





**14 December 2023** 10:00-12:00 CET

Breaking ground together: Solutions for urban and post-industrial soil de-sealing

Organizers: Eugenio Morello & Anita De Franco (POLIMI)

With the technical support of: Gabriela Rogowska &

Fabiana De Carlo (TRUST-IT)











The event will be recorded



Use **Zoom chat**feature for
comments/reactions
/links/questions



Online polls will be launced during the event



# Thematic events

European-wide digital sessions dedicated to specific themes crucial to the Mission







1. Breaking ground together: Solutions for urban and post-industrial soil de-sealing
14 December 2023, 10:00 - 12:00 CET
Organiser: Politecnico di Milano

2. Beyond gender barriers in the agrifood system: Innovative women improving food & soil health 11 January 2024 10:00 – 12:00 CET

Organiser: EIT Food

3. Industry engagement for sustainable soil health: Joining living labs

18 January 2024 10:00 - 12:00 CET

Organiser: BusinessMed

4. Smart Soils: Smart Specialization meets EU Soil Mission

24 January 2024 10:00 – 12:00 CET

Organiser: FUNDECYT-PCTEX

5. Soil health from a forestry perspective 25 January 2024 10:00 – 12:00 CET Organiser: Swedish University of Agricultural Sciences (SLU)

6. Soil decontamination
15 February 2024 10:00 – 12:00 CET
Organiser: Institute of Soil Science and Plant
Cultivation (IUNG)









**14 December 2023** 10:00-12:00 CET

Breaking ground together: Solutions for urban and post-industrial soil de-sealing











- Introduce challenges and showcase best practices on the topic of soil de-sealing.
- Inspire innovative approaches for future Living
   Labs engaged in the Mission, including cutting-edge topics.
- Encourage cross-country collaboration, cluster
   stakeholder groups, and stimulating their involvement in Healthy Soil Living Labs. The goal is to encourage networking and collaboration on a transnational scale.
- Introduce aim to refine and customise EU Mission "A Soil Deal for Europe" messages for diverse audiences across different countries.



Part I
Keynote
Speeches
45 minutes

- Welcome and introduction
   Eugenio Morello and Anita De Franco, Politecnico di Milano on behalf of NATIOONS
- Addressing soil de-sealing at the EU level
   Luca Montanarella, Joint Research Centre of the European Commission, ESDAC
- Green with Gray
  Federico Broggini, Latitude Platform, Brussels

Break

Part II
Collaborative
Session
60 minutes

- Presentation of the collective discussion and collaborative sessions With Andrea Arcidiacono, Luca Montanarella, Federico Broggini, Silvia Ronchi. Moderated by: Anita De Franco and Eugenio Morello
- De-sealing and healthy soils
   Chiara Ferrè, UNIMIB
- Living labs for soil de-sealing Dolinda Cavallo, ENOLL



# Part I Introduction

Eugenio Morello & Anita De Franco (POLIMI)









### The Mission: "A Soil Deal for Europe"

- 1 of 5 EU missions;
- The mission to lead the transition to healthy soils in 2030;
- A mission at the heart of the EU Green Deal: the transition to overcome the threats of climate change and environmental degradation.



The advantages of the EU Green Deal





1. Reduce desertification

2. Conserve soil organic carbon stocks

3. Stop soil sealing and increase re-use of urban soils

4. Reduce soil pollution and enhance restoration

5. Prevent erosion

6. Improve soil structure to enhance soil biodiversity

7. Reduce the EU global footprint on soils

8. Improve soil literacy in society





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www.nati00ns.eu

The main objective of NATIOONS is to facilitate the deployment of the EU Soil Mission across EU Member States and Associated Countries during most of its first 'induction and pilot' phase (2021-2025).































## The approach of the Mission

 Scientific knowledge, frameworks, methods Research & innovation programme

- Knowledge and innovation in real-life contexts
- Research questions from local operators

 Demonstrations in rural and urban environments

> oil literacy, mmunicat

Living labs & Lighthouses

- Monitoring framework
- Indicators, data, thresholds

Soil literacy, communicat ion, citizen engagement

Citizens' needs and ideas  Practice-proof monitoring techniques and indicators Monitoring





#### **National engagement events**



Events at national level to raise awareness of the Mission in all HE eligible countries and inform and spur discussions with national stakeholders on soil health challenges and resilience strategies, Living Labs establishment.

#### Webinars



A series of webinars presenting information on Living Labs methodology, Mission criteria, best practices and recommendations, as well as on application process.



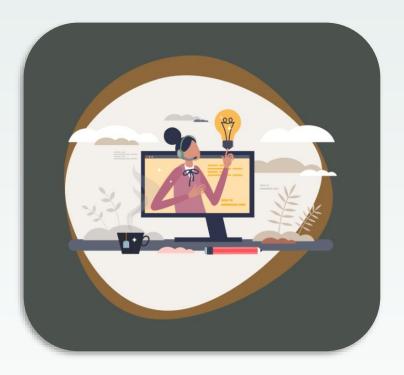


#### **Matchmaking platform**



NATIOONS allows interested parties to meet online to build partnerships and create Living Labs or Lighthouses in line with the EU mission: A Soil Deal for Europe.

#### Helpdesk



The Helpdesk offers assistance to applicants on the topics of the open calls of the EU mission, on the rules of the open call, how to apply, eligibility criteria, validation of proposals, scientific and technical issues relating to the field of proposals, etc.



#### Supporting potential candidates to EU calls



**Engagement events** 



**Matchmaking (national)** 



**Factsheets & online training** 



Helpdesk & FAQ



**Living Labs methodology** 



Coaching



Webinars & thematic events



**Matchmaking (transnational)** 

Inform, involve and promote.

43 countries (EU member states + associated countries)

Facilitate the creation of local Living Labs.

Engagement events online and along the way

Inform and train.

Open calls, types of peculiarities of Living Labs

Online support.

Answering questions about the creation of LLs

Training.

How to create, develop and expand a LL.

Support.

Available in local language, tutors appointed.

Inform, train and involve.

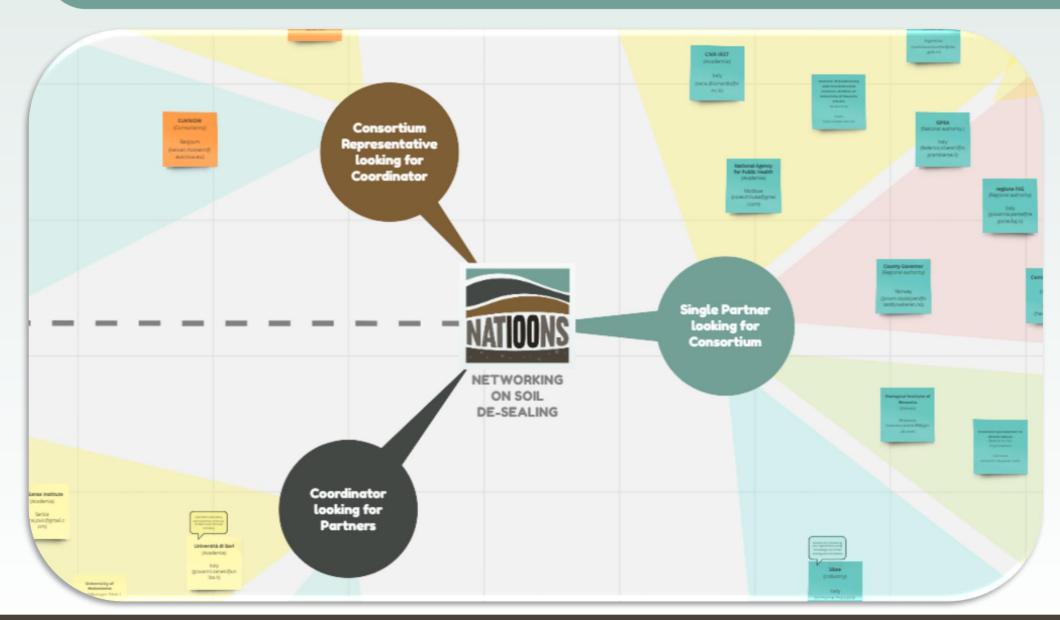
Different themes for specific uses of the areas.

Facilitate the creation of LLs partnerships.

Through online events and networking.



## Map of the participants to this thematic event







#### **Definition**

Soil de-sealing refers to the process of reversing or mitigating the effects of soil sealing.

"Soil sealing is understood to be the action of permanently covering an area of land with artificial, impermeable material, such as cement or asphalt" (EEA, 2012, Guidelines on Best Practice to Limit, Mitigate or Compensate Soil Sealing).



Latitude Platform, Green with Gray <a href="https://latitude-platform.eu/works/green-with-grey/">https://latitude-platform.eu/works/green-with-grey/</a>



#### **Challenges**

- Public awareness: limited perception of the need for de-sealing (e.g., associated environmental benefits); lack of community support; land use conflicts and competing demands for land use.
- **Technical challenges**: multi-disciplinary expertise is needed to address de-sealing operations and to choose the most appropriate methods for de-sealing; limited opportunities to work on established structures and infrastructure.
- **Financial constraints**: significant resources required; possible contingencies due to deimpermeabilized soil quality; maintenance costs.
- Policy and Regulatory Barriers: lack of incentives, lack of integration with urban planning strategies and tools.





Luca Montanarella

JRC - Joint Research Center

EC, Head of the European

Soil Data Center (ESDAC)



Federico Broggini Latitude platform, Università Roma Tre



Please make sure to keep your microphones mute, but feel free to write in the chat your impressions and questions to our keynote speakers!





Luca Montanarella

JRC - Joint Research Center

EC, Head of the European

Soil Data Center (ESDAC)

Luca Montanarella leads JRC's soil data and information systems, supporting EU Thematic Strategy for Soil Protection and related policies (e.g., CAP, UNCCD, UNFCCC, CBD).

He oversees ESDAC, EUSIS, and ESBN.
Other roles include establishing GSP at FAO (2011),
ITPS presidency (2012-2018), and co-chairing IPBES
Land Degradation and Restoration Assessment (2016-2018).

Until end-2022, he manages JRC's project portfolio for the 2021-27 soil health work program, including the EU Soil Observatory.





Federico Broggini Latitude platform, Università Roma Tre

Federico Broggini is an architect graduated at Accademia di Architettura di Mendrisio. Since his early experiences he focused on urban and landscape design, in particular dealing with soil and water management concerns.

He is part of Latitude Platform for Urban Design and Research. In 2022 he started a PhD in landscape architecture at RomaTre University.

The thesis explores the world of urban soils, in particular sealed soils by asphalt, investigating their intrinsic values and potentialities in landscape design practices.



# Break

Please stay connected!

in the meantime, have a look at our **Miro Board** (find the link in the chat)









# Part II Collaborative discussion

Eugenio Morello & Anita De Franco (POLIMI)

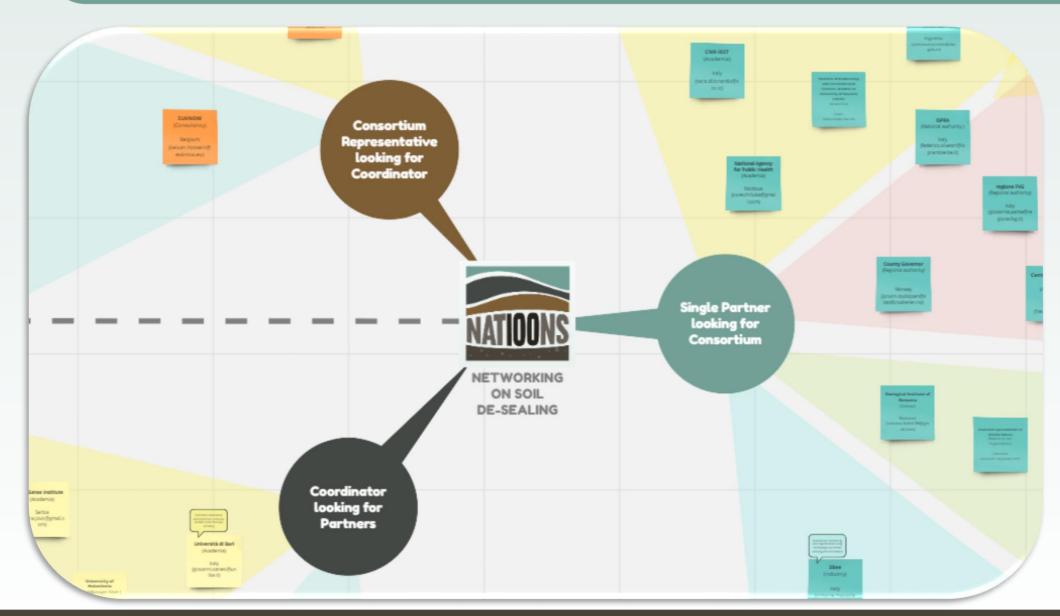








## Map of the participants to this thematic event





#### Quiz to the audience

## Do you have any experience on de-sealing?

- Yes, in terms of de-sealing plans (policy, planning sector)
- Yes, in terms of tangible actions (de-construction, urban regeneration, building sector)
- No



If your answer is 'Yes', feel free to share your experience in the chat



#### Quiz to the audience

In your opinion what is the most challenging aspect of soil de-sealing?

- Public awareness: to get public support on competing demands for land use
- Stakeholder engagement: To involve multiple stakeholders in the process
- Lack of technical expertise in recovering de-sealed soils, which requires multidisciplinary knowledge
- Financial constraints related to costs of de-sealing and reclamation from pollution
- *Policy and Regulatory Barriers*: lack of incentives, lack of integration with urban planning strategies and tools.



If you encountered other challenges, please report them in the chat







Chiara Ferré
UNIMIB



Dolinda Cavallo *ENOLL* 

In dialogue with

Luca Montanarella, JRC
Federico Broggini, LATITUDE
Andrea Arcidiacono, POLIMI
Silvia Ronchi, POLIMI

... and our public!



Feel free to join the discussion and/or write in the chat your impressions and questions





Chiara Ferré
UNIMIB

Dr. Chiara Ferré obtained her Ph.D. in Environmental Sciences at the Department of Environmental and Earth Sciences of the University of Milan-Bicocca, where she continued her research as a post-doctoral fellow. Since 2021 she is a researcher in Pedology. Expert in the environmental functions of soils with focus on carbon storage, spatial variability, soil-plant relationships and degradation processes.

She is currently involved in the National Biodiversity Future Center – NBFC (Urban Biodiversity) project financed by the National Recovery and Resilience Plan, as a referent of the task "Biodiversity of urban soils and water cycle".



#### **Open questions**

- What are the consequences of soil sealing in terms of ecosystems services? What kind of soil do we find when the sealing layer is removed?
- How can the knowledge of the soil help in the recovery of the de-sealed soils?
- What are the common practices for the de-sealing process?





Dolinda Cavallo ENOLL

My name is Dolinda Cavallo, I am a Project Manager at the European Network of Living Labs (ENoLL). I hold a master's degree in international relations from the University of Bologna - Forlì Campus, along with a bachelor's degree in foreign languages and cultures where I studied English, Spanish, and Russian at the University of Pavia. My career spans various European countries where I have contributed to non-profit organizations as both a Project Manager and Coordinator of EU-funded projects covering diverse areas such as digitization, environment, migration, and social inclusion. Currently, I am actively engaged in ENoLL's portfolio of Agri and Soil-related projects and co-chairs the working group on Agriculture, Agrifood, and Rural issues.



- Urban / industrial soils are a "surprise"! A complex challenge
- Practical experiences and tangible results of soil-de-sealing are still few and often confined to small areas.

#### Implementing soil de-sealing measures requires...

- the collaboration of multiple stakeholders and multidisciplinary expertise. The Living Lab model offers support in this sense.
- a broad **engagement of citizens**, stakeholders, policy-makers and also technical experts, professionals, and planners, so that all recognize the value of "freed" soil.
- advanced technical knowledge in implementing methods for sustainable interventions and monitoring that are capable of restoring the health of de-sealed soil.







https://nati00ns-soil-living-lab-matching.b2match.io



14.12.2023

De-sealing urban and post-industrial soil

11.01.2024

Innovative women improving food & soil health

18.01.2024

Industry
engagement
for sustainable
soil health

24.01.2024

Regional Smart Strategies for soil health 25.01.2024

Soil health from a forestry perspective

15.02.2024

Soil decontamination

- 3. Stop soil sealing and increase re-use of urban soils
- 6. Improve soil structure to enhance soil biodiversity
- 2. Conserve soil organic carbon stocks
  - 8. Improve soil literacy in society

- 4. Reduce soil pollution and enhance restoration
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5. Prevent erosion

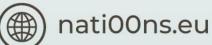
6. Improve soil structure to enhance soil biodiversity

1. Reduce desertification

4. Reduce soil pollution and enhance restoration



# Join the Community



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in nati00ns







