
nati00ns.eu

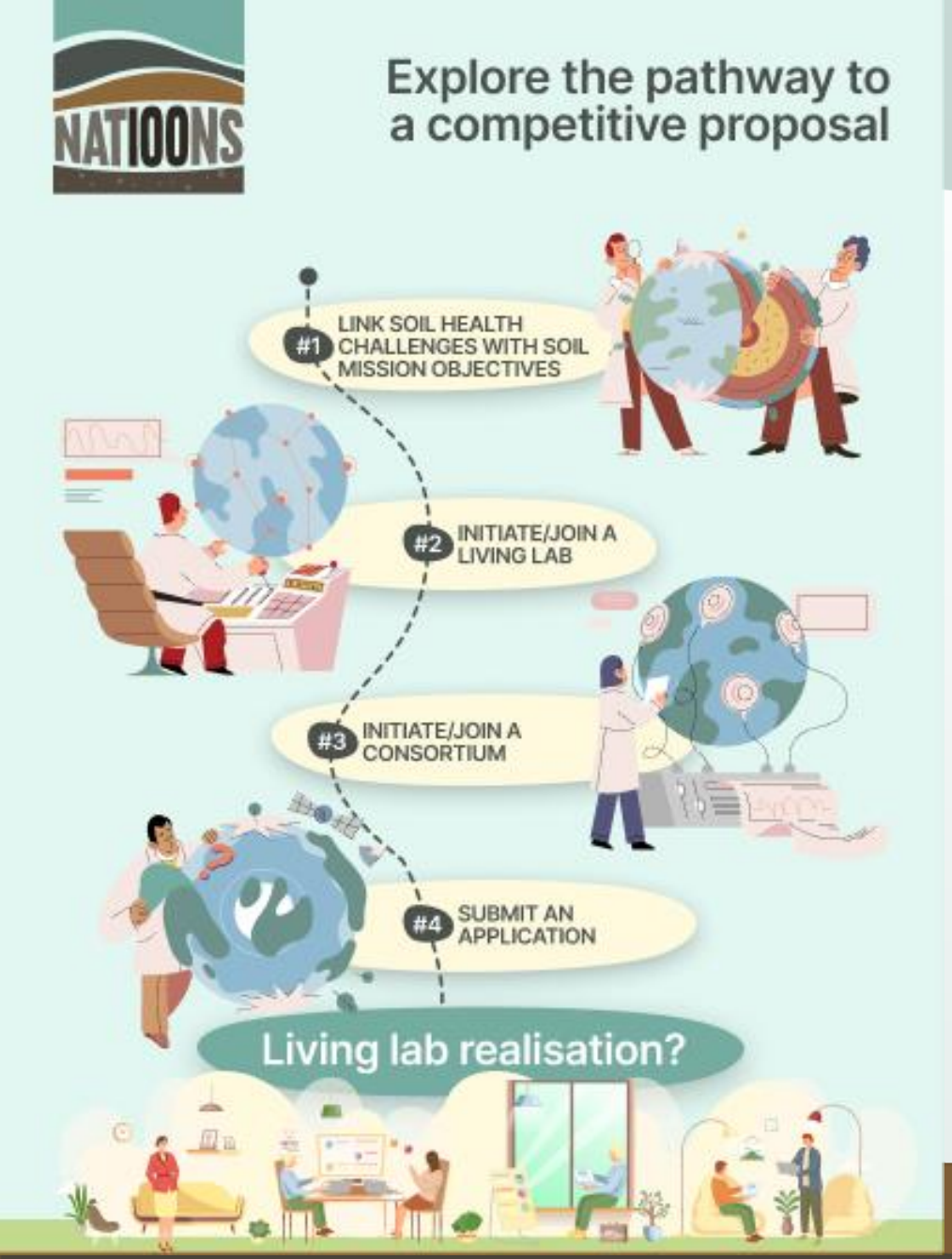
# National Engagement Event

4 July 2024

Funded by
the European Union

## Please be aware:

- We will share the **participant list** with names, institutions and e-mail addresses with participants only, for information and further networking.
- We will take **photos** during the event for communication and dissemination purposes of the NATI00NS project. If you find yourself in a picture you would like us to remove, please send an email to info@nati00ns.eu
- If you have given your **consent** during registration to receive updates from NATI00NS and/or to receive information from other initiatives related to the EU Soil Mission, you have the **right to withdraw your consent** - by email to info@nati00ns.eu
- This is an online event. The **Zoom Meeting will be recorded**.




# National engagement event

- The Mission explained
- Soil monitoring and resilience (Soil Monitoring Law)
- Soil Health Living Labs and Lighthouses
- Thematic focus of the 2024 Living Lab topic
- Successful experiences in Soil Mission Call
- SOILL
- Engagement session

Funded by the European Union

# Karl Walsh

Head of Agriculture & Codex Division in the Irish Department of Agriculture, Food and the Marine (DAFM)

Funded by the European Union

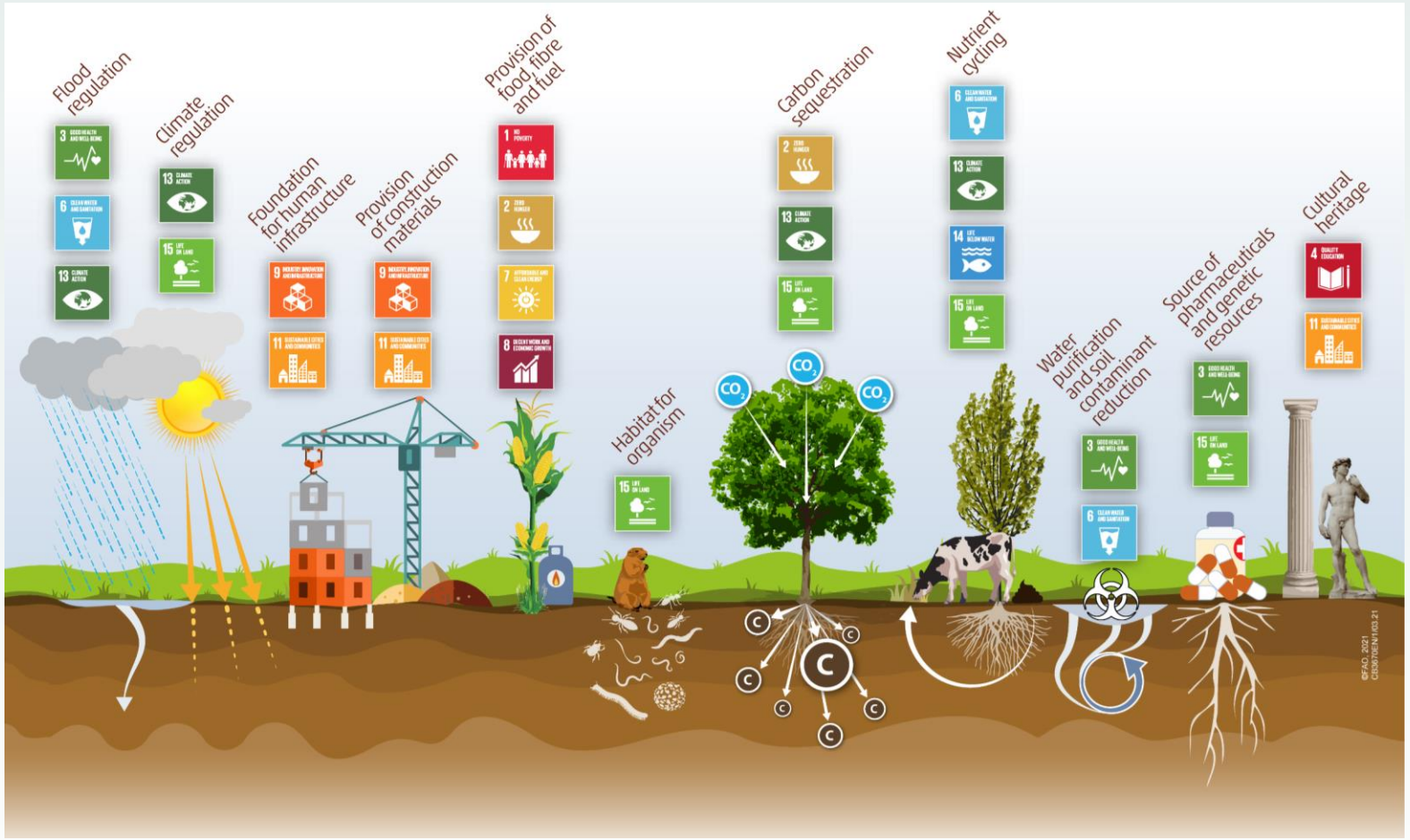
# The Mission explained

**Dolinda Cavallo, ENoLL**

Funded by
the European Union

## Healthy soils

- are essential for all life-sustaining processes on Earth
- have the continued capacity to support ecosystem services




Healthy soils, a prerequisite to achieve the SDGs. Source: fao.org

## Unhealthy soils

- Soils degraded by human activities, including anthropogenic climate change;
- Often enhanced by a lack of understanding or education;
- Concerns about 2/3rd of European soils: agricultural, natural and rural;
- Ecosystem services are limited, and costs of degraded soils are enormous (> 50 billion € $yr^{-1}$).

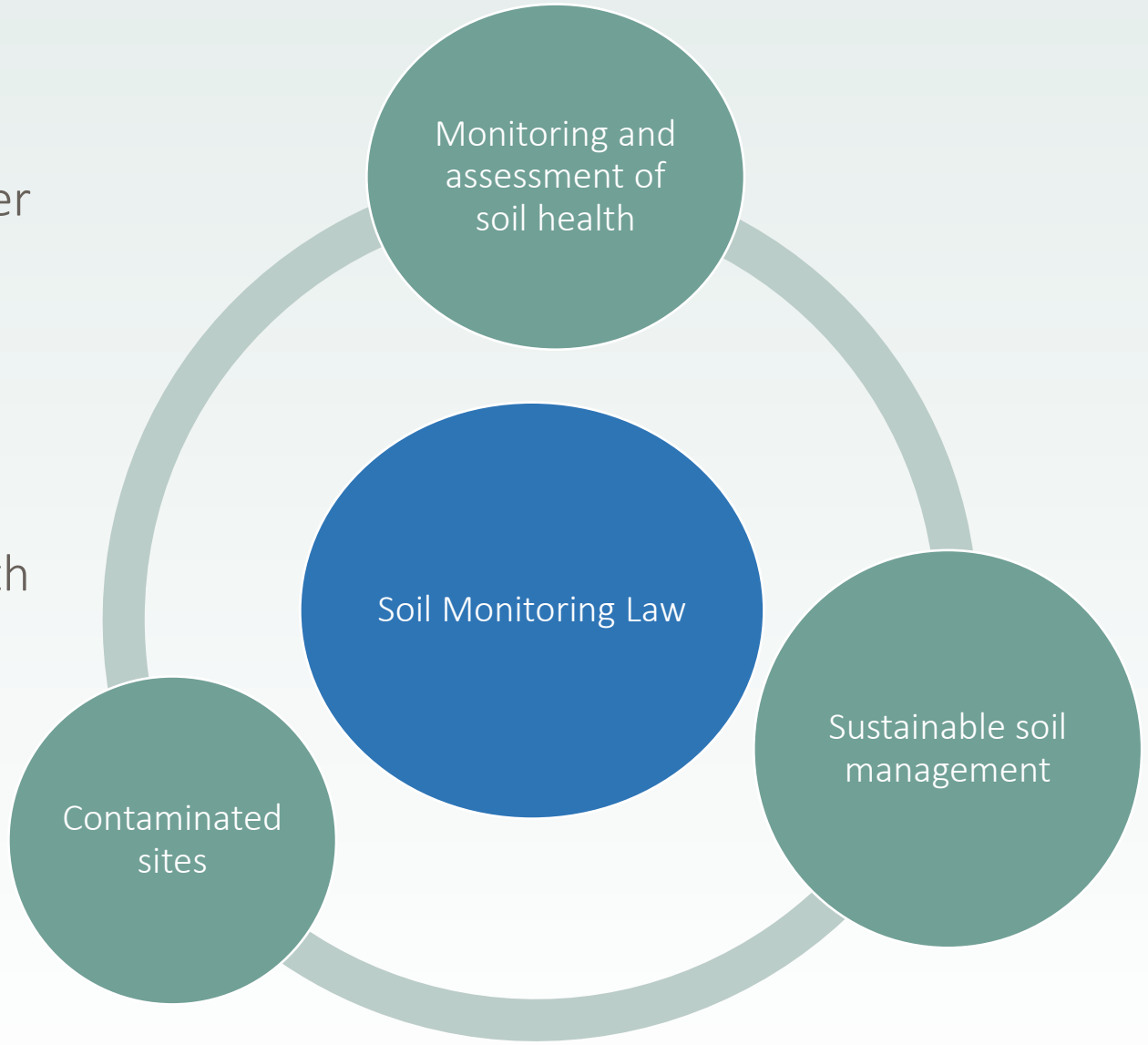
# Soil monitoring and resilience (Soil Monitoring Law) – Adopted by the EU Commission

## Proposed EU Soil Monitoring Law

- to ensure a level playing field among Member States and a high level of environmental and health protection
- to provide a legal framework to help achieve healthy soils by 2050

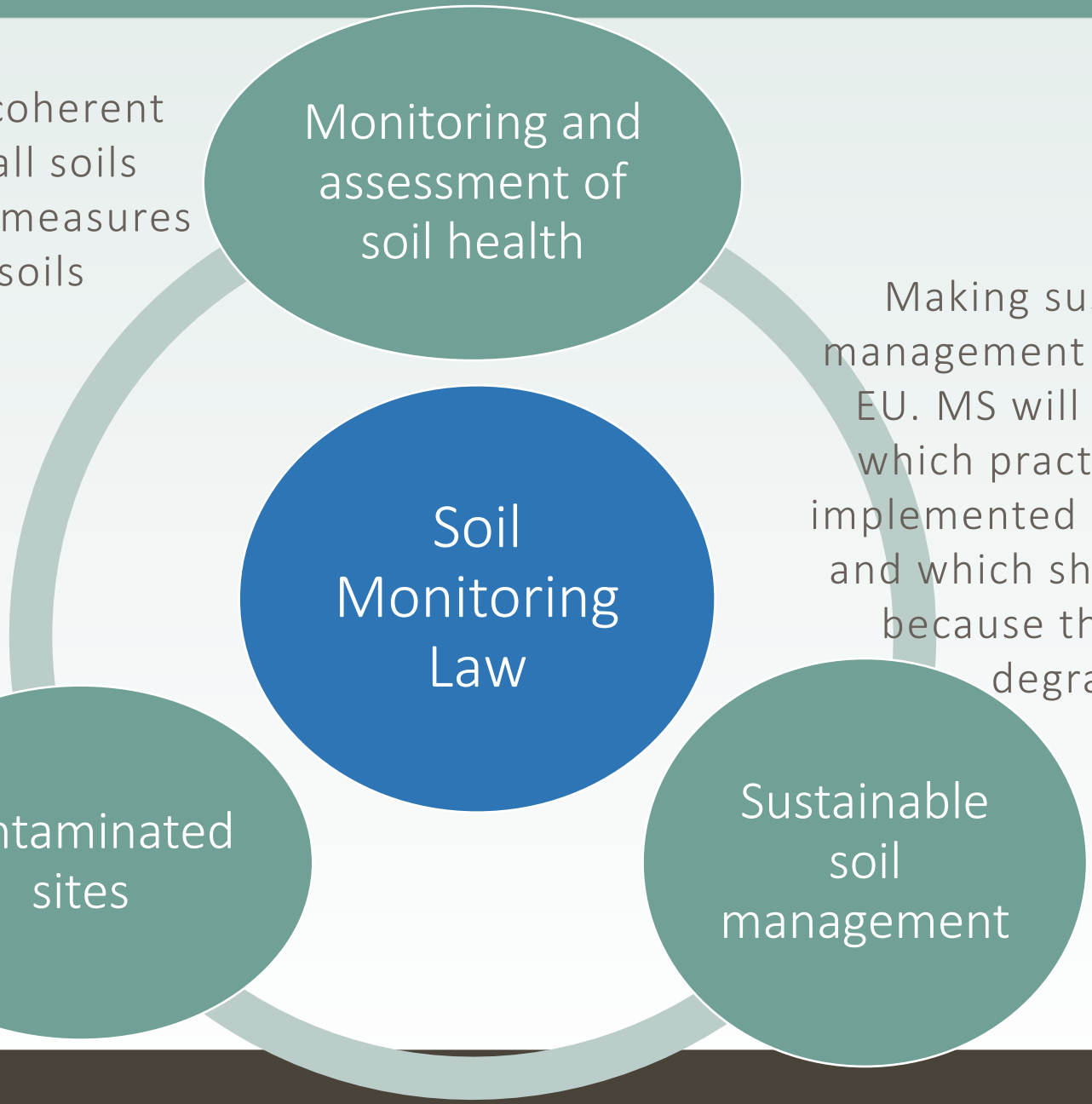
**Status:** adopted by the EU Commission July 5th 2023

- amendments will be proposed by:
  - European Parliament (ENVI committee)
  - Council of the European Union
- up to three drafts



# Soil Monitoring Law – Proposed objectives

Putting in place a solid and coherent monitoring framework for all soils across the EU so MS can take measures to regenerate degraded soils




Making sustainable soil management the norm in the EU. MS will have to define which practices should be implemented by soil managers and which should be banned because they cause soil degradation.

Requesting MS to identify potentially contaminated sites, investigate these sites and address unacceptable risks for human health and the environment, thereby contributing to a toxic-free environment by 2050.

## The soil mission’s main goal

- The main goal of the Mission 'A Soil Deal for Europe' is to establish 100 living labs (places for on-the-ground experiments) and lighthouses (sites for showcasing good practices) by 2030, to lead the transition towards healthy soils in rural and urban areas.

## The Mission ‘A Soil Deal for Europe’

- 1 out of 5 EU Missions;
- The Mission to lead the transition towards healthy soils;
- A Mission at the heart of the EU Green Deal: the transition to overcome threats by climate change and environmental degradation.

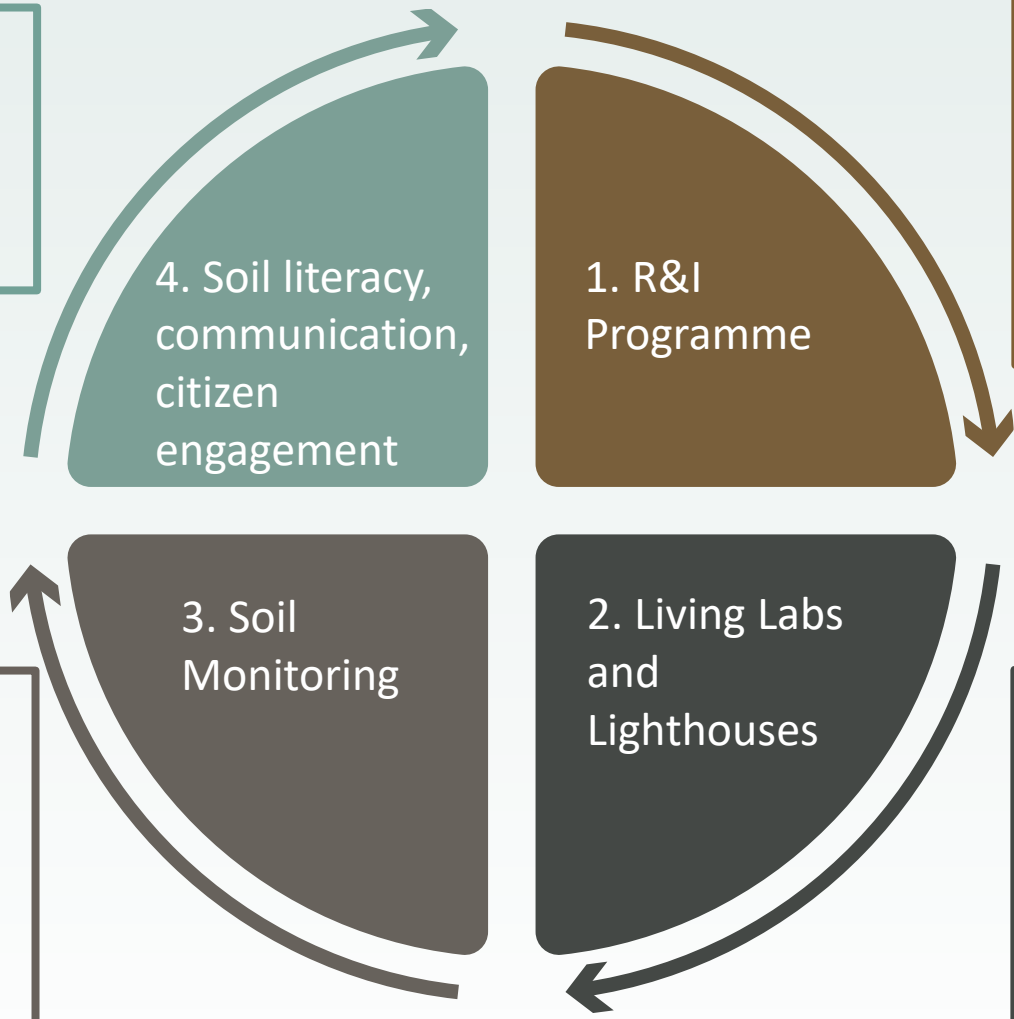

The benefits of the European Green Deal

## The Soil Mission goals and implementation

- 100 Living Labs and Lighthouses across all land uses: agricultural, forestry, natural, industrial and urban sites;
- To give visibility to soils as a crucial, yet widely “unrecognized” societal asset and public good;
- To pioneer, showcase and accelerate the transition to healthy soils.
- Bottom-up approach: based on open science and interactive, participatory innovation with strong stakeholder and citizen engagement;
- Co-implementation of mission by researchers, land managers, regions, businesses, policy makers, citizens and international partners;
- To accelerate the co-creation and uptake of solutions.

# The Mission's four building blocks

Communication, training and advice targeted to different target groups; specialised "soil advisors"




**Knowledge, data, technologies and infrastructures** to support practices and business models for soil health

Harmonization of **soil health monitoring and reporting** across Europe; contribution to European Soil Observatory

A comprehensive **network of real-life sites** for co-creating, testing, demonstrating and upscaling of solutions

# The Soil Mission objectives

1. Reduce desertification
2. Conserve and increase 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

# The Soil Mission objectives in more detail

1. Reduce desertification
2. Conserve and increase soil organic carbon stocks
3. Stop soil sealing and increase re-use of urban soils
4. Reduce soil pollution and enhance restoration

# The Soil Mission objectives in more detail

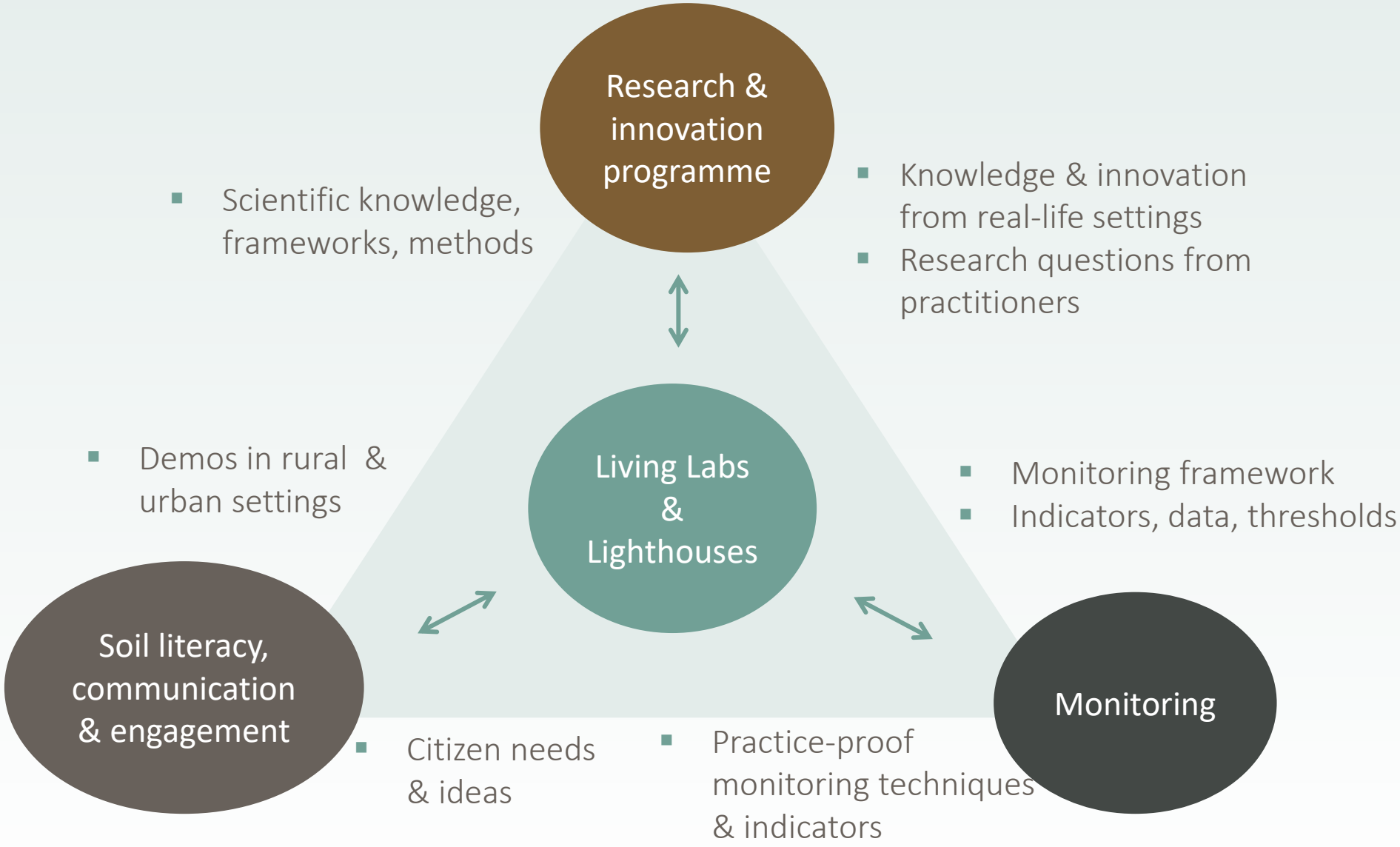
5. Prevent erosion

6. Improve soil structure to enhance soil biodiversity

7. Reduce the EU global footprint on soils

8. Improve soil literacy in society

# The core element of the Mission: Living Labs and Lighthouses



# Soil Health Living Labs and Lighthouses

Dolinda Cavallo, ENoLL

Funded by the European Union

# Soil Health Living Labs & Lighthouses: Definition

## Soil Health Living Labs *

### Collaborative initiatives to co-create knowledge and innovations

"User-centred, place-based and transdisciplinary research and innovation ecosystems, which involve land managers, scientists and other relevant partners in systemic research and co-design, testing, monitoring and evaluation of solutions, in real-life settings, to improve their effectiveness for soil health and accelerate adoption."

- **User-centred,** place-based and transdisciplinary
- **Multi-stakeholder**: Involve all relevant partners in co-design, testing, monitoring and evaluation of solutions,
- Use of **real-life** settings to accelerate adoption.
- Contain **several sites** (e.g. farms, forest exploitations, city parks) at **regional** or **sub-regional** level.

## Soil Health Lighthouses

### Individual sites of exemplary performance

"Places for demonstration of solutions, training and communication that are exemplary in their performance in terms of soil health improvement"

- They **showcase** good practices and upscale solutions.
- They are places for **demonstrations**, **training**, **networking** and **communication** towards future users, policy-makers or the broader society.
- Help adoption of sustainable practices by **inspiring land users** through practical tools.

* This LL definition is customised for soil health LL and is provided within the "**A Soil Deal for Europe – Implementation Plan**".
It aggregates elements of **ENoLL definition** with those of a WG of the G20 agricultural chief scientists on agroecological living labs.

# Soil Health Living Labs & Lighthouses: Implementation Plan - Criteria

## Living Labs*

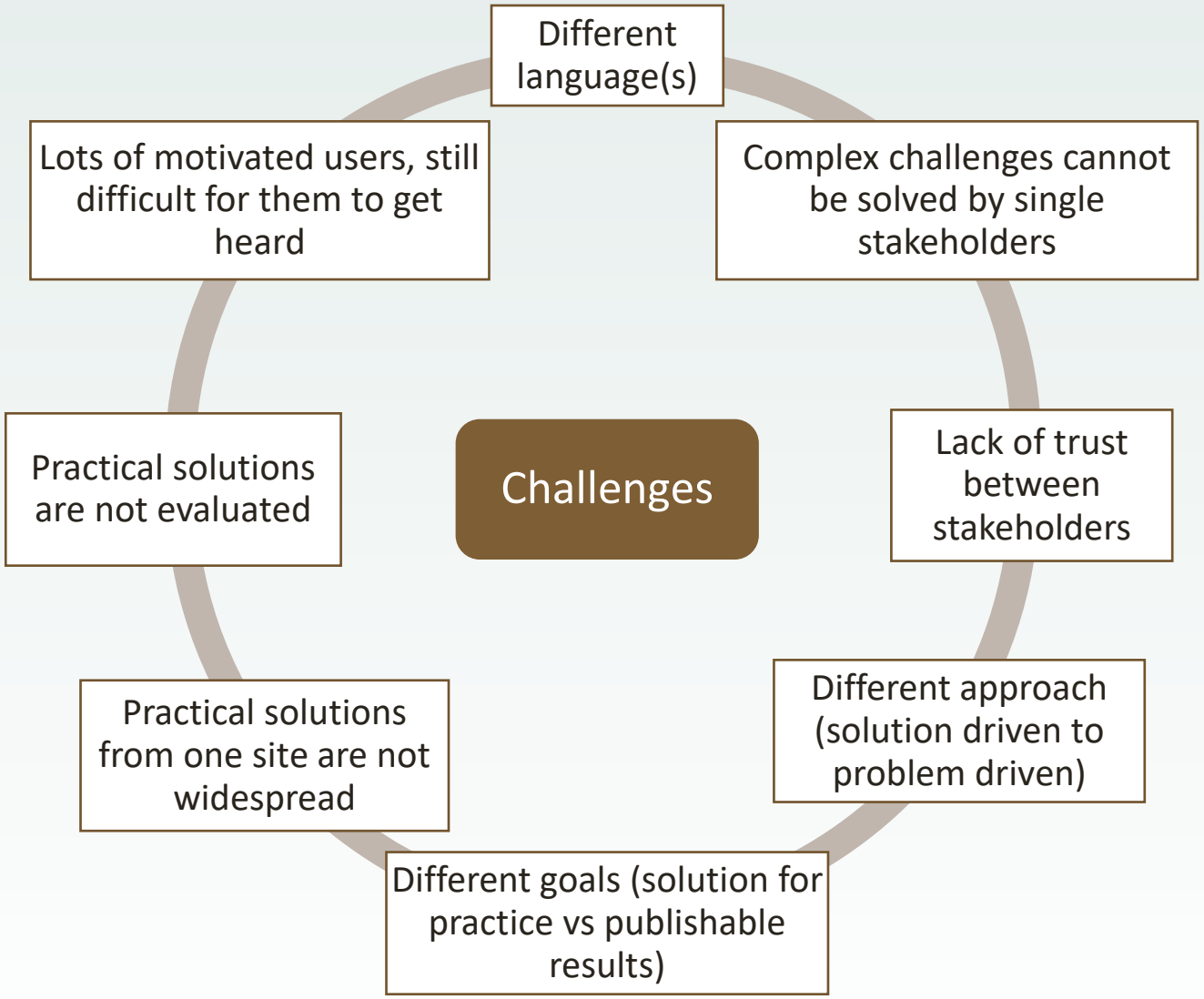
| | |
|---|---|
| AIMS | • **Innovation**, **co-creation**, formal learning<br>• Contribution to **societal challenges**<br>• **Improving soil health and related ecosystem services** (=> mission objectives) |
| ACTIVITIES | • **Co-creation, co-development & experimentation** of innovations improving soil health and related ESS<br>• **Research on impact of these innovative practices** on **ecosystems**<br>• **Networking** and **knowledge exchange**<br>• **Demonstration** (in particular lighthouses) |
| PARTICIPANTS | • **Public-private people partnership**<br>• **Real users (soil managers connected with broad array of stakeholders & decision-makers)**<br>• **Demonstration:** wider public, policy arena, EIP and relevant networks |
| CONTEXT | • Multiple **disciplines** (-> transdisciplinary, inc. social sciences), **methods, dimensions** (technical, economic, social)<br>• **Place-based** approach and **real-life context** = real farms/forest/urban sites<br>• **Robust scientific setup** for **ecosystem assessment**<br>• **Openness,** communication, dissemination |

## Lighthouses

Criteria based on **exemplary performances** in terms of soil health and related ecosystems services

*adapted from McPhee et al. (2021)

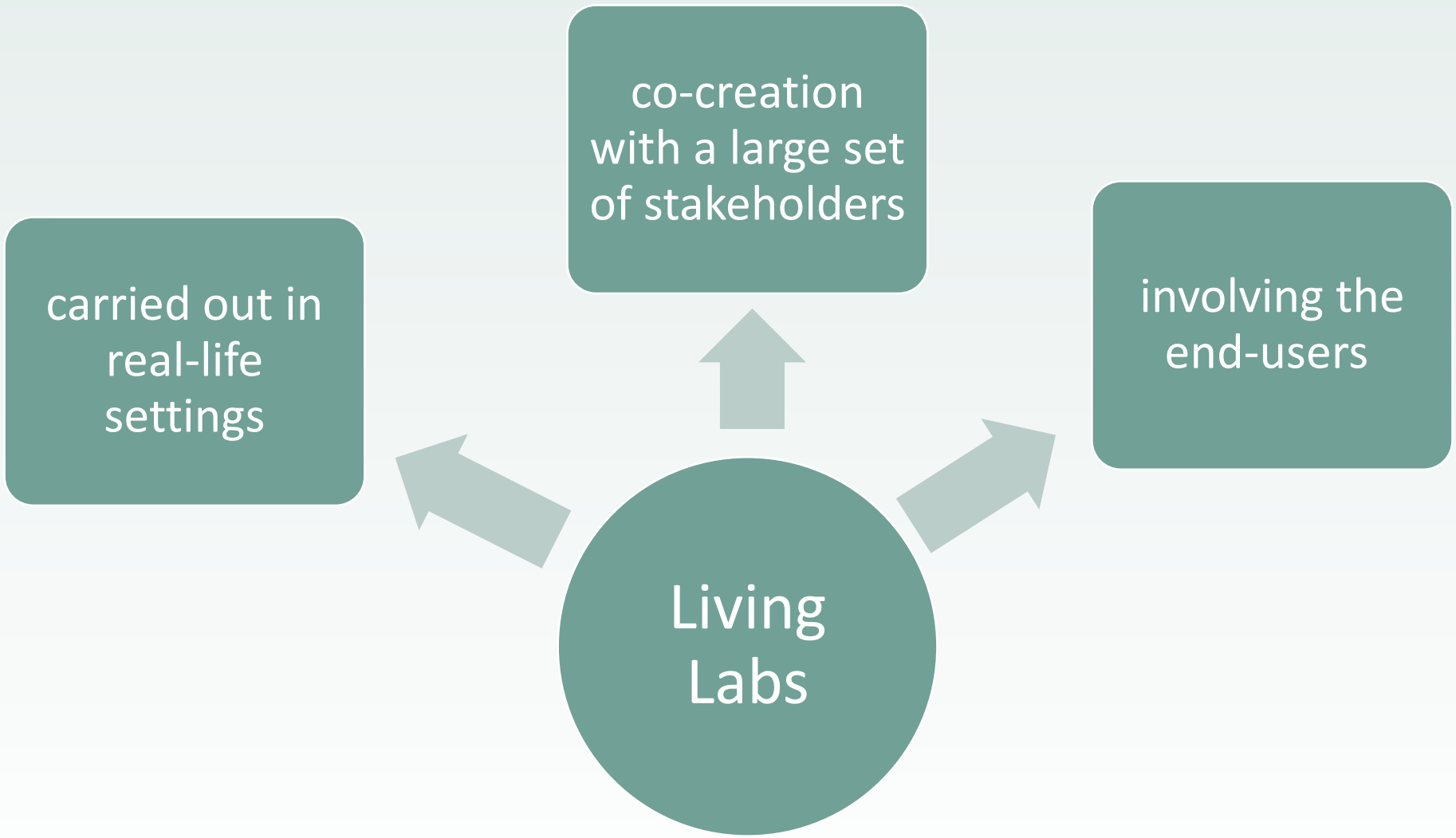
# Why implementing Living Labs?




## Cooperating in a multi-stakeholder team makes you

- … become inspired by each other
- … learn to think out of the box
- … better understand each other
- … accept different perspectives from different stakeholders
- … aim for the same goals
- … work together instead of side by side
- … contribute to faster find faster, validated and more scalable solutions
- …

# Components of the Living Labs



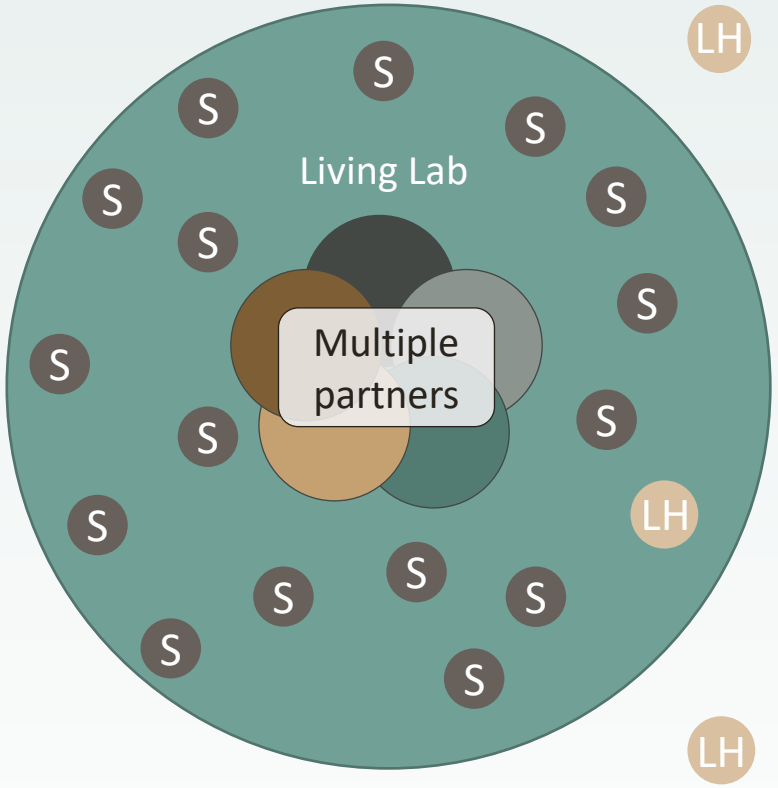
# What to consider when setting up a Living Lab?

Places of co-creation, co-design, co-implementation and co-assessment

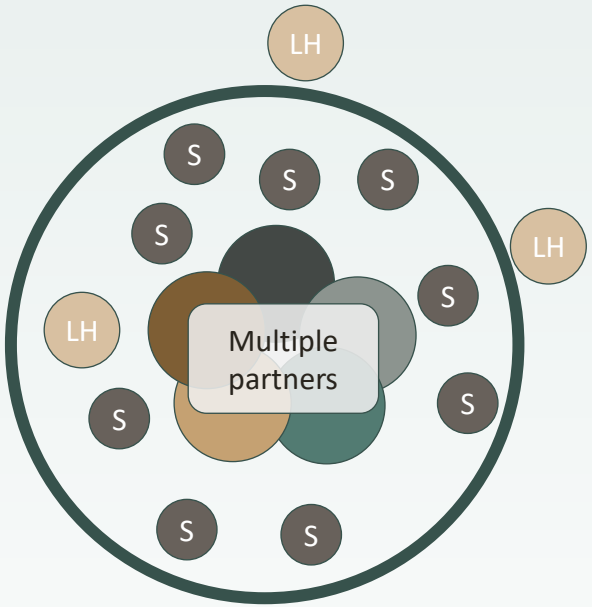
Participatory, interdisciplinary and transdisciplinary R&I approach

Business Models to ensure sustainability

# Soil Health Living Labs & Lighthouses: Scale & Activities




| | Scale | Activities | Performance in soil health improvement |
|---|---|---|---|
| Living Lab (LL) | Regional/ subregional landscape | Coordinate experimentations & partners | In progress at landscape scale |
| Living Lab experimentation site (S) | Local (one farm/forest, one urban site, etc) | Co-create knowledge and innovations | In progress on the site |
| Lighthouse (LH) | Local (one farm/forest, one urban site | Experiment and/or demonstrate | Demonstrates high performance |




Regional level

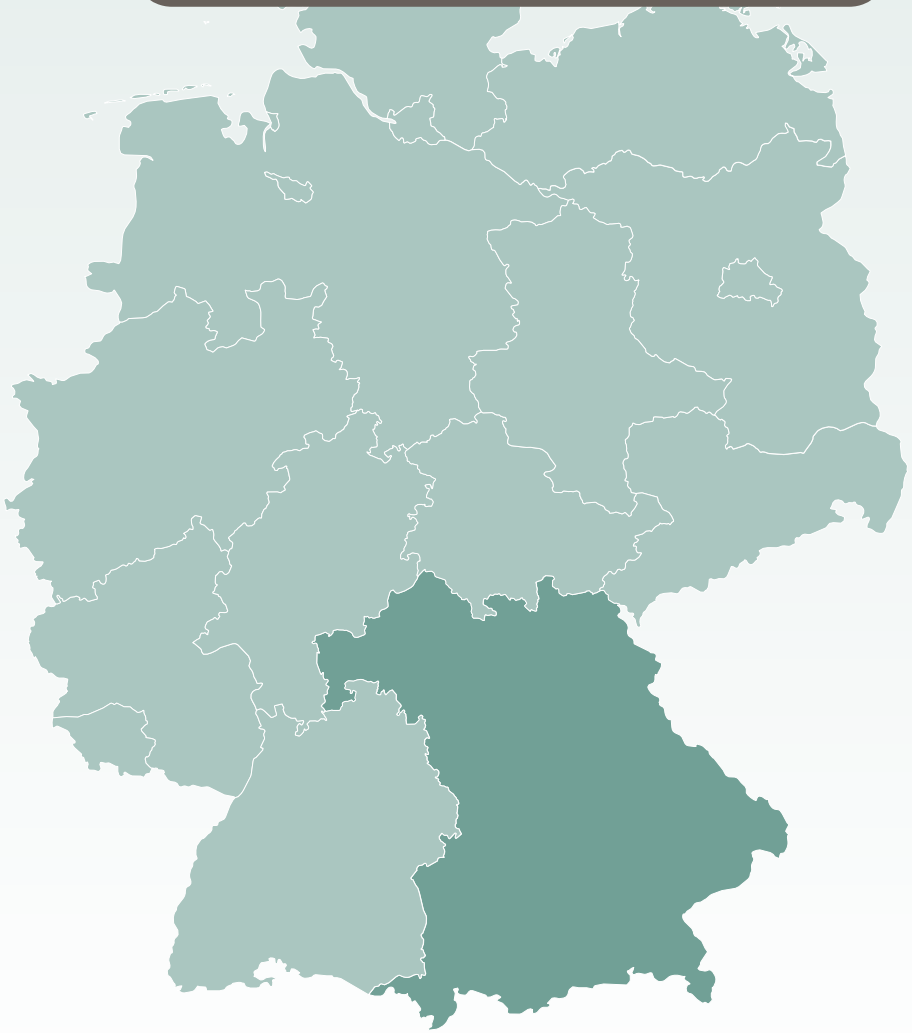
Sub-regional level

Local soil health needs
Local context
Common soil health goals

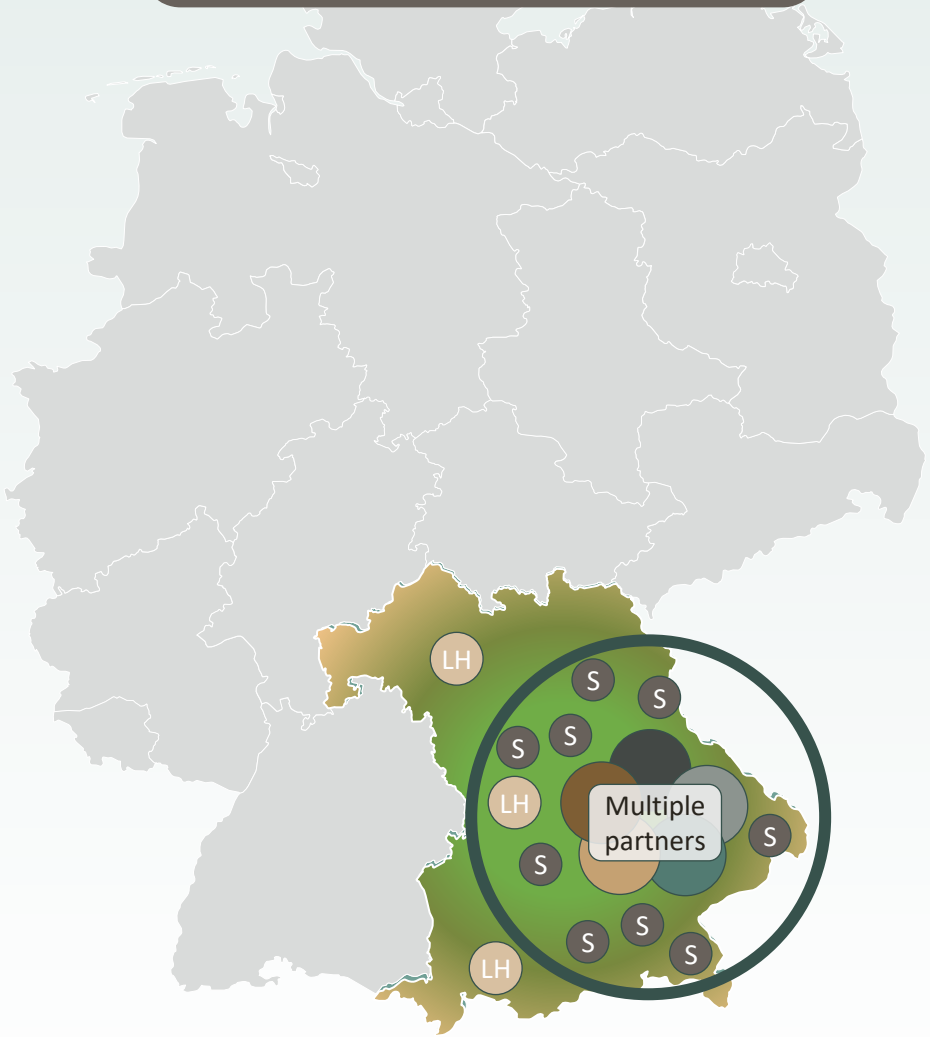
Within or across actual
administrative and geographical borders
at regional & national level

# Scale: Regional/Sub-regional

## Regional/Sub-regional borders



## Common soil challenges

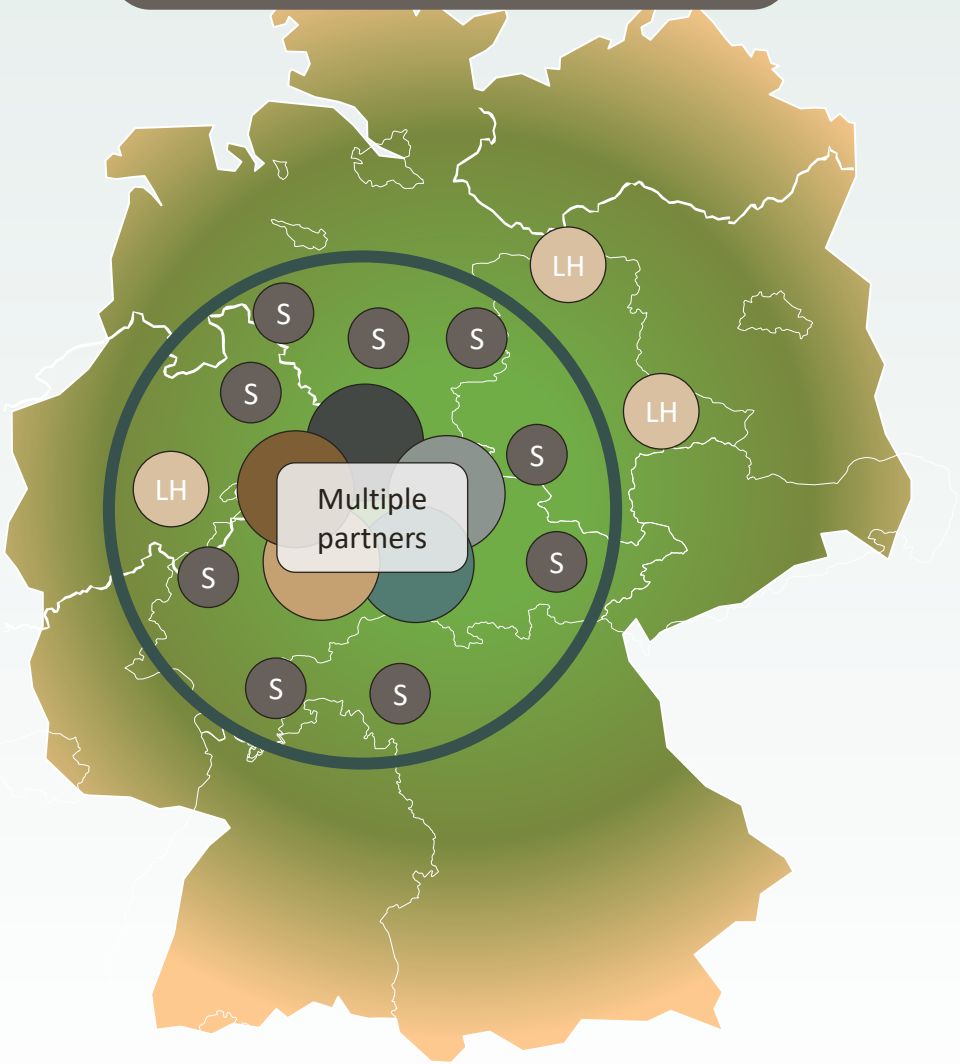



The image is a fabricated example of shared soil needs across sub-regions, for illustration only. Not intended to be exhaustive.

# Scale: Cross-regional

Cross-regional borders

Common soil challenges

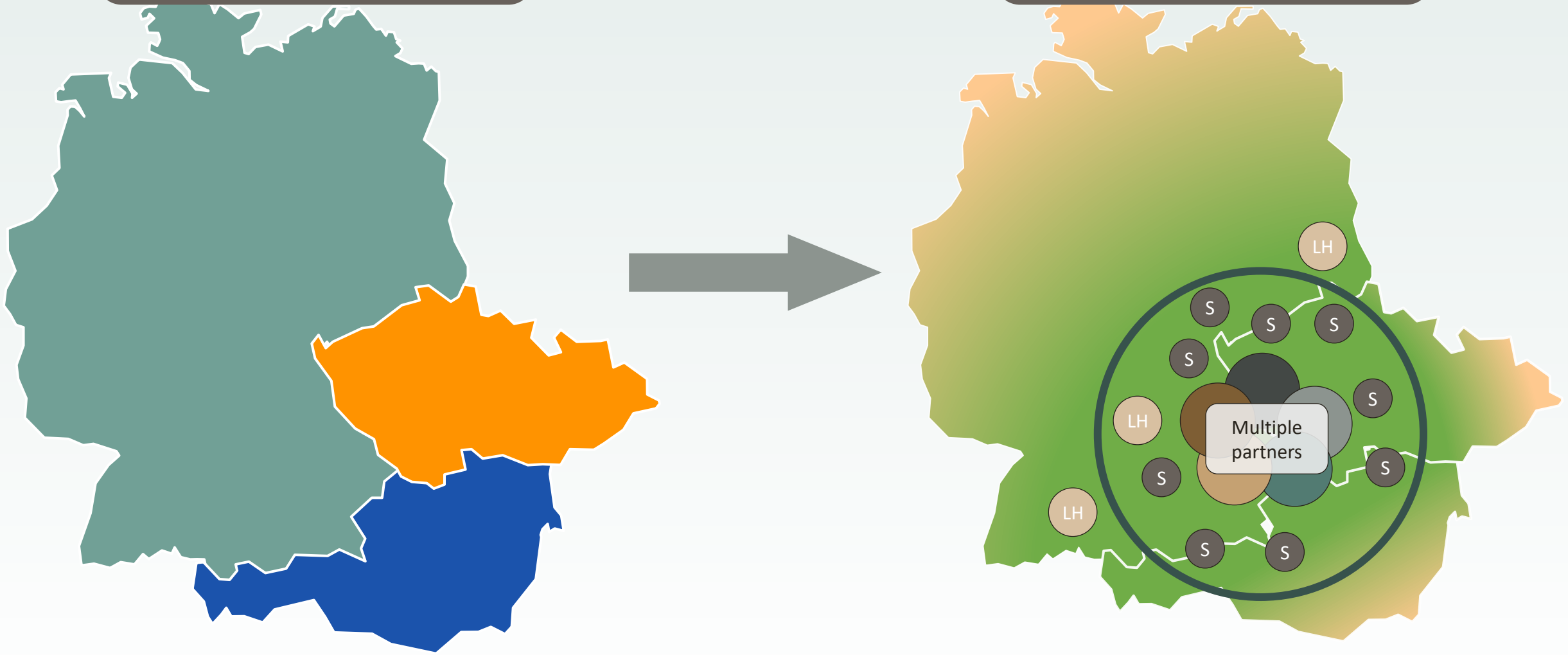



The image is a fabricated example of shared soil needs across regions, for illustration only. Not intended to be exhaustive.

# Scale: cross-country

Administrative borders

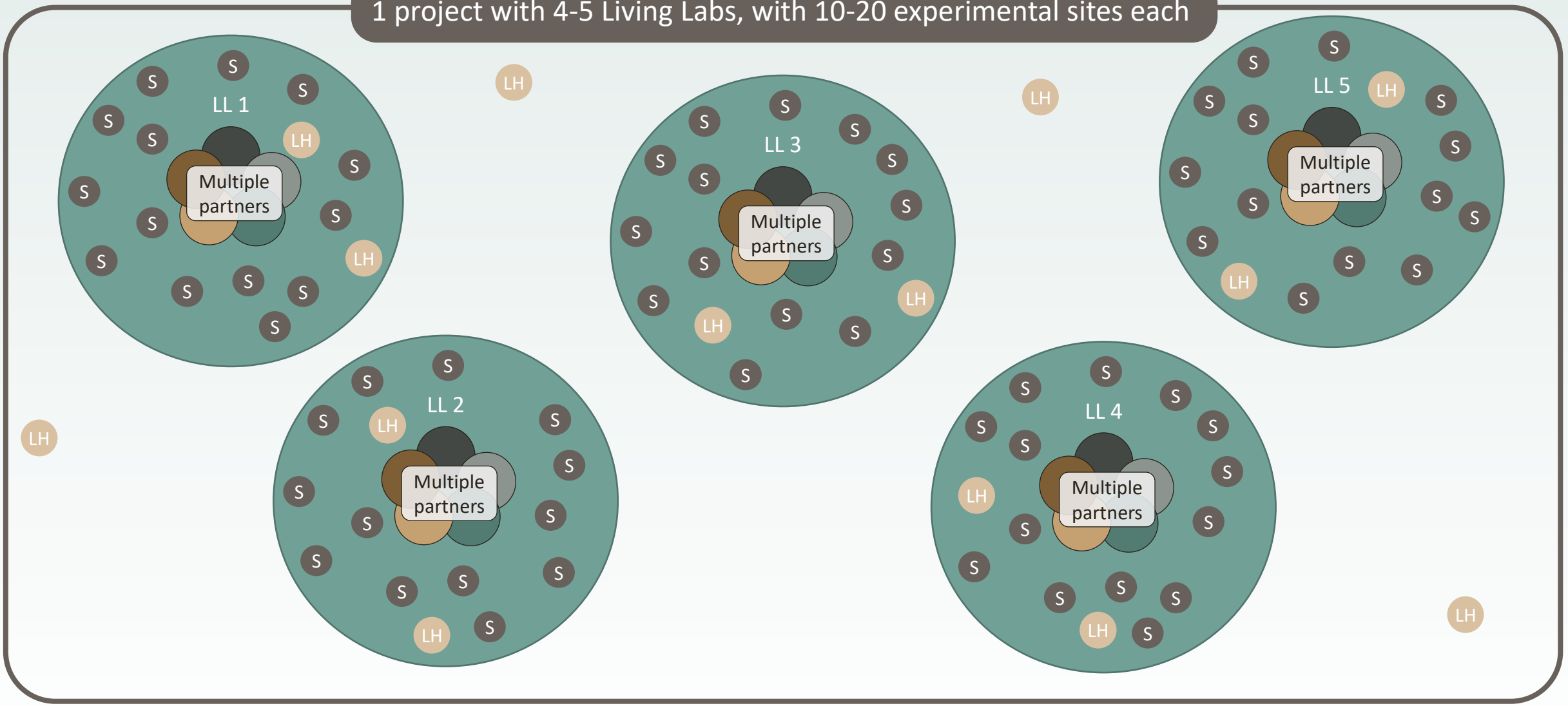
Common soil challenges




The image is a fabricated example of shared soil needs across countries, for illustration only. Not intended to be exhaustive.

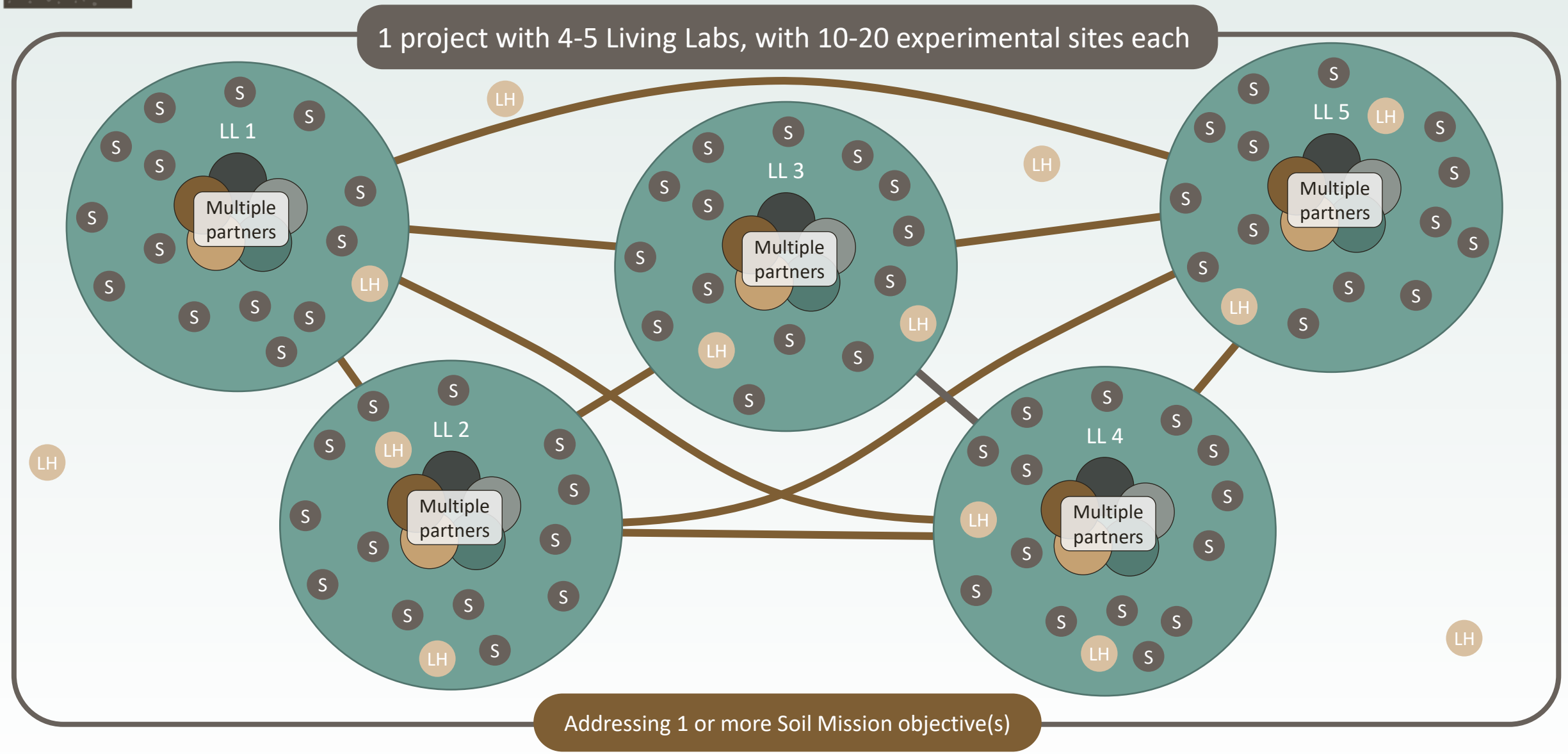
# Soil Health Living Labs & Lighthouses

1 project with 4-5 Living Labs, with 10-20 experimental sites each




Living Lab (LL), Lighthouse (LH) and Living Lab experimental site (S)

# Soil Health Living Labs & Lighthouses




Living Lab (LL), Lighthouse (LH) and Living Lab experimental site (S)

# Common aspects within LLs in projects

| Living Lab (LL) | Objectives | Land-use types | Application |
|---|---|---|---|
| LL1 | **Objective A** | Land-use A | Local context 1 |
| LL2 | **Objective A** | Land-use B | Local context 2 |
| LL3 | **Objective A** | Land-use C | Local context 2 |
| LL4 | **Objective A** | Land-use A, Land-use B | Local context 3 |
| LL5 | **Objective A** | Land-use B, Land-use C | Local context 4 |

Living Labs focus on the **same Mission Objective, different land-use types**

| Living Lab (LL) | Objectives | Land-use types | Application |
|---|---|---|---|
| LL1 | **Objective A** | **Land-use A** | Local context 1 |
| LL2 | **Objective A** | **Land-use A** | Local context 2 |
| LL3 | **Objective A** | **Land-use A** | Local context 3 |
| LL4 | **Objective A** | **Land-use A** | Local context 4 |
| LL5 | **Objective A** | **Land-use A** | Local context 5 |

Living Labs focus on the **same Mission Objective and land-use type**, but with **different focus**

| Living Lab (LL) | Objectives | Land-use types | Application |
|---|---|---|---|
| LL1 | Objective A | **Land-use A** | Local context 1 |
| LL2 | Objective B | **Land-use A** | Local context 2 |
| LL3 | Objective C | **Land-use A** | Local context 1, 2 |
| LL4 | Objective A, Objective B | **Land-use A** | Local needs 2 |
| LL5 | Objective C | **Land-use A** | Local context 1 |

Living Labs focus on the **different Mission objectives**, but **same land-use types**

The tables are fabricated as example of a consortium, not intended to be exhaustive.

# Our suggestions & recommendations

&

**Clear and justified biogeographic regions**
Make sure to justify the common aspects within LLs in projects and how the coordination across regions will be established.

**Prevent cross-regional unjustified scope**
Minimize outliers and, in case of a remote site, explain the management and the involvement in co-creation activities.


The image is a fabricated example of shared soil needs across countries, for illustration only. Not intended to be exhaustive.

# Types of Living Labs

## Living Labs per land-use type

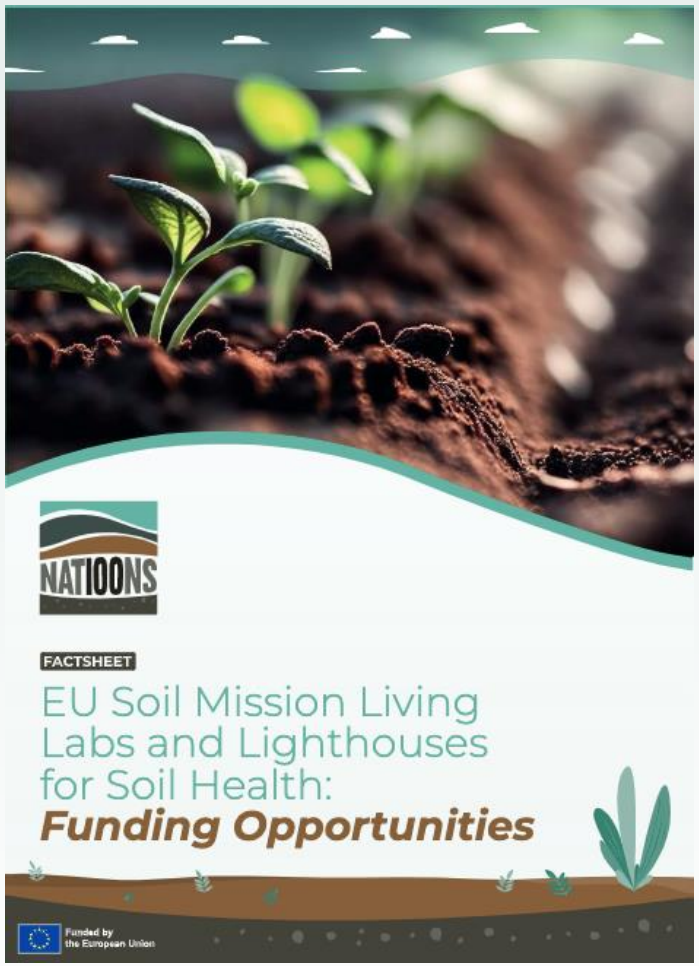
Agricultural LLs

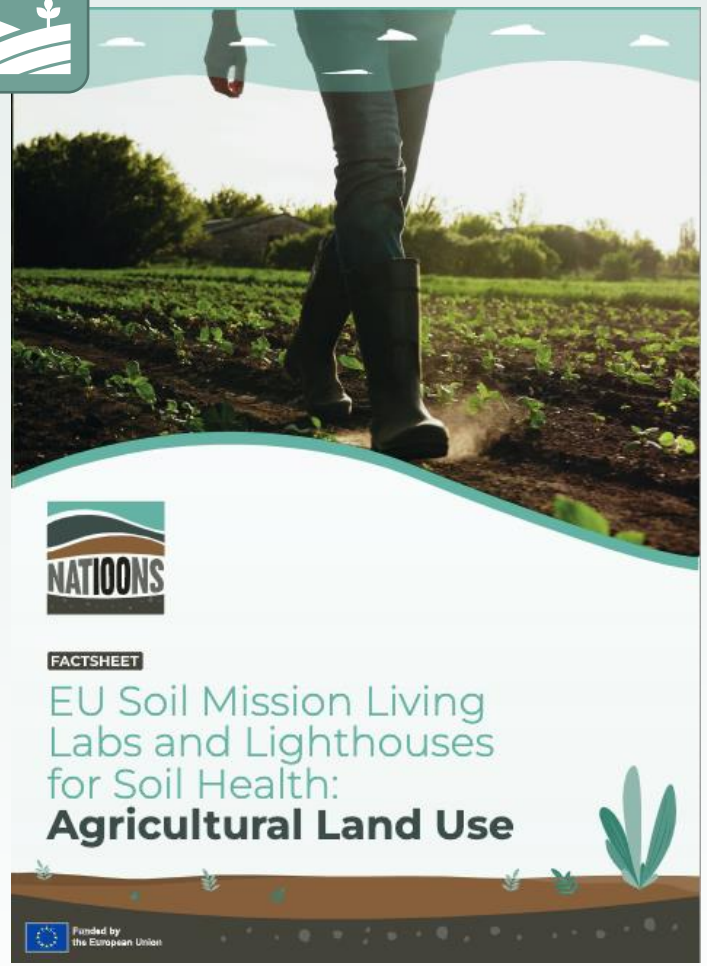
Forestry LLs

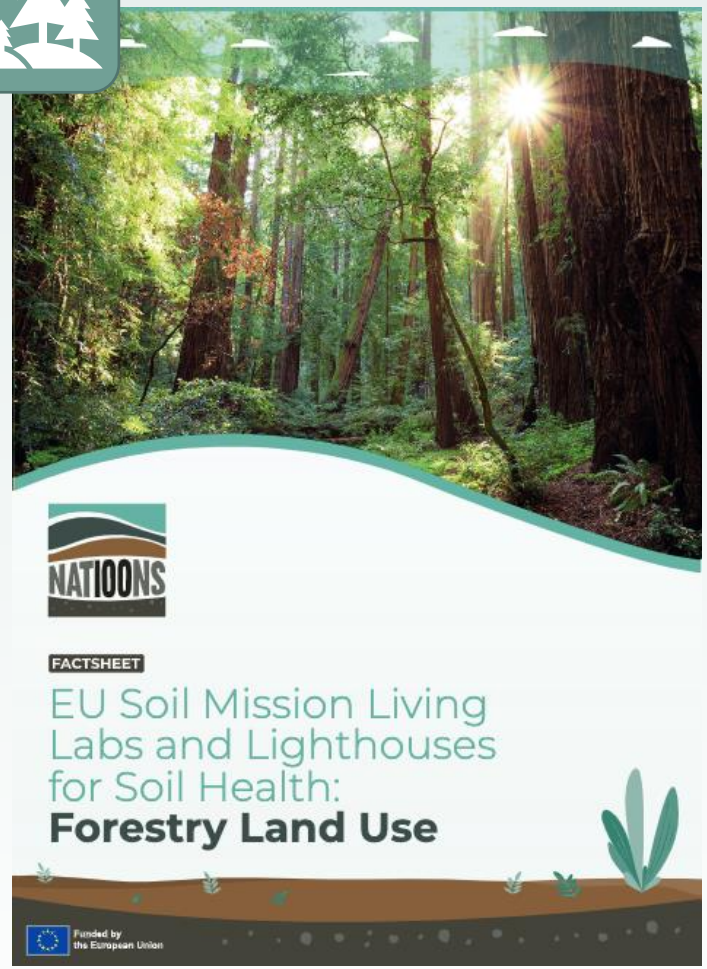
Urban LLs

Industrial LLs

# Factsheets on EU Soil Mission Living Labs and Lighthouses for Soil Health

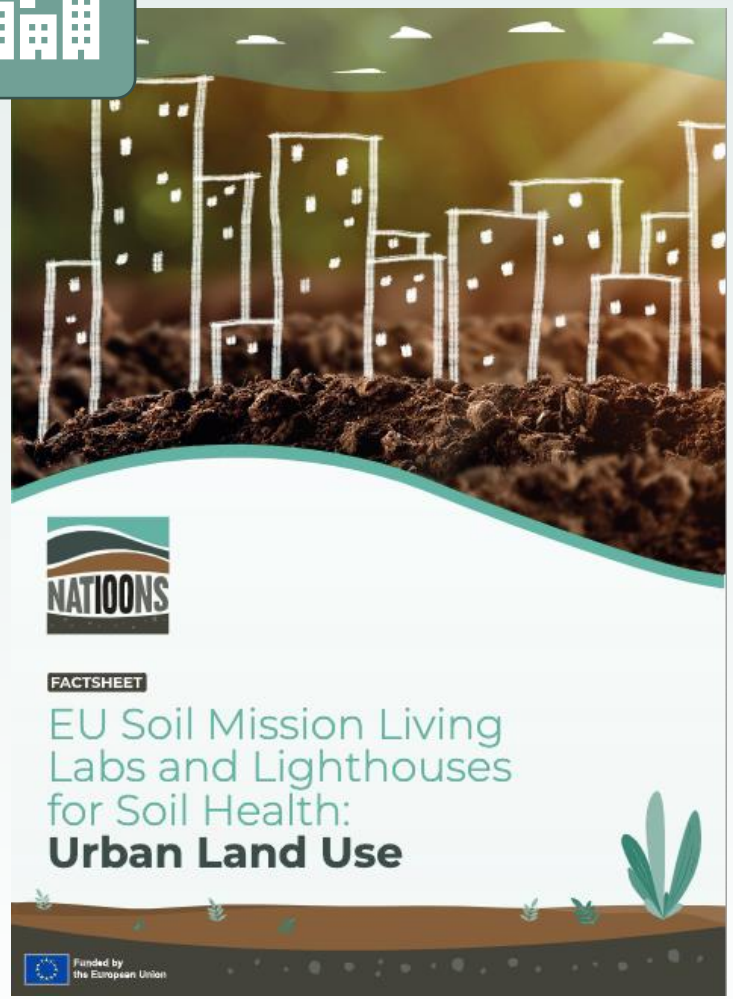


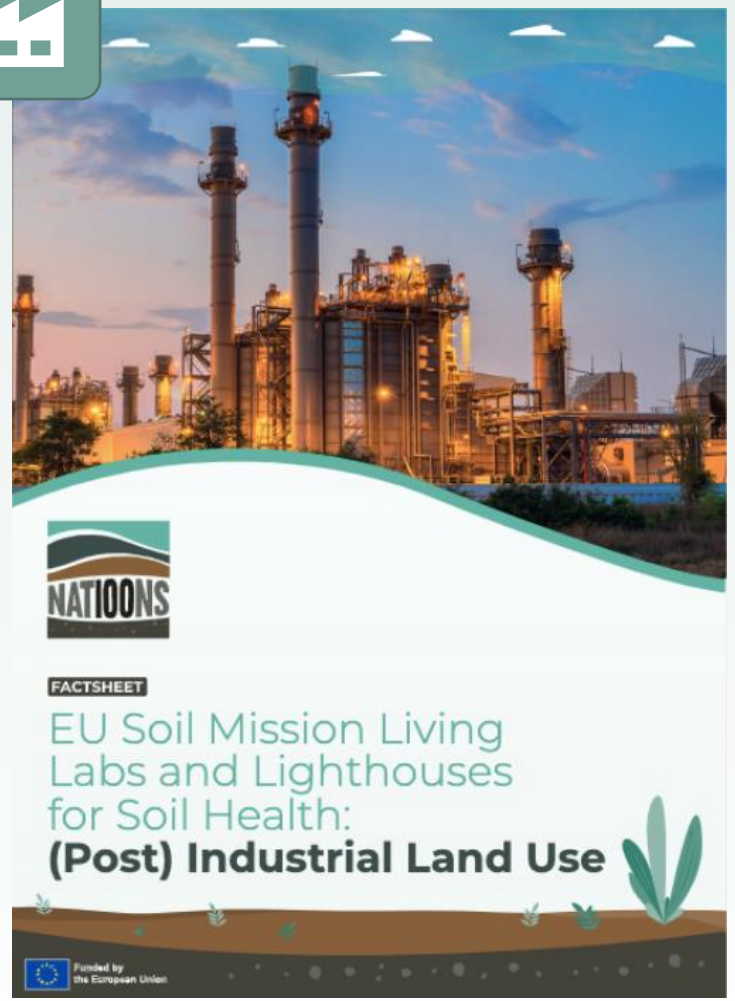




Nati00ns Factsheets. https://nati00ns.eu/factsheets

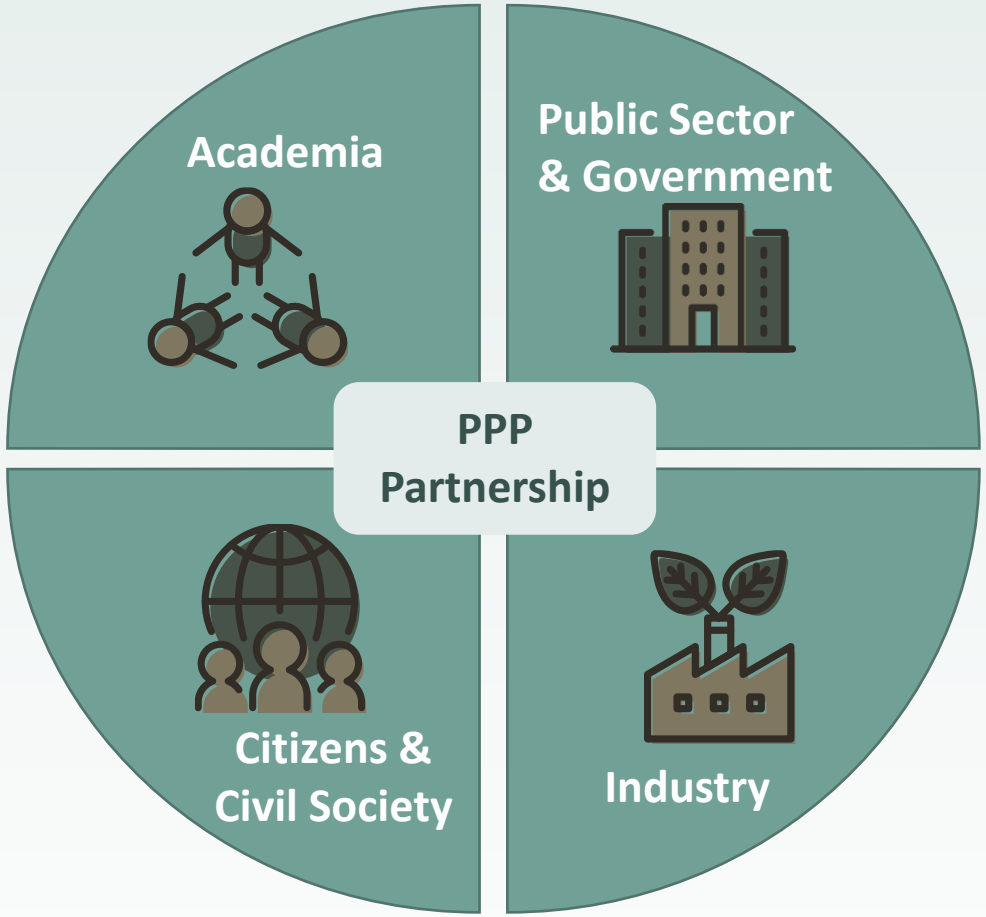
# Factsheets on EU Soil Mission Living Labs and Lighthouses for Soil Health




Nati00ns Factsheets. https://nati00ns.eu/factsheets

# Participants in the Living Labs: Multi-actors approach




*Carayannis, Elias & Campbell, David. (2009). 'Mode 3' and 'Quadruple Helix': Toward a 21st century fractal innovation ecosystem. International Journal of Technology Management - INT J TECHNOL MANAGE. 46. https://doi.org/10.1504/IJTM.2009.023374 .*

*Carayannis, E.G., Barth, T.D. & Campbell, D.F. The **Quintuple Helix innovation model**: global warming as a challenge and driver for innovation. J Innov Entrep 1, 2 (2012). https://doi.org/10.1186/2192-5372-1-2*

# Participants in the Living Labs: Quadruple Helix

## Industry

### Agricultural

- Farmers and landowners
- Cooperatives and supermarkets
- Agribusiness companies (e.g. agricultural engineers, food engineers, manufacturers of seeds and inorganic fertilizers, retailers) ranging from major European players to innovative startups, investors.

### Urban

- Building/construction professionals: e.g. civil engineers, architects, real estate)
- GIS specialists
- Urban Planners (e.g. landscape, transport).

### Forestry

- Landowners and forest managers
- Forest companies
- Forest owner associations
- Industries
- Land managers

### Industrial

- Industrial landowners
- Land developers
- Environmental consultants
- SMEs


Larson, J. (2023). FACTSHEET - EU Soil Mission Living Labs and Lighthouses for Soil Health: Forestry Land Use. Zenodo. https://doi.org/10.5281/zenodo.7969297
Morello, E., & de Franco, A. (2023). FACTSHEET - EU Soil Mission Living Labs and Lighthouses for Soil Health: Urban Land Use. Zenodo. https://doi.org/10.5281/zenodo.7969333
Munkholm, L., & ten Damme, L. (2023). FACTSHEET - EU Soil Mission Living Labs and Lighthouses for Soil Health: Agricultural Land Use. Zenodo. https://doi.org/10.5281/zenodo.7969257
Siebielec, G. (2023). FACTSHEET - EU Soil Mission Living Labs and Lighthouses for Soil Health: (Post) Industrial Land Use. Zenodo. https://doi.org/10.5281/zenodo.7969358


The is a fabricated example of potential participants within the different types of LLs. Not intended to be exhaustive.

# Participants in the Living Labs: Quadruple Helix

## Government & Public Sector

### Agricultural

- Local, regional, and national (e.g. authorities, regulators, researchers)

### Urban

- Public authorities and private agencies
- Public administrations (e.g. local, county-regional, national, communitarian)
- Health authorities (e.g. public health, epidemiologists)
- Environmental managers (e.g. disaster/risk and environmental managers)

### Forestry

- Local, regional, and national authorities
- Regulators
- Governmental organizations
- Public authorities
- Agencies

### Industrial

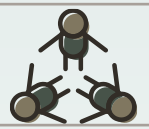
- Local, regional, national authorities
- City and regional administration
- Environmental protection offices
- Spatial planners

That might benefit from LLs focused on the regeneration and reuse of brownfield land and optimised spatial planning in (Post)industrial areas, adding value and addressing health risk.


Larson, J. (2023). FACTSHEET - EU Soil Mission Living Labs and Lighthouses for Soil Health: Forestry Land Use. Zenodo. https://doi.org/10.5281/zenodo.7969297
Morello, E., & de Franco, A. (2023). FACTSHEET - EU Soil Mission Living Labs and Lighthouses for Soil Health: Urban Land Use. Zenodo. https://doi.org/10.5281/zenodo.7969333
Munkholm, L., & ten Damme, L. (2023). FACTSHEET - EU Soil Mission Living Labs and Lighthouses for Soil Health: Agricultural Land Use. Zenodo. https://doi.org/10.5281/zenodo.7969257
Siebielec, G. (2023). FACTSHEET - EU Soil Mission Living Labs and Lighthouses for Soil Health: (Post) Industrial Land Use. Zenodo. https://doi.org/10.5281/zenodo.7969358


The is a fabricated example of potential participants within the different types of LLs. Not intended to be exhaustive.

# Participants in the Living Labs: Quadruple Helix



## Academia

### Agricultural

- Researchers from universities
- Governmental organizations
- Research institutes

### Urban

- Universities
- Social sciences research institutions: e.g. anthropologists, economists, geographers, sociologists
- Physical sciences research institutions: e.g. agronomists, biologists, chemists, climatologists, geologists, epidemiologists, physicians.

### Forestry

- Researchers in forest and soil sciences
- Social science researchers
- Universities
- Research institutions

### Industrial

- Researchers, agricultural and soil advisors.
- Farmers and advisors that might be interested in tackling diffuse contamination and transformation of agriculture in (Post)industrial regions to avoid contaminant transfer to food.


Larson, J. (2023). FACTSHEET - EU Soil Mission Living Labs and Lighthouses for Soil Health: Forestry Land Use. Zenodo. https://doi.org/10.5281/zenodo.7969297
Morello, E., & de Franco, A. (2023). FACTSHEET - EU Soil Mission Living Labs and Lighthouses for Soil Health: Urban Land Use. Zenodo. https://doi.org/10.5281/zenodo.7969333
Munkholm, L., & ten Damme, L. (2023). FACTSHEET - EU Soil Mission Living Labs and Lighthouses for Soil Health: Agricultural Land Use. Zenodo. https://doi.org/10.5281/zenodo.7969257
Siebielec, G. (2023). FACTSHEET - EU Soil Mission Living Labs and Lighthouses for Soil Health: (Post) Industrial Land Use. Zenodo. https://doi.org/10.5281/zenodo.7969358


The is a fabricated example of potential participants within the different types of LLs. Not intended to be exhaustive.

# Participants in the Living Labs: Quadruple Helix

## Citizens, Civil Society & Users

### Agricultural

- NGOs (e.g. nature conservation and water protection organizations)
- Citizen groups
- Consumers
- Local, regional and national movements

### Urban

- Inhabitants (e.g. residents, tenants)
- Civic groups (e.g. associations, cooperatives, NGOs)
- Loosely organized groups (e.g. artists, designers, retailers, and local businesses)
- Informal interest groups of the communities.
- Nature conservation groups

### Forestry

- Urban and local citizens, community and citizens representatives, NGOs (e.g. nature conservation protection organizations).

### Industrial

- Citizens
- Citizen organizations,
- Environmental organizations

Larson, J. (2023). FACTSHEET - EU Soil Mission Living Labs and Lighthouses for Soil Health: Forestry Land Use. Zenodo. https://doi.org/10.5281/zenodo.7969297
Morello, E., & de Franco, A. (2023). FACTSHEET - EU Soil Mission Living Labs and Lighthouses for Soil Health: Urban Land Use. Zenodo. https://doi.org/10.5281/zenodo.7969333
Munkholm, L., & ten Damme, L. (2023). FACTSHEET - EU Soil Mission Living Labs and Lighthouses for Soil Health: Agricultural Land Use. Zenodo. https://doi.org/10.5281/zenodo.7969257
Siebielec, G. (2023). FACTSHEET - EU Soil Mission Living Labs and Lighthouses for Soil Health: (Post) Industrial Land Use. Zenodo. https://doi.org/10.5281/zenodo.7969358

The is a fabricated example of potential participants within the different types of LLs. Not intended to be exhaustive.

## FUNDED UNDERHORIZON-MISS-2023-SOIL CALLS

**Living Lab in the Mediteranean Region**

**Living Lab in Western European Farmlands**

# Map of Living Labs and Lighthouses

https://prepsoil.eu/living-labs-and-lighthouses/map


*The Living Labs shown on the map do not necessarily fulfil the criteria for the selection and set-up of living labs in the context of the Soil Health Mission presented in the Mission Implementation Plan.*

# Thematic focus of the 2024 Living Lab call

Dolinda Cavallo, ENoLL

Disclaimer

Information provided herewith are of the NATI00NS consortium.

The sole official source of reference shall remain the *Horizon Europe Work programme (2023-25)* - 12. Missions and Cross-cutting Activities, published by the European Commission on April 17th, 2024.

Funded by the European Union

# Thematic focuses of the two 2024 Living Lab topics

## Soil health (0101)

*HORIZON-MISS-2024-SOIL-01-01: Co-creating solutions for soil health in Living Labs*

*https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/horizon-miss-2024-soil-01-01*

## Urban (0102)

*HORIZON-MISS-2024-SOIL-01-02: Living Labs in urban areas for healthy soils*

*https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/horizon-miss-2024-soil-01-02*

- Deadline for applications: 08 October 2024 17:00:00 Brussels time;
- Single-stage submission via the Funding & Tenders Portal;
- **4-5 Living Labs** for each application located **in at least three** different Member States and/or Associated Countries;
- Research and Innovation Actions: 100% funding for any actor.

# Thematic focuses of the two 2024 Living Lab topics

## Soil health (0101)

*HORIZON-MISS-2024-SOIL-01-01:*
*Co-creating solutions for soil health in Living Labs*

- 36 M€ funding
- Expect 3 applications funded

1. Reduce **desertification**
2. Conserve and increase 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

## Urban (0102)

*HORIZON-MISS-2024-SOIL-01-02:*
*Living Labs in urban areas for healthy soils*

- 12 M€ funding
- Expect 1 application funded

# Proposal template for applicants

- ✓ A new table is included for applicants to topics 2024-SOIL-01-01 and 2024-SOIL-01-02 to fill in.
- ✓ The table aims at gathering key aspects of the LL that will form part of the LL project.
- ✓ It will help applicants and evaluators to better describe how LL are organized.

| |
|---|
| Q1. In which country (countries) is the Living Lab (LL) located? |
| Q2. In which region(s) or sub-region(s) is the LL located? |
| Q3. What is the main land use in the LL? |
| Q4. Which Mission Soil specific objective(s) will be mainly addressed in the LL? |
| Q5. Which soil health challenge(s) will be tackled in the LL? |
| Q6. How many experimental sites will the LL have? |
| Q7. Will sites that demonstrate a high potential and can be converted to lighthouses (LHs) be identified in the same region of the LL? |
| Q8. Which project partner is in the lead of the LL? |
| Q9. Which type of actors are you planning to involve in the LL? |
| Q10. Are there already ongoing co-creation activities in some of the experimental sites of the LL? |
| Q11. Indicate the approximate budget that will be dedicated for the establishment and implementation of activities in the LL? |
| Q12. If you are planning to engage further actors or entities not already involved as partners, please indicate how many and of which type? |
| Q13. Are you planning to make use of Financial Support to Third Parties (FSTP)? |

# SOILL & SOILL-Startup
## Support Structure for Soil Health Living Labs

*Summary of actions/services offered to Mission Soil LL/LH*

Dolinda Cavallo SOILL & SOILL-Startup Coordinator Project Manager

Funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Research Executive Agency (REA). Neither the European Union nor the granting authority can be held responsible for them.

# Living Lab in the Mission Soil

## The Mission ‘A Soil Deal for Europe’

## 100 living labs and lighthouses to lead the transition towards healthy soils

### PREPSOIL

**Preparing for the ‘Soil Deal for Europe’ Mission**

July 2022 – June 2025
GA 101070045

prepsoil.eu

- Taxonomy & features specification
- Identification & mapping
- Model business plan
- Service package


### NATI0ONS

**National engagement activities to support the launch of the Mission 'A Soil Deal for Europe’ 100 LLs and LHs**

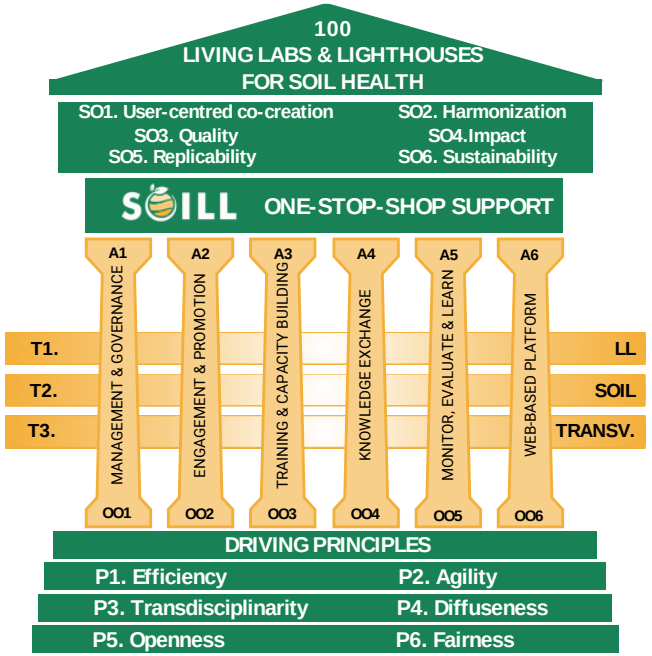
November 2022 – October 2024
GA 101090738
nati00ns.eu

- National engagement sessions
- Supporting applicants
  - Coaching
  - E-learning & capacity building
  - Matchmaking
  - Helpdesk


### SOILL

**Support structure for Soil Health Living Labs**

January 2024 2024 – December 2028
GA 101112782



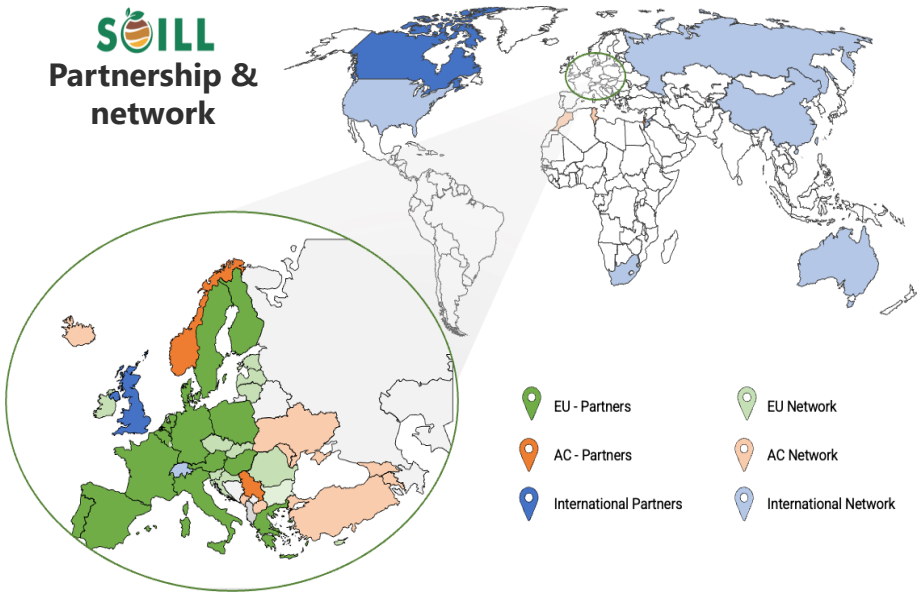
# Living Labs in the Mission Soil

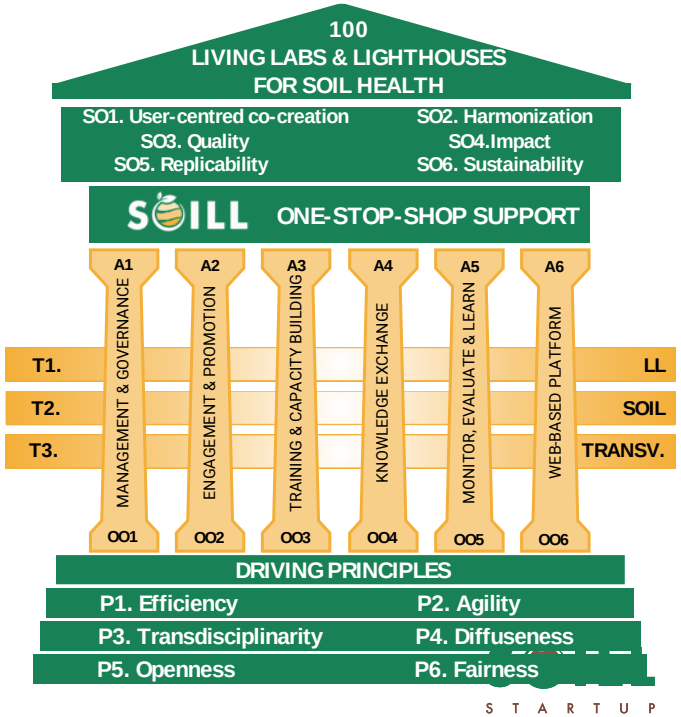
**The Mission 'A Soil Deal for Europe'**

**100 Living Labs and Lighthouses to lead the transition towards healthy soils**

## SOILL Support Structure for Soil Living Labs

**SOILL** aims to set up and run an **effective, agile, transdisciplinary, diffuse, open** and **fair** one-stop-shop structure to coordinate, support, enlarge, and promote the network of 100 living lab and lighthouses funded under the Soil Deal Mission and ensure their **co-created user-centred, harmonized, reliable, impactful, replicable,** and **sustainable** lead of the transition towards healthy soils.



- User-centred co-creation
- Harmonization
- Quality
- Impact
- Replicability
- Sustainability

SOILL

- One-stop-shop structure & hub
- Engagement & enlargement
- Knowledge exchange
- Monitoring & assessment
- Promotion & dissemination
- International networking

# What SOILL is and what is not?

We don't review nor evaluate the SHLLs!

We don't review nor evaluate the project or the consortium!

We do not oblige SHLL/LHs to participate in SOILL activities

We monitor the progress of SHLL/LHs towards their maturity and towards Mission objectives!

We offer training to all partners to enhance the harmonized support to SHLL/LHs

We encourage collaboration for the SHLL/LHs growth and reward most engaged SHLL/LHs (mentoring)

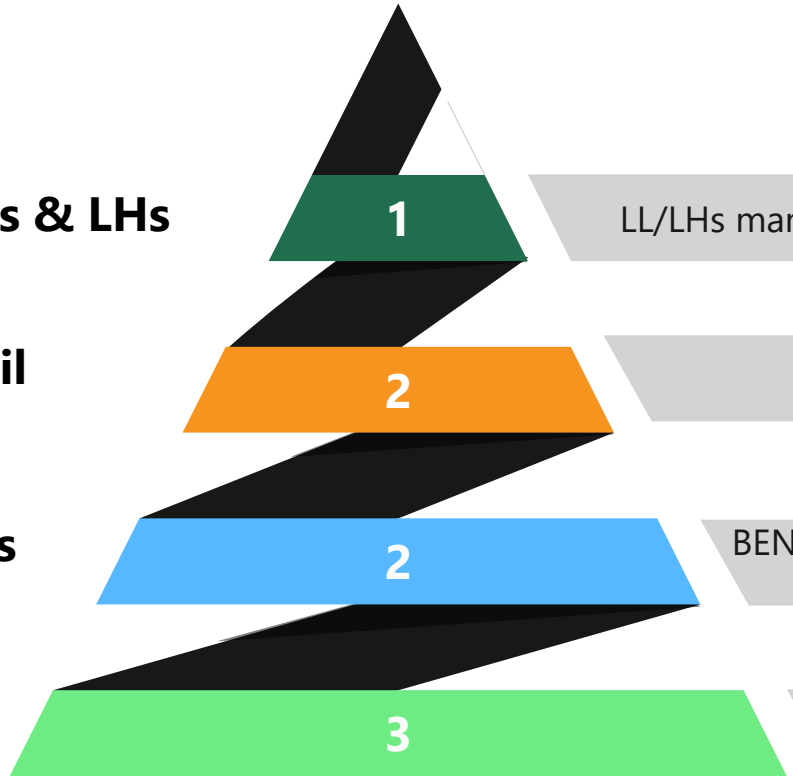
We don't represent the EC nor the Mission

We are not in charge of coordinating all the projects of the Mission or the LLs projects!

We play a pivotal role in the Mission and we need to always provide correct information!

We align with other Mission projects to benefit of common aspects and to enforce the connections of the SHLLs

# Who are we offering it to?




**Funded SHLLs & LHs**

LL/LHs managers, stakeholders, partners, projects

**Mission Soil**

Secretariat - Board - MSP

**Mission(s) projects**

BENCHMARKS, AI4HEALTH, PREPSOIL, TRAMI, SOLO, …

**Wider soil/LL community**

AE partnership, investors, policy makers, international actors, ….

# Soil Health LL&LHs: What do we offer?

| | |
|---|---|
| **Training & Support** | Capacity Building - Mentoring - Helpdesk - Specific Points of Contacts |
| **Monitoring & guidelines** | Monitoring - Assessment - Guidelines - Reporting - Recommendations |
| **Collaboration** | Exchange with peers: Online, Events, Working Groups |
| **Visibility** | Catalogue - Webpages - Presentation at events - Awards |
| **Opportunities** | Matchmaking/marketplace |

SOILL STARTUP

# Soil Health LL&LHs: What do we need?

| | |
|---|---|
| Needs | Needs assessment: training, common interests, hub |
| Indicators | Detailed list of qualitative & quantitative indicators (LL not project) |
| Feedbacks | Feedbacks on events, trainings, comms, hub, tools, …. |
| Comms info | Profile – Updated news – Pictures - Videos |
| Time & Money | Time: Reporting, attending events, provide info, fill surveys<br>Money: PMs & travels to project events |

# What do SHLL/LHs need to plan?

| ACTIVITY | FREQUENCY | TIME | FORMAT | BUDGET EFFORT/PM |
|---|---|---|---|---|
| **Thematic groups training** | 6 in total (24-25)<br>Approx 2/3 per year | From September 2024 | Online | LL/LH representatives and/or additional stakeholders |
| **Network training** | Annual (25-30) | 2025 (at least for 3 days) | In presence | At least one person per LL/LH |
| **Mutual learning/engagement events** | Annual (24-30) | 1) Last quarter of 2024<br>2) 2025 | In presence | At least one person per LL/LH and additional stakeholders |
| **Coaching session*** | 1 per LL/LH (25)* | From 2025 | Online | LL/LH representatives |
| **Open/Fields visits** | tbc | 2025 | In presence/ online | Organization/participation |
| **Self-assessment survey** | Bi-yearly (24-30) | Starting from July 2024 | Online | LL/LH representatives on behalf of LL/LHs team |
| **Monitoring Interviews** | Annual (24-30) | From last quarter of 2024 | Online | LL/LHs managers and key stakeholders |
| **Platform** | Regular | From July 2024 | Online | At least one person per LL/LH and additional stakeholders |
| **Comms interviews** | Ad-hoc | From start of project | In presence | LL/LH representatives and/or key LL/LHs stakeholders |

**only if there is participation in the previous trainings*

SOILL STARTUP

# More information


Visit our brand-new website to find:

ℹ Project & Mission information and updates
📅 Events
🌐 Interactive map of Living Labs
📽 Video gallery and publications:
🤝 Matchmaking platform

📬 Register now to our newsletter!

www.soill2030.eu

# Successful experiences in Soil Mission Call

Lena Madden, Technological University of the Shannon (TUS)

Funded by the European Union

# Q & A

NATIOONS

# Time for engagement

Funded by
the European Union


# Final remarks & conclusions

Mar Ylla, ENoLL

Funded by the European Union

NATIOONS

#1 LINK SOIL HEALTH CHALLENGES WITH SOIL MISSION OBJECTIVES

#2 INITIATE/JOIN/EXPAND A LIVING LAB

#3 INITIATE/JOIN A CONSORTIUM

#4 SUBMIT AN APPLICATION

Living lab realisation?

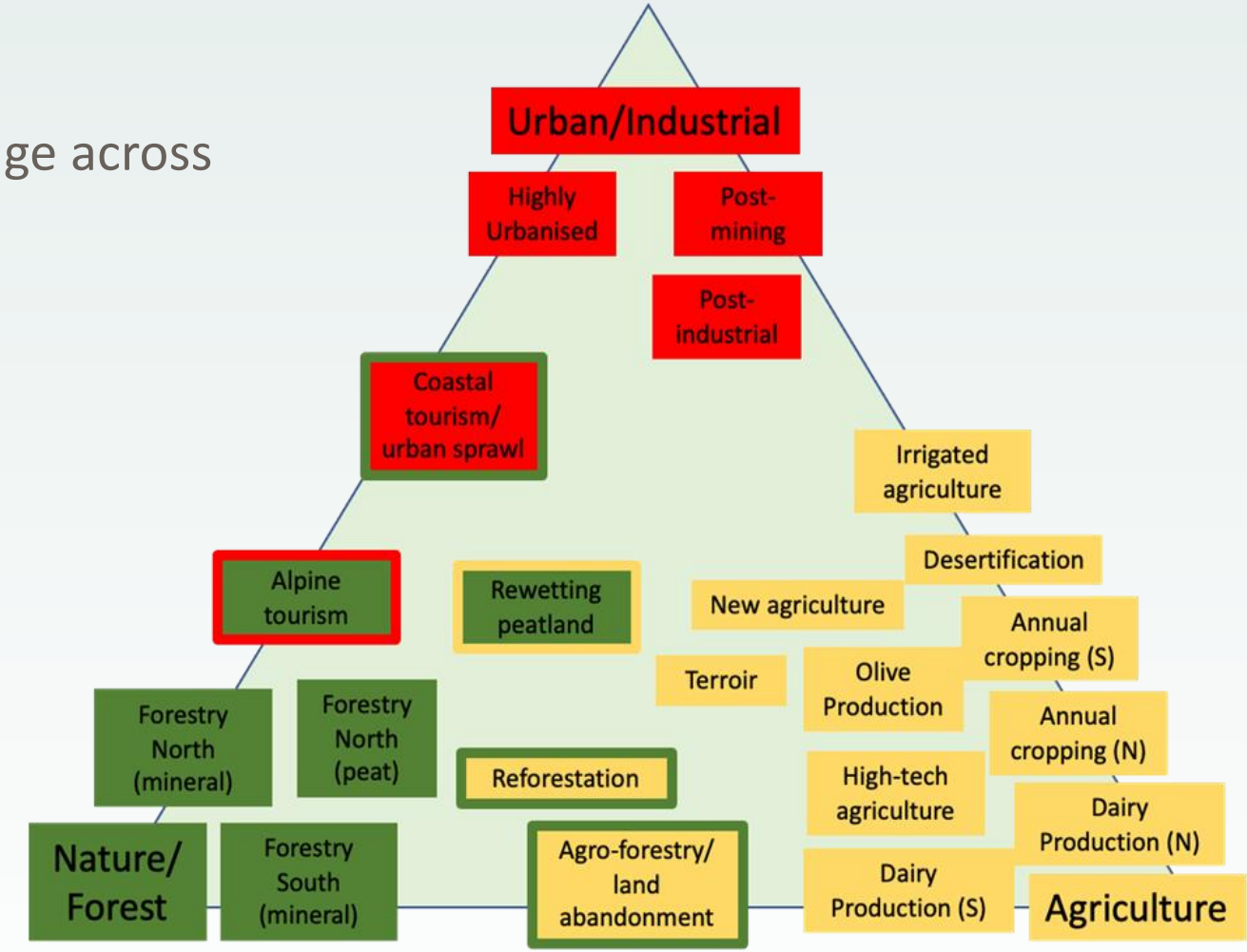
# Explore the Pathway to a Competitive Application

#1 LINK SOIL HEALTH CHALLENGES WITH SOIL MISSION OBJECTIVES

- **Identify** the soil health challenges
- **Learn** about Soil Mission Objectives in the Implementation Plan of ‘A Soil Deal for Europe’
- **Join/watch** thematic events
- **Consult** PREPSOILs Soil Need Assessment

# Aim of PREPSOIL Project

Synthesize soil needs and drivers of change across 21 EU-representative regions


Source: PREPSOIL WP2 workgroup

# Example of PREPSOILs Soil Need Assessment

PREP SOIL Regions SOIL Needs Assessment

Urban - Industrial

## Post-Mining


**Authors**
Blaž Repe (blaz.repe@ff.uni-lj.si),
Barbara Kostanjšek (barbara.kostanjsek@bf.uni-lj.si)
and Naja Marot (naja.marot@bf.uni-lj.si)
from the University of Ljubljana


Scan the QR Code and visit the Workshop Page to access all the materials

*Vzhodna Slovenija (Slovenia)*

## REGIONAL INFORMATION

The Zasavje region is located in the central part of Slovenia, between the capital city of Ljubljana and Celje (the 3rd largest city). The region can be classified as a post-industrial region, more specifically, a post-mining region.

| | |
|---|---|
| **Dominant land use** | Forest (67.5%) |
| **Secondary land use** | Grassland (21.0%) |
| **Climatic Zone** | Cfb, Temperate oceanic climate, without dry season and warm summer (Temperate continental, central Slovenia) |
| **Soil WRB classification** | Cambisols and Leptosols |
| **Soil type** | Cambisols: Eutric, Dytric or Chromic. Leptosols: Mollic, Rendzic or Dystric |
| **Dominant topsoil texture** | Different Loamy textures (loam, silt loam) |
| **Soil threat(s)** | 1. Soil erosion<br>2. Soil contamination<br>3. Soil acidification<br>4. Urban sprawl and urbanization<br>5. Invasive organisms |
| **Representative for regions** | Post-mining region, Central European region |

## SOIL NEEDS ASSESSMENT

**Drivers**
The most important biophysical drivers are the parent material and topography, water erosion and vegetation cover (protects against erosion processes). Further the (lack of) national and local politics is an important socioeconomic driver as well as the mining activity and accompanying industry.

**Pressures**
The five most pronounced pressures are: 1) soil erosion and other negative slope processes (landslides), 2) soil and water contamination, 3) soil acidification (induced by past Trbovlje thermal power plant acid exhausts), 4) urban sprawl and industrialization and 5) invasive organisms.

**State**
The region is characterised by two types of landscapes: the mountainous part and the valley part. The state of the mountainous part is largely affected by natural factors (steep and rugged topography, hard and consolidated rocks, rapid runoff of precipitation water and watercourses), while the state of the soil in the valley largely reflects human activities (flat topography, softer and unconsolidated rocks, industrialized area).

**Impact**
In the mountainous part, the steep and rugged topography makes the soil less stable and shallow and, in combination with heavy rainfall, the soil is subject to landslides. In the valley, the past industrial long term pollution results in excessive concentration of heavy metals in soils, plants and water. Further, underground mining and surface extraction of rock material lead to soil subsidence.

**Response**
Regarding the policy sector, adequate soil legislation should be adopted at EU level, but municipalities should also manage space strategically through multi-year programmes. Further, a clear soil monitoring program should be established and performed yearly. Lastly soil health awareness should be raised at all levels: municipal officials, higher education, primary education etc.

## KEY MESSAGE

There is a lack of knowledge about soil and soil management. Therefore, it is essential to establish a monitoring program, especially in severely degraded areas, to understand the scope of the problem and to inform the population on an annual basis. Then, stricter criteria on soil management need to be formed, especially on pollution, and more participation and networking of stakeholders (farmers, decision-makers) is needed.

## STAKEHOLDERS INTERACTION

17th of May 2023,
Zasavje, Slovenia

- 10 Policy and government
- 1 Soil and Other Advisors
- – Business
- – Research community
- 1 Farmer/land Owner
- – CSOs and NGOs

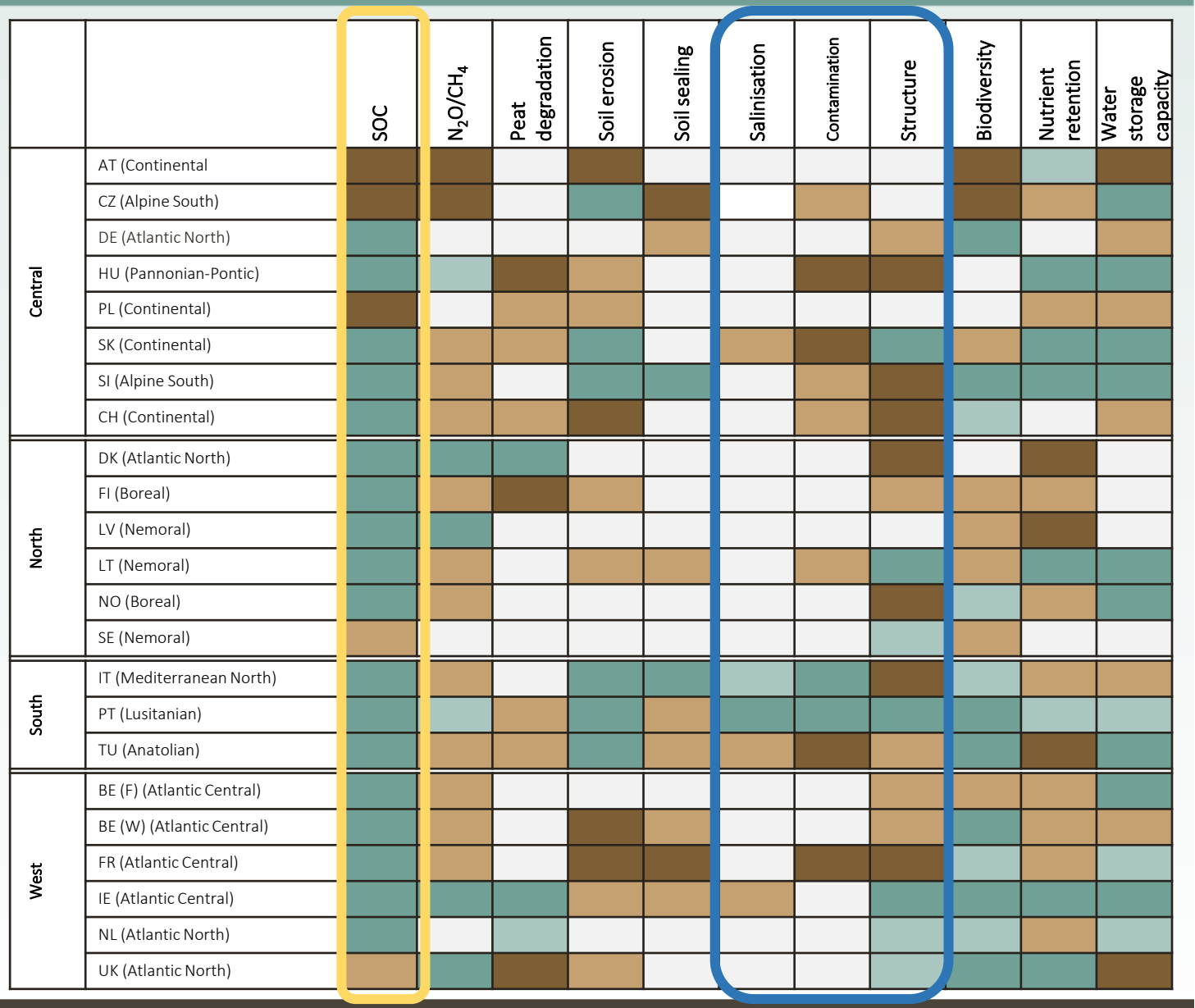
### Relevant Soil Mission Objectives

- 3. Stop soil sealing and increase re-use of urban soils
- 4. Reduce soil pollution and enhance restoration
- 5. Prevent erosion

# Regional soil needs

- Different regions have different soil challenges and different research needs.
  For example, salinisation; contamination; structure (in blue)
- Some soil challenges are relevant across regions, such as soil organic carbon (in yellow)

| Soil challenge | Research need |
|---|---|
| Very important | Very important |
| Important | Very important |
| Very important | Important |
| Important | Important |
| Other | Other |




Source: Thorsøe et al. 2023, DOI: 10.1111/ejss.13439

# Explore the Pathway to a Competitive Application

#2 INITIATE/JOIN/ EXPAND A LIVING LAB

- **Identify** stakeholders needed to:
  - overcome soil health challenges
  - fulfil the multi-actor approach
- **Watch** webinars on the Living Lab methodology
- **Learn** about EUs criteria for Living Labs
- **Find** your national mentor
- **Be advised** on the initial phases of establishing a Living Lab

# Explore the Pathway to a Competitive Application

#3 INITIATE/JOIN A CONSORTIUM

- **Reach out** to potential Living Labs collaborators
- **Join** the matchmaking platform and use it for:
  - sending messages
  - showcase products, services, projects, expertise, or other
- **Join/watch** thematic events for networking on a transnational scale
- **Agree** between Living Labs on a joint rationale behind forming the consortium

# Explore the Pathway to a Competitive Application

#4 SUBMIT AN APPLICATION

- **Draft** your application keeping close in mind
  - the rationale of collaboration
  - the roles of stakeholders in the co-creation
  - the status of soil challenges
  - expected impacts
- **Check** NATI00NS FAQ
- **Utilize** NATI00NS tools
- **Comply** with the Horizon Europe Work programme and call text (NATI00NS is guiding)

# NATI00NS: Engagement & Support to applicant LLs

https://www.nati00ns.eu/

| | |
|---|---|
| Engagement events | **Inform, engage & promote.** 43 countries (EU MS + AC), national language |
| Matchmaking – (inter)national | **Facilitate creation of local LL.** https://nati00ns.eu/matchmaking-opportunities |
| Factsheets & E-learning | **Inform & train.** LL, open call, types of LL peculiarity |
| Helpdesk & FAQ | **Support.** Online, addressing all questions on LL creation |
| Webinars LL methodology | **Train.** How to set up, develop and enlarge a LL. https://www.nati00ns.eu/events |
| Coaching | **Support.** Available in local language, appointed mentors. |
| Thematic events & webinars | **Inform, train & engage.** Different themes for specific land. https://www.nati00ns.eu/events |
| Matchmaking – International & thematic | **Facilitate creation of partnerships of LLs.** Online and along thematic events |

NATI00NS

## Join the Community

nati00ns.eu

@nati00ns

nati00ns

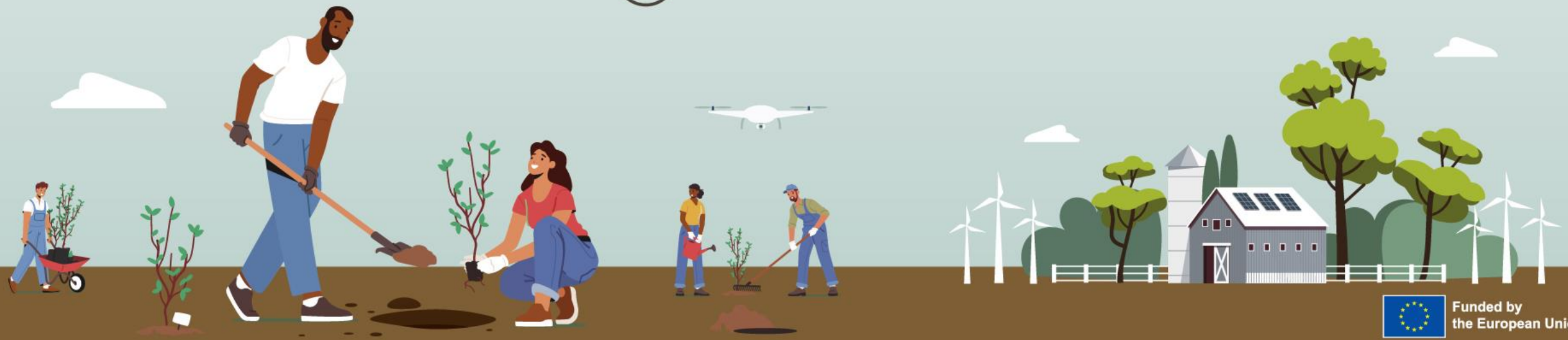
## Contact Details

Dolinda Cavallo:

dolinda.cavallo@enoll.org

Mar Ylla:

mar.ylla@enoll.org



Funded by the European Union