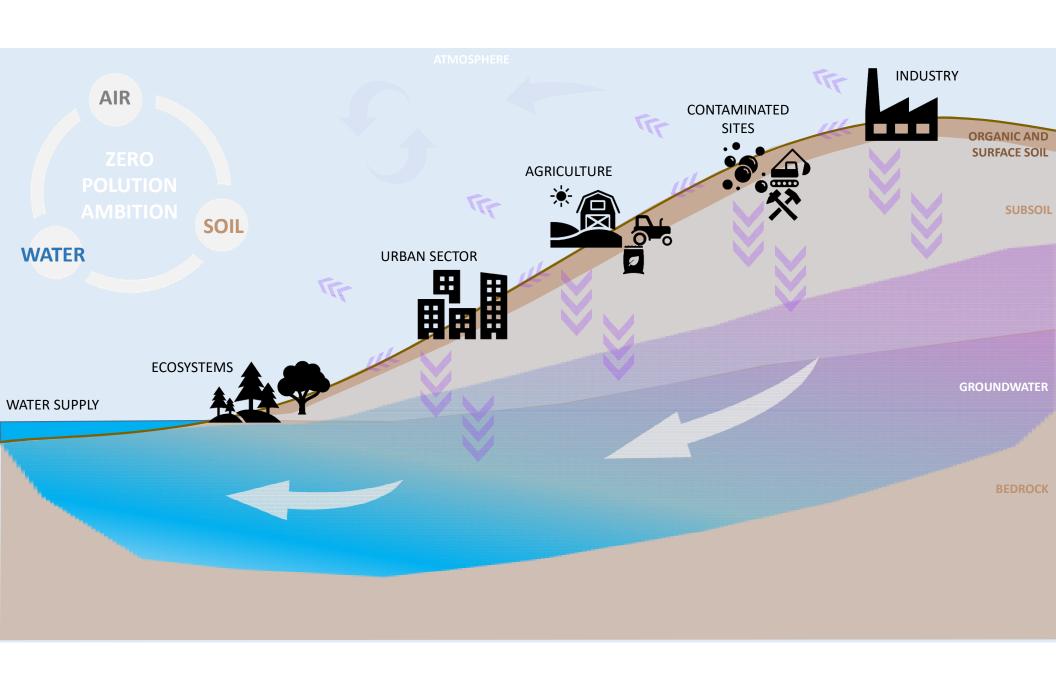
Bigger picture



Clean Soil Outlook Timeline

- JRC to make a proposal by the end of 2021
 - Kicked-off discussions at RemTech Europe 2021
 - EU Soil Observatory Steering Committee and EUSO Stakeholder Forum
 - Other events, consultations and workshops
- First Report ready by the end of 2022
- Second Zero Pollution Monitoring and Outlook Report by 2024





From monitoring to outlook for soil

- We do not have a holistic legislation on soil
 - European Parliament resolution calling for one
- What are the gaps? How to close them?
 - Existing data and collecting new ones?
 - New, emerging substances of concern?
- What are future projections for contamination, biodiversity, ...?
- What are available technologies?
- What are the policy options?



Table of contents

Clean Soil Outlook



Clean Soil Outlook Report, Preliminary ToC

- I. DPSIR analysis
 - Impacts on ecosystems and human hard
- II. Legislation, strategies and actions
- III. Progress towards compliance/targets
- IV. Reflections on the monitoring report and baseline
 - background values/thresholds
 - targets
- V. Commitments, funding, international
- VI. Long-term objectives
- VII. Conclusions



SVD(6 I think this was the title we spoke about

SIMOES VIEIRA Diana (JRC-ISPRA), 03/09/2021

SVD(7 I suggest the following:

- 1 DPSIR
- 2 Legislation, strategies and actions
- 3 Progress towards compliance
- 4 Reflections on the monitoring report and baseline
- 5 Commitments, funding, international
- 6 Long-term objectives
- 7 Conclusions

merged original points 4 &5, point 6 can be included in the DPSIR. In fact 4-6 could all be includen in the DPSIR. SIMOES VIEIRA Diana (JRC-ISPRA), 03/09/2021

DPSIR Drivers

- Continued and expanding societal need for goods, food and mobility
- Increased urbanisation
- Population growth and evolution
- Sustainability awareness



funny way of presenting DPSIR aproach SIMOES VIEIRA Diana (JRC-ISPRA), 01/09/2021 SVD(2

DPSIR - Pressures

- Industrial processes (energy, manufacturing, mining & metal processing), including historical activities
- Transport
- Food production (land use)
- Getting rid of our waste

SVD(1



Limitations in current waste management, or just Waste management SIMOES VIEIRA Diana (JRC-ISPRA), 01/09/2021 SVD(1

DPSIR - State

- Natural/background
- Local pollution
 - Contaminated sites
 SVD(4
 - Landfills (legal and illegal)
- Diffuse pollution (by sector or maybe better by pollutant?)
- Agriculture and Agrochemicals (PPP, veterinary, manure, fertilisers, excess nutrients, irrigation/salinity, rice...)
- Waste management (sewage pharma, plastics, metals)
- Industrial emissions (radioactive) & Emerging pollutants



SVD(3 Point pollution

SIMOES VIEIRA Diana (JRC-ISPRA), 01/09/2021

SVD(4 I think we should make a separation of the 3 first points from the 4-6 ones, because we pass from a general

classification to specific examples.

SIMOES VIEIRA Diana (JRC-ISPRA), 01/09/2021

DPSIR - Impacts

- Limits and thresholds (relevance of soil characteristics including soil as a buffer)
- Environmental Health (biodiversity, water, ecosystem condition)
- Soil functions (soils as emitters of pollutants N20, methane? plastic, wind and water erosion)
- Social Impacts/Human health uptake by food crops
- Transboundary aspects
- Climate change?





Yes in the sense that it afects the capacity of soil to provide ecosystems services. SIMOES VIEIRA Diana (JRC-ISPRA), 01/09/2021SVD(5

DPSIR - Response

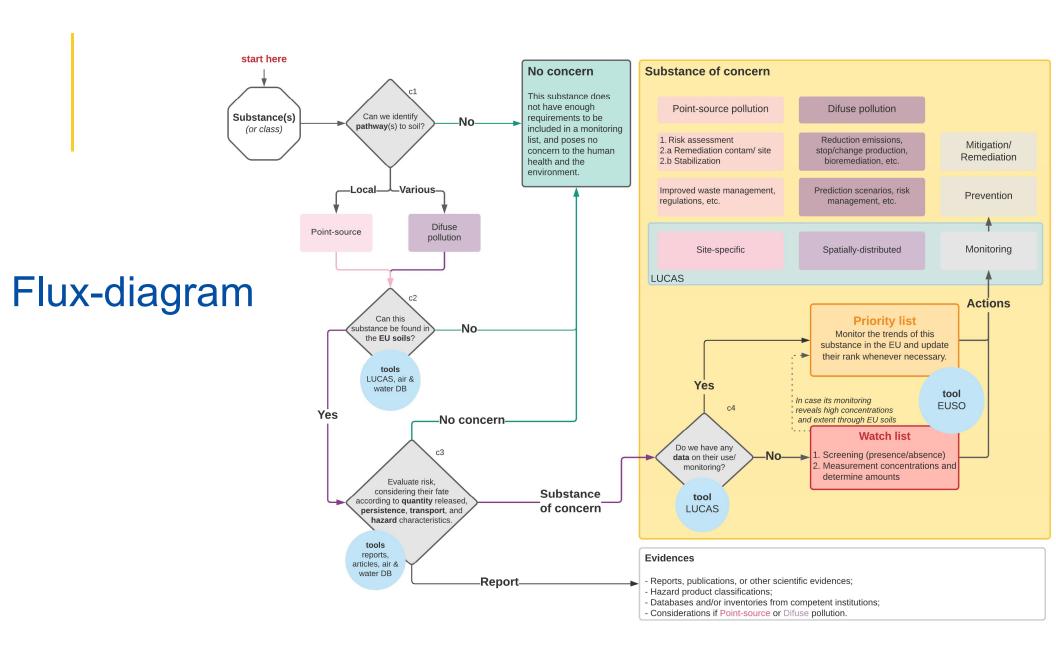
- Risk assessment (site and substances)
- Indicators (EUSO Soil Pollution Dashboard: soil pollution index or footprint?)
- Monitoring (Priority or Watch List, LUCAS, Geochem Atlas, Member States)
- Data and knowledge gaps (R&I component?)
- Industry response and available technologies: restoration of contaminated soils and redevelopment of brownfields
- Policy (EU & Global: SDG): Legal obligations and compliance
- Outlook (State v Policy response or policy response needed)
- Roadmap for 2nd Zero Pollution Monitoring and Outlook Report



Priority OR Watch list

Flux-diagram and examples





Examples for different substances

Flux-diagram was already tested for some substances:

Iron➤ No Concern

• Cadmium ➤ Priority List

Asbestos
 Watch List

• Cesium ➤ Priority List



How can "I" contribute to?

What are the gaps? How to close them?



Areas of expertise

- Data availability, Data collection, Data sharing
- Cost-benefit analysis
- Availability of new technologies
- Digital technologies and successful stories
- Registries of contaminated sites: location, characterization, options
- Diffuse contamination: extent, characterization, scenarios
- ZPAP, New European Bauhaus, ...



Further steps



Discussions on-going

- Zero Pollution Monitoring and Outlook Report
- Need for projections: Foresight considerations
- Policy options (scale of an issue, R to address DP, timeline)
- Metals, Sewage Sludge, Fertiliser regulation, persistent organics
- Fate and transport component
- Reflections with EEA has already started, tight collaboration



Technical Working Group on Soil Pollution

Tasks, Milestones, Members



Tasks of Technical Working Group on Soil pollution

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| Nr | Milestone | Focus | Date proposals | Who | Comments | | | |
|----|---------------------------------|---|----------------------------|-------------------------|----------|--|--|--|
| | 2021-2022 | | | | | | | |
| 1. | EUSO Stakeholder Forum | Clean Soil Monitoring and Outlook Report: Introduction and Scope | 20/10/2021 | Stakeholders | | | | |
| 2. | EUSO TWG: Soil Pollution | Reflections from the EUSO Forum, CSO ToC and Approach, Responsibilities and Request for contributions | by end November 2021 | | | | | |
| | EIONET WG on Soil Pollution | LSI003 | 15/12/2021 | EIONET WG Members | | | | |
| | Common Forum meetings | | | Common Forum Members | | | | |
| 3. | EUSO Soil Pollution TWG | (AM) Contaminated Sites and watchlist | 15/02/2022 | | | | | |
| | | (PM) Diffuse pollution and watchlist | | | | | | |
| 4. | EUSO Soil Pollution TWG | Collect contributions from TWG Members | 15/04/2022 | | | | | |
| 5. | EUSO Soil Pollution TWG | First draft of the CSO | 15/06/2022 | | | | | |
| 6. | EUSO Soil Pollution TWG | Revision and input from and to EU Soil Expert Group (DG ENV) | 15/09/2022 | | | | | |
| 7. | EUSO Soil Pollution TWG | Draft final report | 15/11/2022 | | | | | |
| | 2023+ Refocus? | | | | | | | |
| 1. | | | 15/01/2023 | | | | | |
| 2. | | | 15/06/2023 | | | | | |
| 3. | | | 15/11/2023 | | | | | |

Members



Members of the Technical Working Group on Soil Pollution

- Chairs:
 - Piotr Wojda, Diana Vieira, Arwyn Jones
- Co-chairs proposal:
 - Dietmar Müller-Grabherr, Frank Swartjes, ...
- Members
 - Proposal, what are the grounds, possible contributions

For more info and communication on the establishment of the TWG on Soil Pollution, do not hesitate to contact us:

Piotr.WOJDA@ec.europa.eu, Diana.SIMOES-VIEIRA@ec.europa.eu, Arwyn.JONES@ec.europa.eu



Conclusions

- Timeframe is short
- Open-mind for contributions, ideas, projections
- Working together: industry, MS, EU institutions, society
- Next events: EUSO TWG: Soil Pollution (by end November 2021)
 - Reflections from the EUSO Stakeholders Forum
 - CSO, ToC and Approach
 - Responsibilities and Request for contributions
- Please visit young researcher session tomorrow morning



Keep in touch



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Thank you



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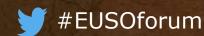
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Lunch Break

Back at 14:00 CEST



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