Foundations of Soil Health Living Labs: principles, setup and tools

Online Training Session, Day 1

Funded by the European Union

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This webinar is developed by SOILL-Startup, a project funded by the European Union (Mission Soil).

Context: SHLL Learning Journey

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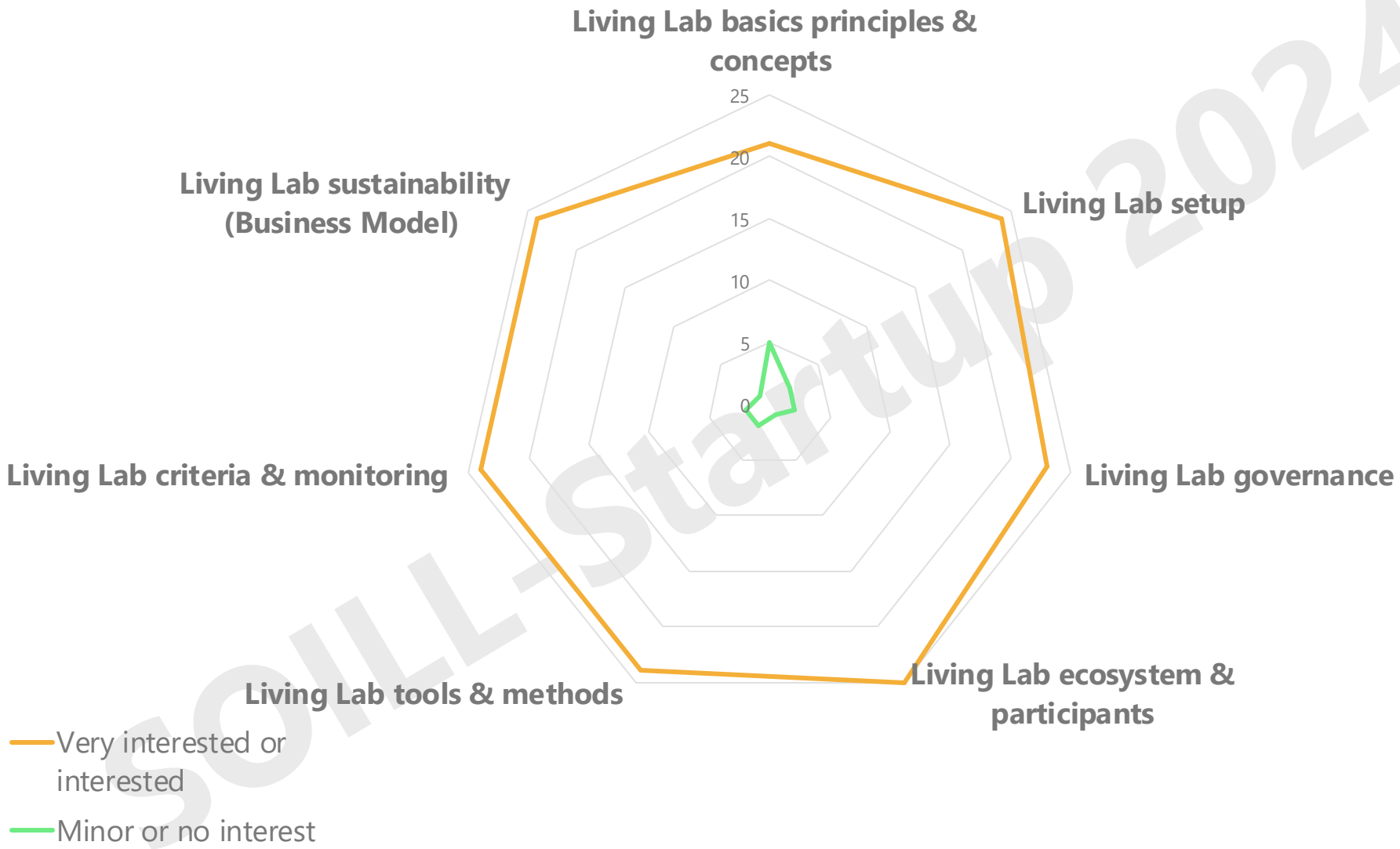
Needs assessment: your feedback



Today's Trainers

Giulia Campodonico
European Network of Living Labs (ENoLL)

Dolinda Cavallo
European Network of Living Labs (ENoLL)

Aurora Agostinis
European Network of Living Labs (ENoLL)

Jo Bijttebier
ILVO | Living Lab

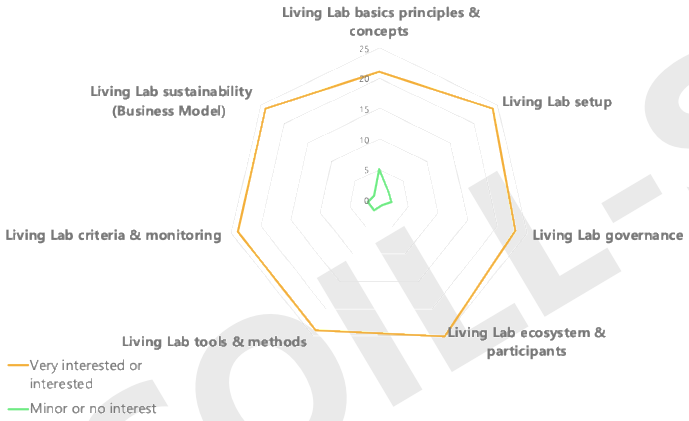
The steps for setting up a Living Lab

1. Define Vision, Mission, and purpose
2. Define the Value Proposition
3. Stakeholders' identification
4. Develop a Governance model
5. Design a Business model
6. Create a Strategic Development Plan

Successful Living Labs

Writing up your LL…

…starting from ABC



What to expect from this training?

BASICS	Principles & definitions of Soil Health Living Labs
BLOCKS	Building blocks of Living Labs
CHAMPION	Champion example of a successful Living Lab
ACTORS	Key actors and stakeholders of Living Labs
STEPS & TOOLS	Key steps & tools to set up a successful Soil Health Living Lab
PLANS	Designing a Living Lab Governance Model & Business Model

What are the key sources

European Network of Living Labs

PREP SOIL

NATIOONS

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Agenda Day 1

- Key components: SHLLs, SHLHs and ES
- Why Living Labs?
- 3-layer model & real-life example
- Building blocks of Living Labs
- Participants in Living Labs along the 4-helix
- Q&A

What are the principles and definitions of a Living Lab?

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Soil Health LL naming (harmonization)

SHLL/LH (Soil Health LL&LHs)

- Funded by dedicated topics
- Currently 25
- SOILL-Startup main target

Mission Soil
LLs & LHs

European Soil
LLs & LHs

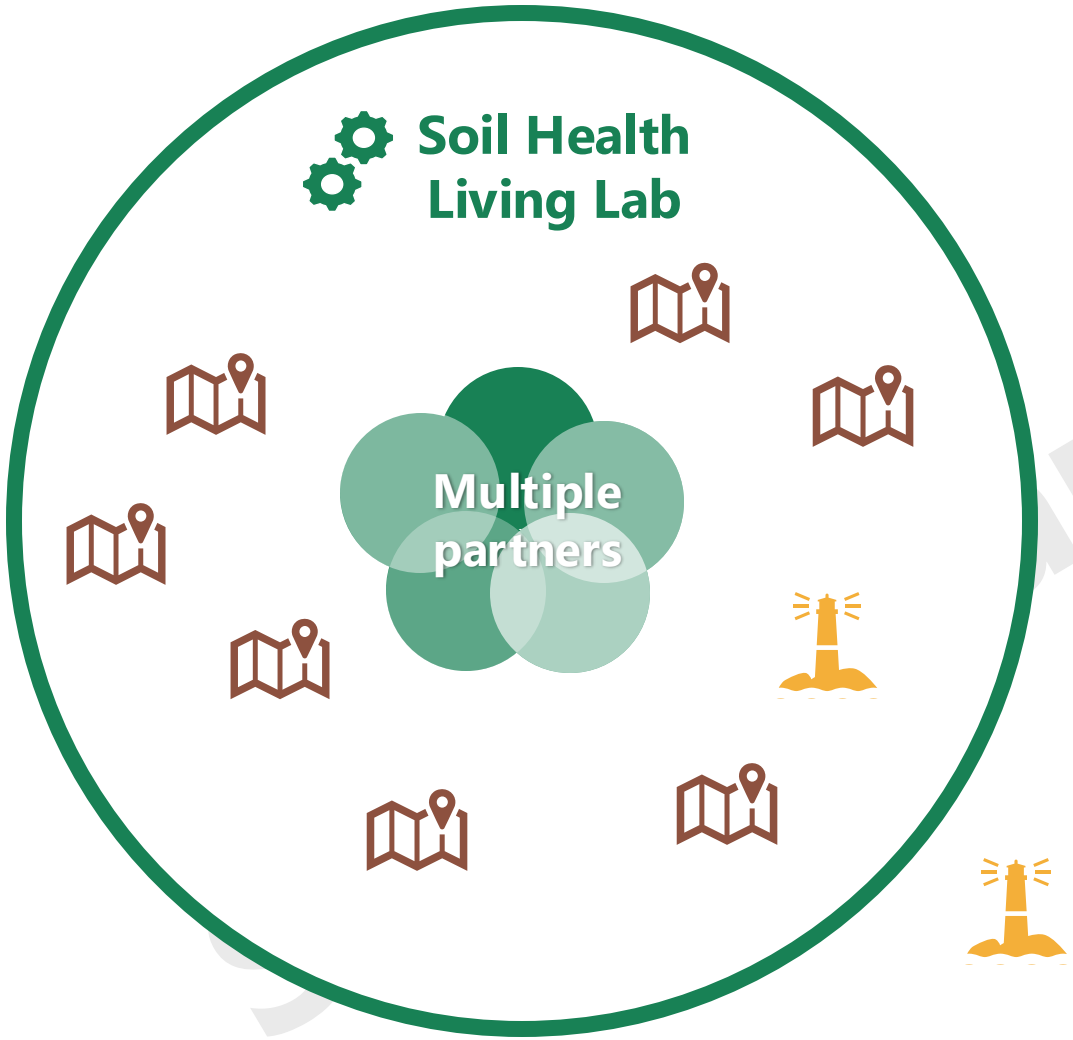
- Other LLs not funded by the dedicated ed topics that align to Mission criteria
- SOILL-Startup evaluation (from PREPSOIL)

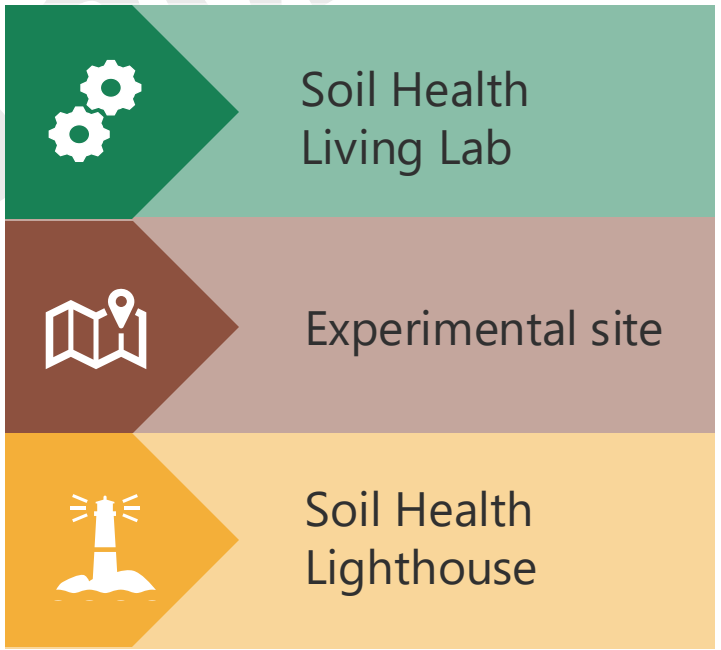
GOV4ALL iCOSHELLS LILAS4SOILS LIVINGSOILL SOILCRATES

Emerging Soil
LLs & LHs

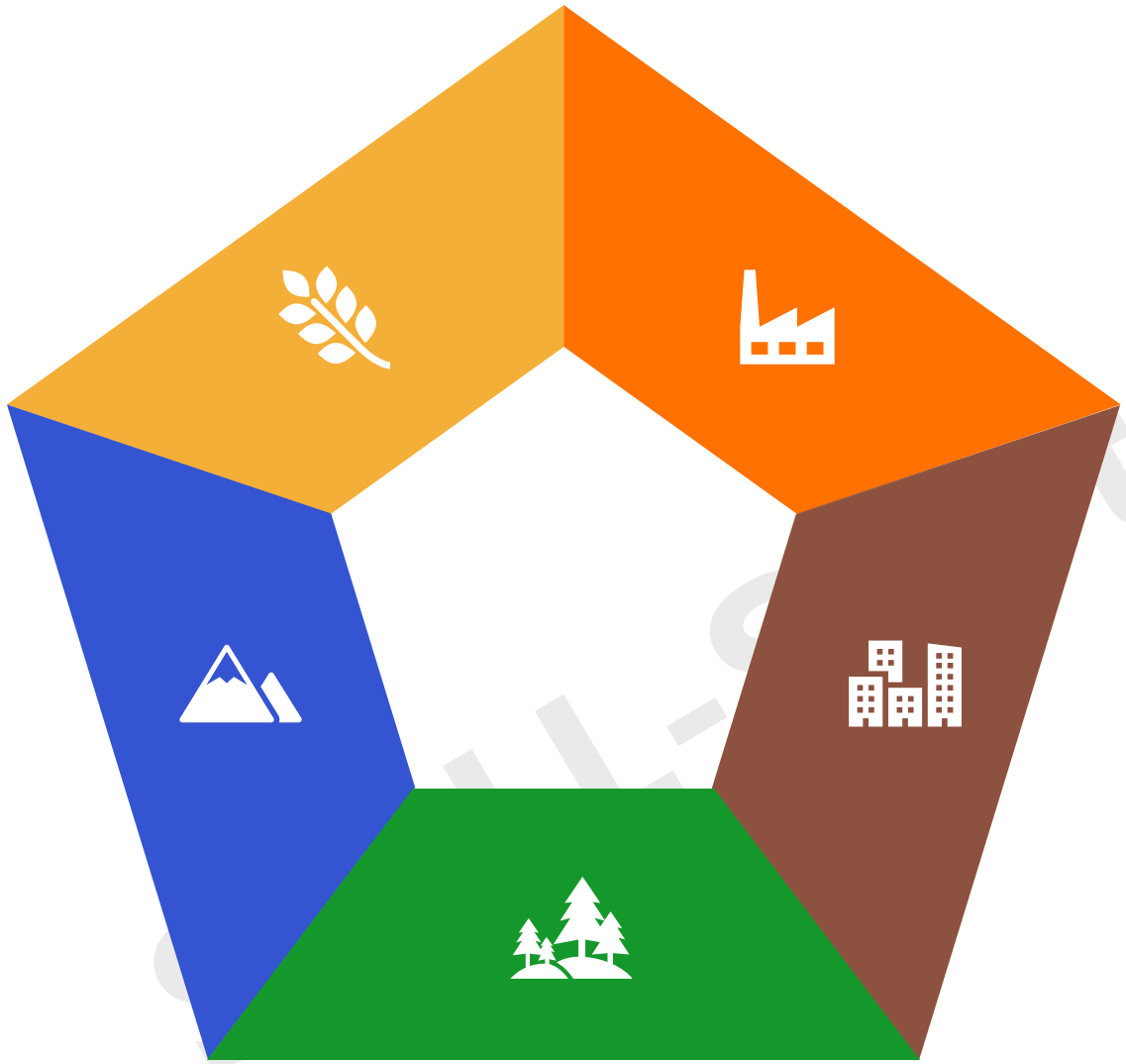
- "not there yet"
- From PREPSOIL assessment or those not succeeding Startup evaluation
- Potential applicants
- Support to be rediscussed for SGA2

Soil Health Living Labs key components





Mission Soil Living Labs per land-use type



Agriculture
92%

Natural
24%

Forestry
24%

(Peri-)Urban
8%

(Post-)Industrial
4%

AGRICULTURE LIVING LAB

Landowners

Farmers

Researchers

Advisors

Suppliers

Retailers

Existing and new technology

Customers

Cultivation experts

URBAN LIVING LAB

FORESTRY LIVING LAB

Soil Health Living Labs across land-use types

	FOCUS	PLAYERS
Agricultural LLs	Organic and mineral soils, specific farming systems approaches (organic, regenerative, conservation, precision), agroecology	Farmers and land users, agricultural advisors, agribusiness companies…
(Peri)Urban LLs	Multi-use soils, soil threats, sustainable urban planning, etc.	Citizens, public administrations, inhabitants, civic groups…
Forestry LLs	Forest related measures (Forest Strategy 2030), land fragmentation, abandonment, landscape planning.	Landowners, forest managers, forest companies, forest owner associations…
Industrial LLs	Multi-use soils, soil restoration, soil threats, soil sealing and pollution	SMEs, large industries, associations, consumers
Natural LLs	Natural soils, specific conservation and restoration approaches (forest management, wetland restoration, erosion control, biodiversity conservation).	Land managers and custodians, environmental advisors, conservation businesses, researchers, policy makers, NGOs.

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Definition: Soil Health Living Labs

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."

Multi-stakeholders	• Quadruple helix model
User-centred	• Involve all relevant partners in co-design, testing, monitoring and evaluation of solutions
Real-life environment	• Real life setting
Several sites	• e.g. farms, forest exploitations, city parks at **regional** or **sub-regional** level.
SOIL	• Alignment to Mission goals and strategies

Source: EU Soil Mission Implementation Plan

SOIL

- alignment to Mission Goals and strategies

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

Source: EU Soil Mission Implementation Plan

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Mission implementation plan criteria for LLs

AIMS

- **Innovation**, **co-creation**, formal learning
- Contribution to **societal challenges**
- **Improving soil health and related ecosystem services** (→ mission objectives)

ACTIVITIES

- **Co-creation, co-development & experimentation** of innovations improving soil health and related ESS
- **Research on impact of these innovative practices** on **ecosystems**
- **Networking** and **knowledge exchange**
- **Demonstration** (in particular Lighthouses)

PARTICIPANTS

- **Public-private people partnership**
- **Real users (soil managers connected with broad array of stakeholders & decision-makers)**
- **Demonstration:** wider public, policy arena, EIP and relevant networks

CONTEXT

- Multiple **disciplines** (-> transdisciplinary, inc. social sciences), **methods, dimensions** (technical, economic, social)
- **Place-based** approach and **real-life context** = real farms/forest/urban sites
- **Robust scientific setup** for **ecosystem assessment**
- **Openness,** communication, dissemination

Source: EU Soil Mission Implementation Plan

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What is not a Living Lab?

A Living Lab is NOT...

TEST BED

"Pre-Living Lab" setting enabling rigorous, transparent, and replicable testing of scientific theories, computational tools and new technologies in a controlled environment with users (often mainly researchers).

FABLAB

"Fabrication Laboratory" or Fab Lab is a small-scale workshop offering digital fabrication.

HOMELAB

Focus on testing and adapting new technologies based on their fit with the daily home environment.

Source: Ballon, Pieter & Schuurman, Dimitri. (2015). Living labs: concepts, tools and cases. info. 17. 10.1108/info-04-2015-0024

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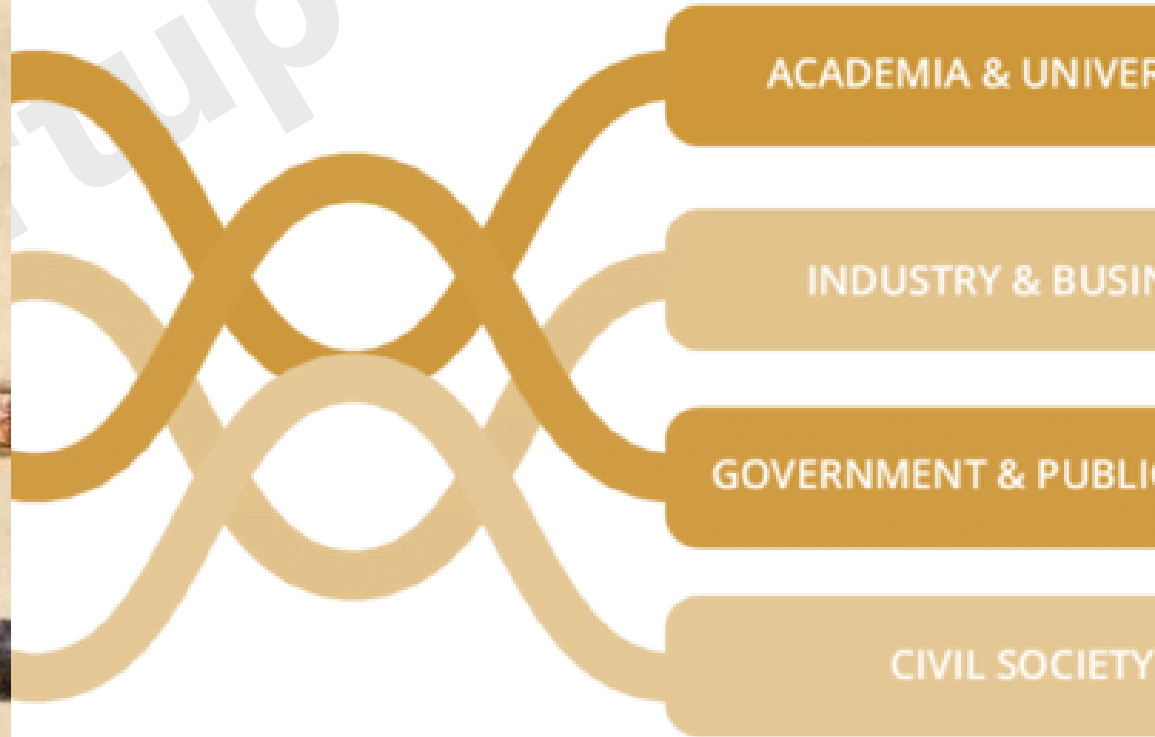
Why LLs: LLs for complex & wicked problems

- Complex challenges cannot be solved by single stakeholders
- Different language
- Different approach (solution driven to problem driven)
- Different goals (solution for practice vs publishable results)
- Practical solutions from one site are not widespread
- Practical solutions are not evaluated
- Lots of motivated key stakeholders, still difficult for them to get heard
- Lack of trust between stakeholders
- …

Living Lab are trustful regional ecosystems

Living Labs create a **trustful environment** that all stakeholders perceive as safe and neutral to open and contribute, understanding the value for them but also the value for the whole ecosystem



Why Living Labs: Benefits

Derisk innovation

Real-life environment

Bridge the research/ market gap

Address complex societal challenges

Insights into the adoption

Involve end-users in the innovation process

Faster innovation cycle

Quadruple helix

Living Labs provide a flexible and adaptable innovation approach that can help create positive societal change by addressing wicked problems through collaborative and participatory processes.

Definition: Soil Health Experimental Sites & Lighthouses

Experimental Sites

Experimental sites are characterized by being **individual**, real-life physical places where co-creation processes take place to improve soil health.

- The sites and their characteristics can vary according to the land type.
- The sites should focus on specific themes of shared interest for the LL, allowing for replication, validation, and knowledge exchange at regional level, extendable to similar settings beyond the project scope.
- The **sites** can e.g. farms, forest plots, 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.

Source: EU Soil Mission Implementation Plan

Mission implementation plan criteria for LHs

Lighthouses: good example for others to learn from

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

ACTIVITIES

- **Demonstration, dissemination and promotion** to soil managers, the public and the policy arena, at landscape scale and beyond, of land-use systems that satisfy criteria for sustainable development, science-based terms of soil health and related ecosystem services.
- **Reaching out to the policy arena** linking results of the LHs to environmental rules and regulations. This in line with science-based policy support and governance.

Source: EU Soil Mission Implementation Plan

Mission implementation plan criteria for LHs

Lighthouses: good example for others to learn from

A short-term project, well defined, measureble that serves as a model for other similar projects

Key features

- Progressive nature
- Fast delivery
- Adaption to new ideas, as specific problem to address and a clear and easily understood metrics

Source: EU Soil Mission Implementation Plan – Mission Soil Foresight

Soil Health key concepts

	SCALE	ACTIVITIES	PERFORMANCE IN SOIL HEALTH IMPROVEMENT
Living Lab	**Regional/ subregional landscape**	Coordinate experimentations & partners	In progress at landscape scale
Living Lab experimentation site	**Local** (one farm/forest, one urban site, etc)	Co-create knowledge and innovations	In progress on the site
Lighthouse	**Local** (one farm/forest, one urban site	Experiment and/or demonstrate	**Demonstrated high performance**

Source: EU Soil Mission Implementation Plan

The three-layered model

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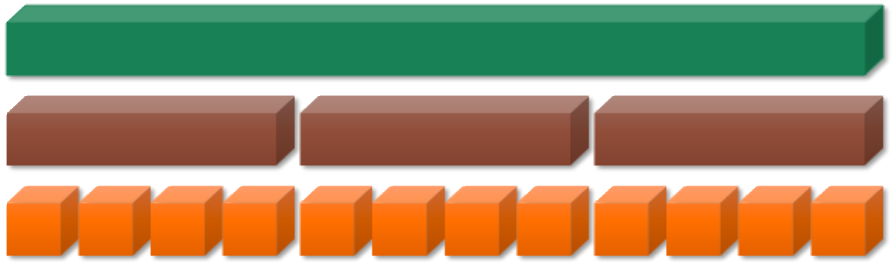
Three-layered model: Overview



LAYER	DEFINITION	RESEARCH PARADIGM	LEVEL
MACRO	Living Lab constellation consisting of organised stakeholders	Open Innovation: Knowledge transfers between organizations	PPPP
MESO	Living Lab innovation project using Living Lab methodologies	Open & User innovation: Real life experimentation, active user involvement, multi-method and multi-stakeholder	PROJECT
MICRO	Individual Living Lab research steps and activities linked to the stakeholders' assets and capabilities	User innovation: User involvement & contribution for innovation	ACTIVITIES

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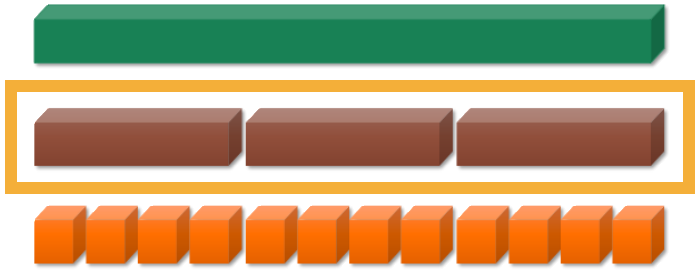
Living Labs focus on:

- A well structured **organisation** on the **macro** level
- With living lab **projects** in the **meso** level
- Consisting of **co-created activities** in the **micro** level

Three-layered model: Meso level



LAYER	DEFINITION	RESEARCH PARADIGM	LEVEL
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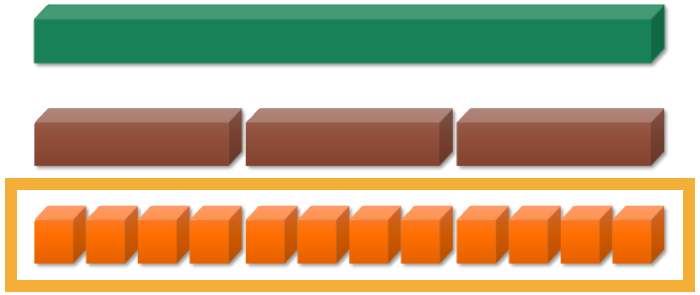
Three-layered model: Micro level



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EU MISSIONS
SOIL DEAL FOR EUROPE

ACTIVITIES

- **Co-creation, co-development & experimentation** of innovations improving soil health and related ESS
- **Research on impact of these innovative practices** on **ecosystems**
- **Networking** and **knowledge exchange**
- **Demonstration** (in particular lighthouses)

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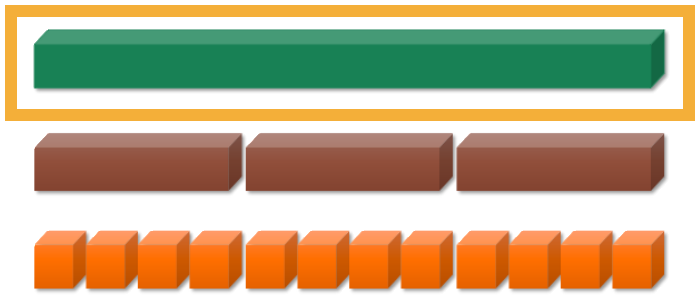
Three-layered model: Macro level



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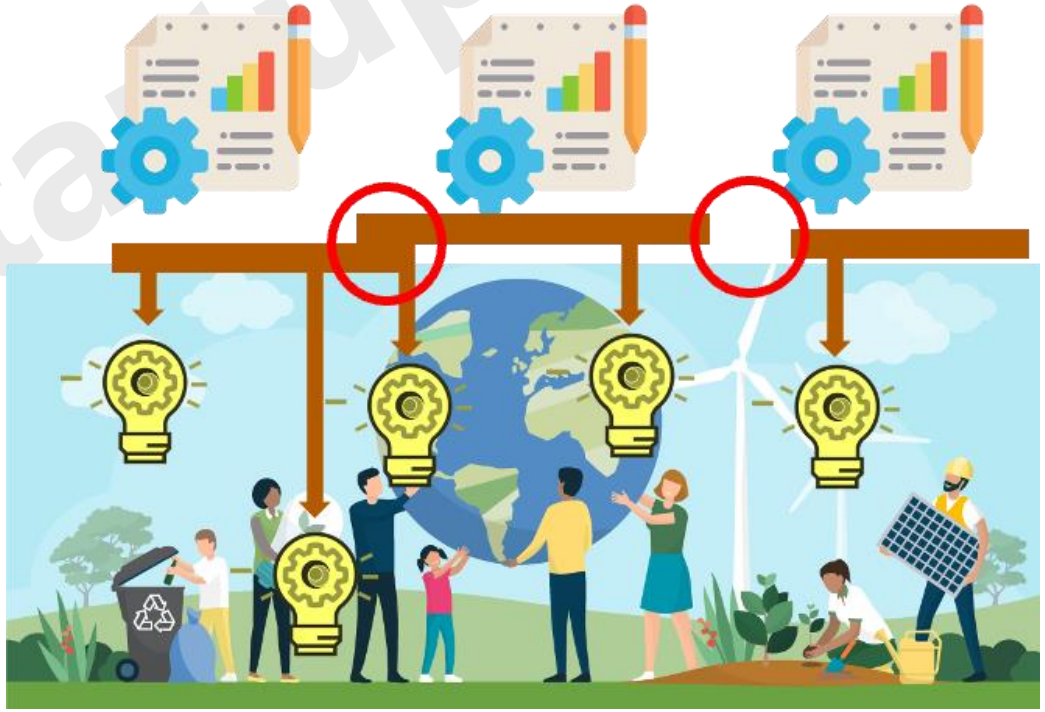
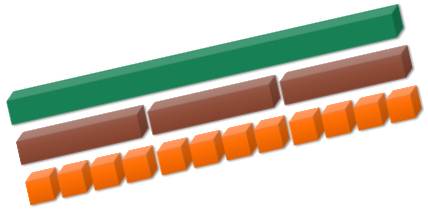


Strategy beyond the project(s)!

SOILL systemic approach to LL evaluation



Living Lab approach

Soil Health impact

European Network of Living Labs

CRITERIA

PREP SOIL

MONITORING

LL APPROACH

TAXONOMY

SOILL

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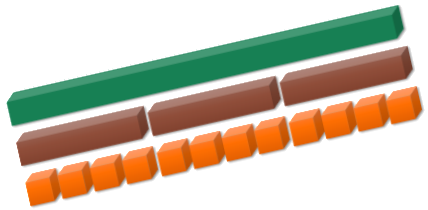
SOILL harmonized LL monitoring & evaluation framework

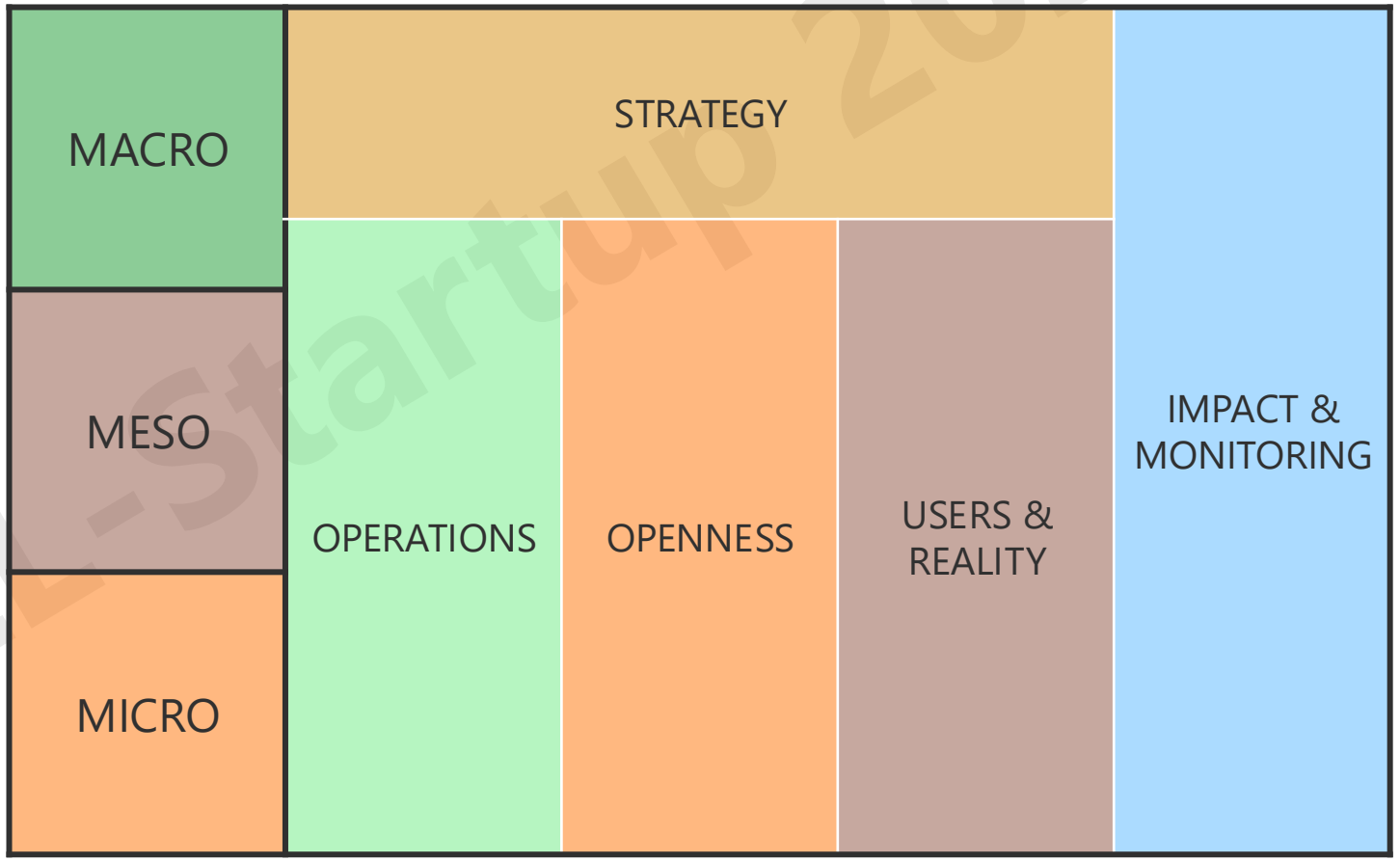
5 monitoring & evaluation chapters

Strategy	Governance | Business Model | Ecosystem & Collaboration
Operations	Operations | Equipment & Infrastructure
Openness	Innovation partnerships, projects & processes | Ownership of results
User & reality	User-centricity | Lifecycle & real-life contexts
Impact & monitoring	Scale-up | Monitoring | Impact (Soil health)

SOILL harmonized LL monitoring & evaluation framework

5 monitoring & evaluation chapters





SOILL harmonized LL monitoring & evaluation framework

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Mission Soil LLs

GUIDELINES

- Webinar
- Guidelines
- Annotated templates

Early 2025

YEARLY CUT-OFFS

- Self reflection
- Quantitative self-assessment
- Qualitative report

March 2025

EVALUATION

- Assessment & evaluation
- Analysis of network

REPORTING

- Report to Mission Soil
- Individual report
- Aggregated report & recommendations

TRAINING

- Tailored training
- Support material

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Real-life example: ILVO Living Lab

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LIVING LAB
AGRO-ECOLOGIE & BIOLOGISCHE LANDBOUW

Jo Bijttebier (ILVO) -9th of December 2024

ILVO
Flanders Research Institute for Agriculture, Fisheries and Food
Burg. Van Gansberghelaan 92
9820 Merelbeke – België

www.ilvo.vlaanderen.be

llaebio@ilvo.vlaanderen.be

www.llaebio.be

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Farming in Flanders

declining **SOIL** quality

WATER availability and water quality

decline in (**AGRO)BIODIVERSITY** and related ecosystem services

acces to **LAND**

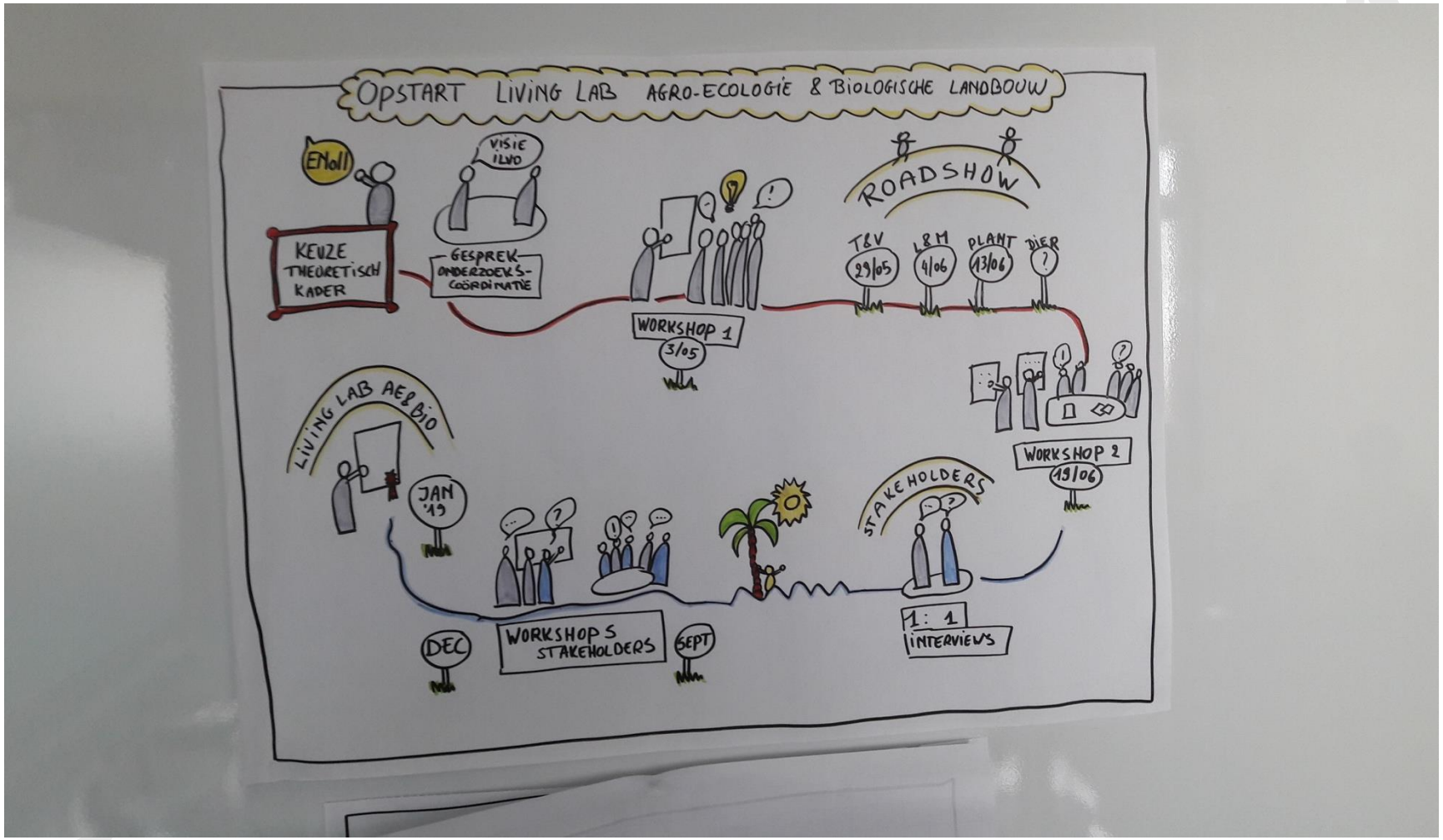
POSITION of the farmer in food chain

Reconnect with consumer

Agroecology as lever in transition to more sustainability ?

The initiative

The initiative



The initiative

The name of the living lab: agroecology; organic farming; agroecology and organic farming, etc

What is the added value, interest for each stakeholder?

How do we differentiate from already existing initiatives?

...

Official launch in 2020

LIVING LAB
AGRO-ECOLOGIE & BIOLOGISCHE LANDBOUW

A platform for collaboration in Flanders
Where different stakeholders are connected
To share knowledge and conduct research to support agroecology transition
By applying LL principles

Facilitation and coordination by ILVO: 2 FTE from ILVO (4 persons)

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LIVING LAB

AGRO-ECOLOGIE & BIOLOGISCHE LANDBOUW

Living lab@the macro level

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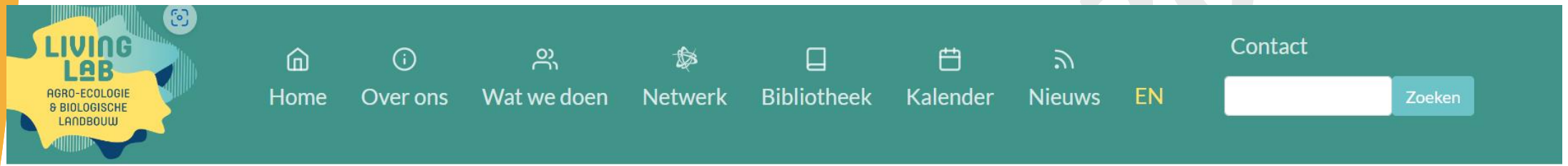
A platform for collaboration

Website www.llaebio.be



A meeting place

The Agroecology and Organic Agriculture Living Lab (LLAEBIO) is a network open to all individuals and organizations who wish to support the development of agroecology and organic farming in Flanders.
Read more about our mission.

LLAEBIO supports research, innovation and knowledge sharing around agroecology and organic agriculture. By bringing together science, policy and practice, LLAEBIO addresses your questions or ideas within this field of practice.
Read more about what we do.

LIVING LAB
AGRO-ECOLOGIE & BIOLOGISCHE LANDBOUW

For you too!

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A platform for collaboration

Network databank (expertise, stakeholder group, location, etc)

A platform for knowlegde exchange

'LLAEBIO draait door' (4 times/year): presentation of events, research results, new initiatives, legislation, etc

Farm visits (eg connecting farmers and policy makers):

Formal and informal moments

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Living lab@the meso level

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Research and innovation projects

- No structural funding for long term experiments
- Applying for funding (local, regional and european funding) on a project related basis

- Consolidated network contributes to
  - Lobby for funding as a collective (living lab platform)
  - Have impact on the research agenda of local and national funding bodies
  - Share potential opportunities for funding among each other
  - Develop consortia

LIVING LAB
AGRO-ECOLOGIE & BIOLOGISCHE LANDBOUW

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Living lab@the meso level

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Co-creation with end users

Pioneer farmers are involved in many projects- pressure, fatigue among farmers

- No clear agreements on collaboration (expectations, roles, etc)
- Results are not clearly communicated to farmers
- Added value for farmers is lacking

Investing in developing a network of farmers for long term commitment and structural collaboration with researchers

Develop code of conduct

- Guidelines on norms, values and responsibilities
- Good practices and conditions for successful collaboration
- List of aspects that need to be included in 'collaboration agreement' (template)

What are the building blocks of a Living Lab?

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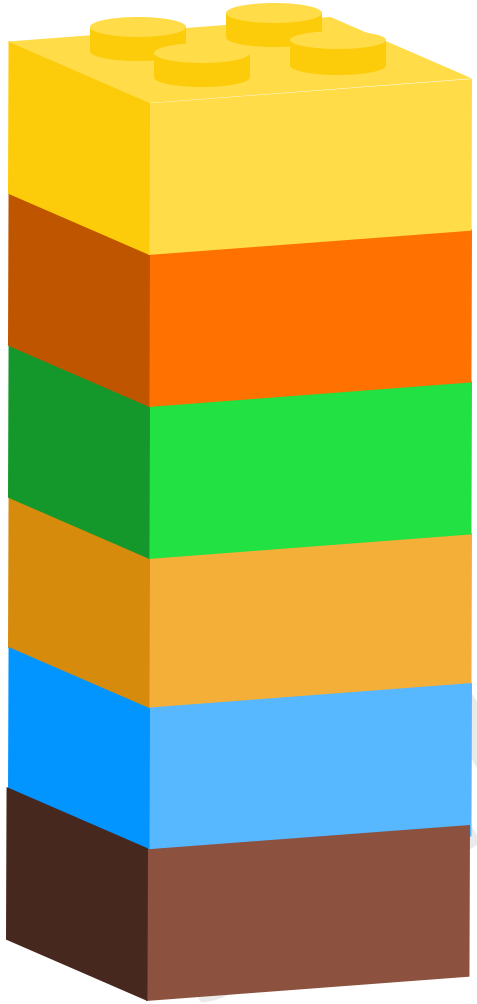
Essential Building Blocks of Living Labs



- Co-creation
- Real life settings
- Multi-method approach
- Orchestration
- Multi-stakeholder participation
- Active user engagement

Participants in the Living Labs: Quadruple Helix

Academia

Schools, colleges, universities, research institutes and innovation labs, whether in the public, private or civil sectors

Government & Public sector

Central, regional & local governments, intergovernmental organizations, government entities, public administrations

PPPP

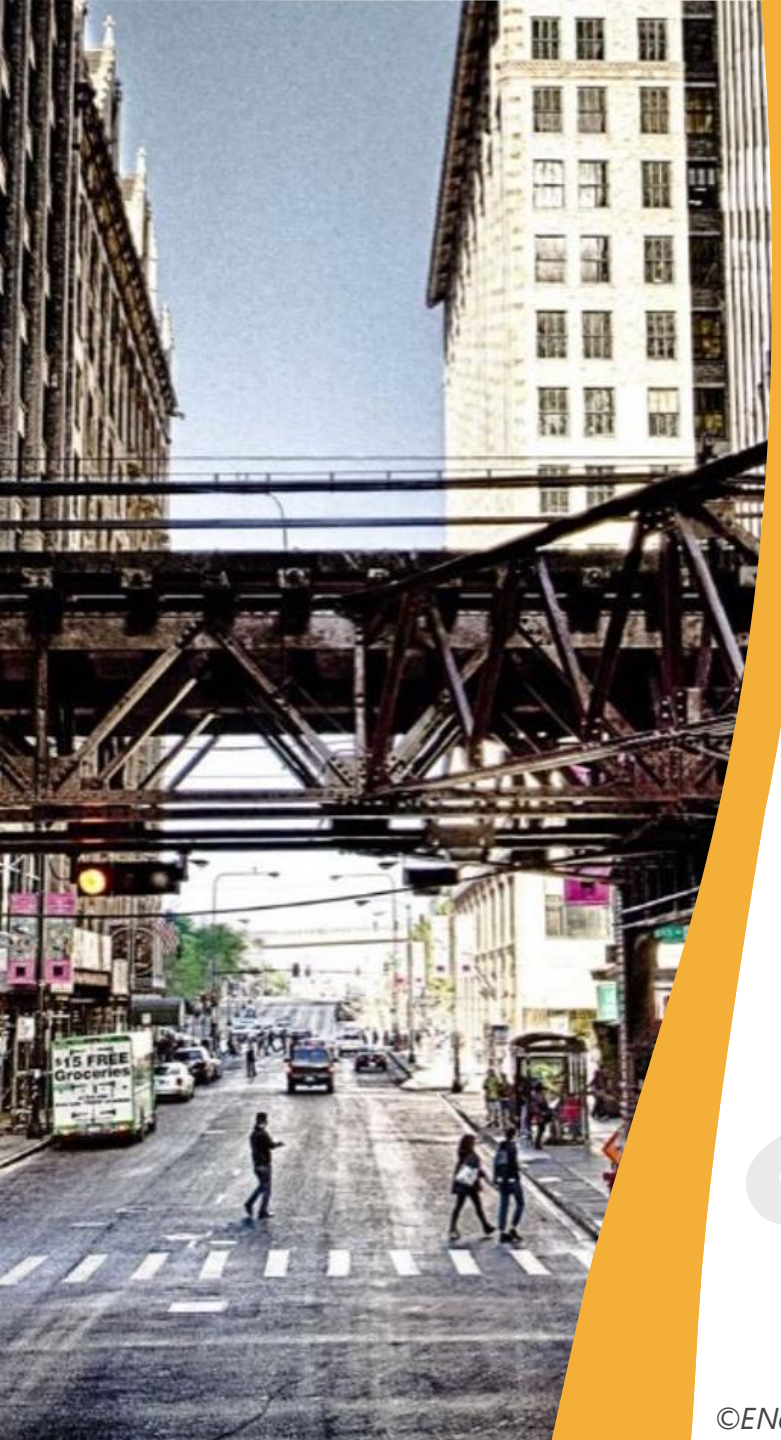
Citizens, civil society & users

Farmers, NGOs, charities, foundations, associations, trades unions, land managers, citizens, interests groups & movements

Industry

Firms, companies, entrepreneurs, SMEs, corporates, commercial ICT & technology sectors, representatives of these stakeholders like employers' and trade organizations

Source: 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*



Key benefits of Living Labs

For cities and public bodies

- Increased customer knowledge
- Better business model design
- More desired products/services
- Increased customer satisfaction
- Knowledge generation
- Business realism

Key benefits of Living Labs

For companies

- Increased impact of products/services
- Better business model design
- Increased knowledge of customers
- Increased customer satisfaction
- Increased customer understanding
- Business realism

Key benefits of Living Labs

For academia & research

- Enhanced research opportunities
- Interdisciplinary collaboration
- Access to real-world data
- Increased publication potential
- Knowledge exchange
- Technology transfer

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Key benefits of Living Labs

For citizens and users

- Empowered decision-making
- Increased civic engagement
- Enhanced knowledge & skills
- User-centred public services
- Be part of the innovation
- Stronger community bond

What to gain from a multi-stakeholder collaboration?

Cooperating in a multi-stakeholder team makes you …

- … become inspired
- … 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
- … quickly find solutions that have been thoroughly evaluated from different perspectives and that can be scaled more easily.
- …

The steps for setting up a Living Lab

1. Define Vision, Mission, and purpose
2. Define the Value Proposition
3. Stakeholders' identification
4. Develop a Governance model
5. Design a Business model
6. Create a Strategic Development Plan

Successful Living Labs

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What to expect from the Part 2 of this training?

- Key actors of & within the LL
- Governance model
- Business models
- Final considerations and tools
- Q&A

Q&A

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Thank you

Connect with us for more information

soillcoordinator@enoll.org

contacts@soill2030.eu

soill2030.eu

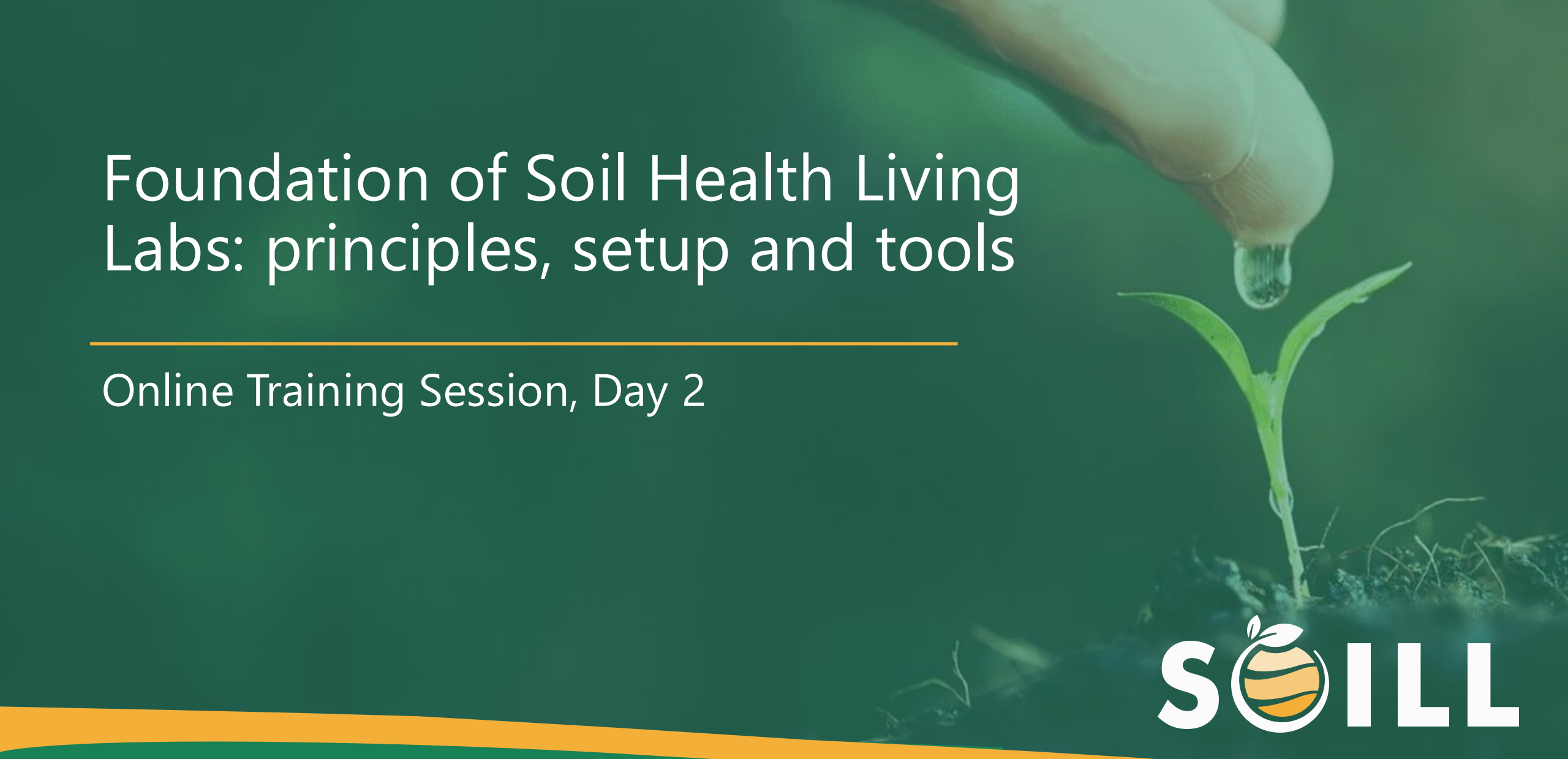
@soill2030

company/soill2030

@soill2030

Foundation of Soil Health Living Labs: principles, setup and tools

Online Training Session, Day 2



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This webinar is developed by SOILL-Startup, a project funded by the European Union (Mission Soil).

Today's Speakers

Giulia Campodonico
European Network of Living Labs (ENoLL)

Dolinda Cavallo
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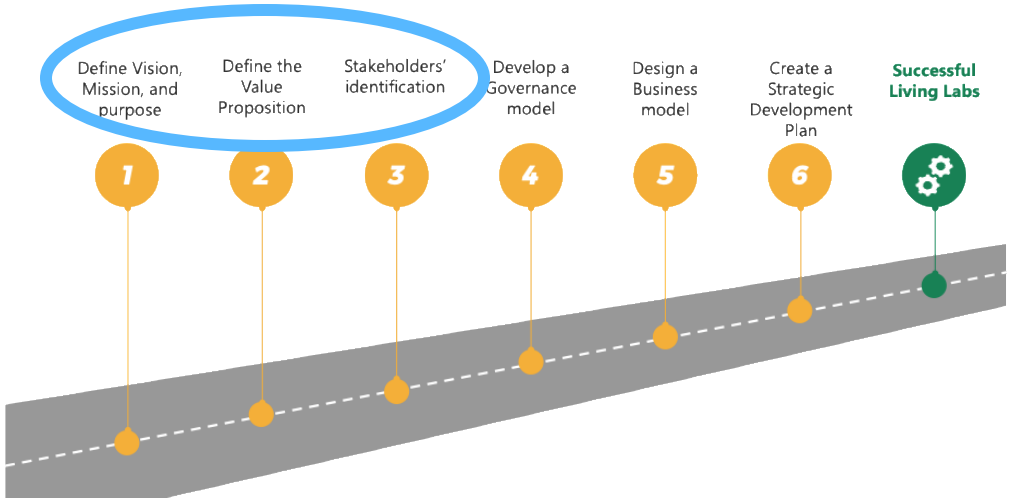
- Q&A

The steps for setting up a Living Lab

1. Define Vision, Mission, and purpose
2. Define the Value Proposition
3. Stakeholders' identification
4. Develop a Governance model
5. Design a Business model
6. Create a Strategic Development Plan

Successful Living Labs

Who benefits from the LL activities?



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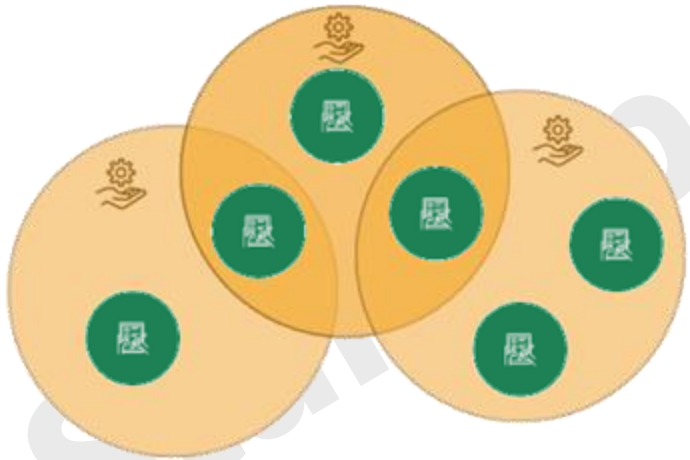
Activities vs Services

SHLL activities

Specific, task-oriented processes which operationalize the broader services provided by the Living Lab to foster innovation and collaboration.

EU MISSIONS
SOIL DEAL FOR EUROPE

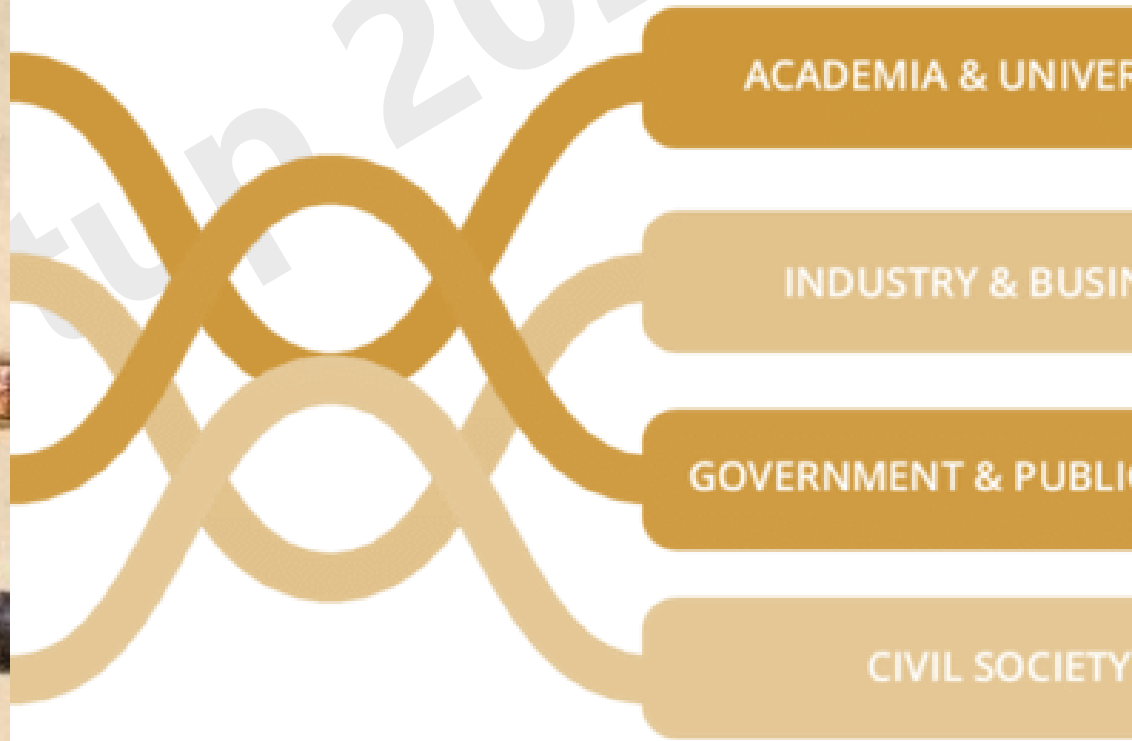
- **Co-creation, co-development & experimentation** of innovations improving soil health and related ESS
- **Research on impact of these innovative practices** on **ecosystems**
- **Networking** and **knowledge exchange**
- **Demonstration** (in particular lighthouses)



SHLL services

A structured set of offerings by Living Labs tailored to support innovation across its lifecycle, while leveraging real-world environments and collaborative methodologies.

Key principles



Who benefits from the Living Lab activities?

Individuals

Groups

Organizations

STAKEHOLDERS

- Involved in the Soil Health Living Lab

OR

- Impacted by the outcomes of the SHLL but not actively involved in the SHLL organization, project, or activities

USERS

- Active participants who contribute to the innovation process through real-life engagement and feedback in LL projects and activities.
- They collaborate with researchers and developers, providing valuable insights and data that drive the development and refinement of user-centred solutions
- They are the end-users of your innovations

CUSTOMERS

- Directly paying the SHLLs to deliver services (paying the SHLL outside the scope of funded projects)
- Their willingness to invest in or purchase the SHLLs solutions can drive sustainability and scalability of its initiatives.

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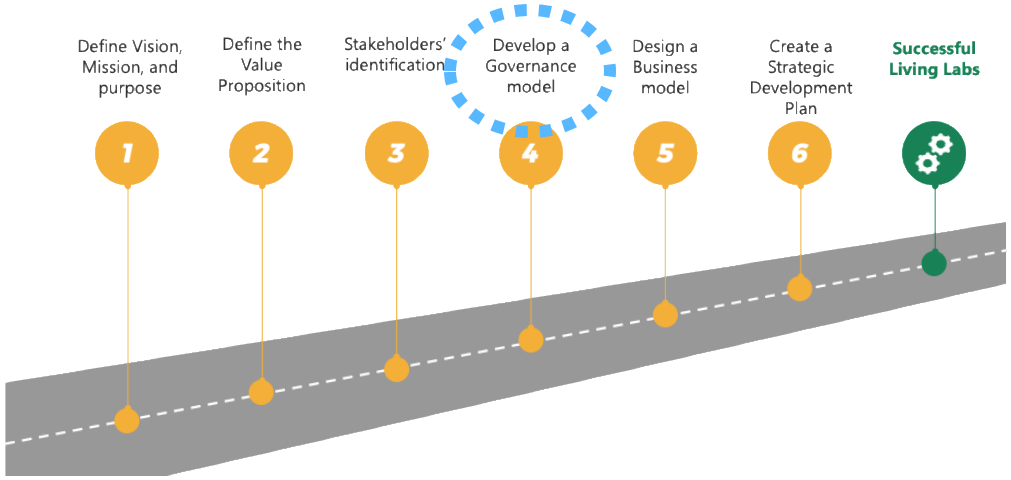
Who are the key actors within the LL?



Internal roles in Living Labs

Living Lab Manager

- Most apparent internal role
- Initiator & keeper of LL strategy
- Everyday activities
- Maintaining LL effectively & sustainably

Project Manager

- Responsible for management of a particular Living Lab project

Pilot Manager

- Setup, run & scale up technologies during pilot project(s)
- Facilitate implementation and test of the innovation

Internal Roles in Living Labs

Communicator

- Creates and implements the communication strategy

Human Interaction Specialist

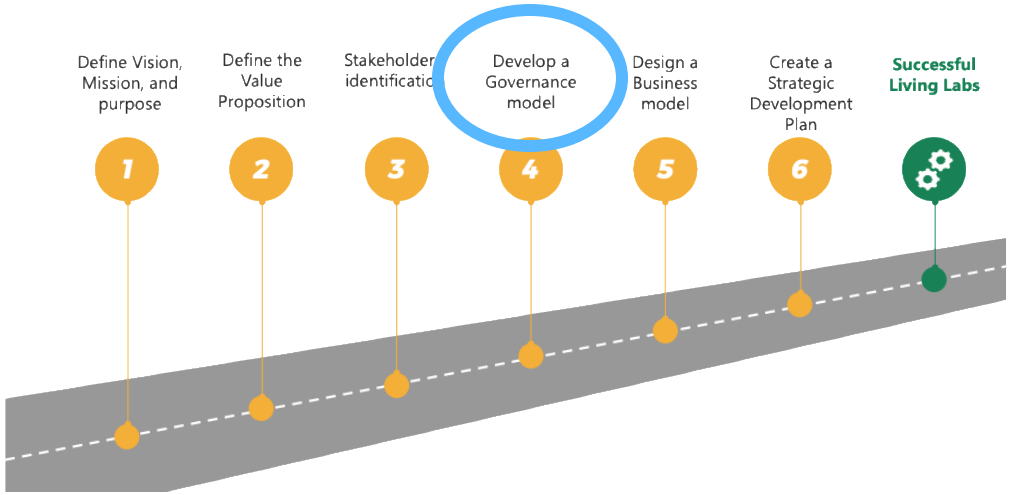
- Performs user-centred interactions
- Analyses the results from different human interaction methods
- Responsible for testing solutions before their implementation in the real-life context
- In some research papers it is called a “researcher”

Panel Manager

- Recruiting & interacting with stakeholders' panel
- Selects stakeholders & communications

How can a Living Lab operate effectively?

Governance in Living Labs



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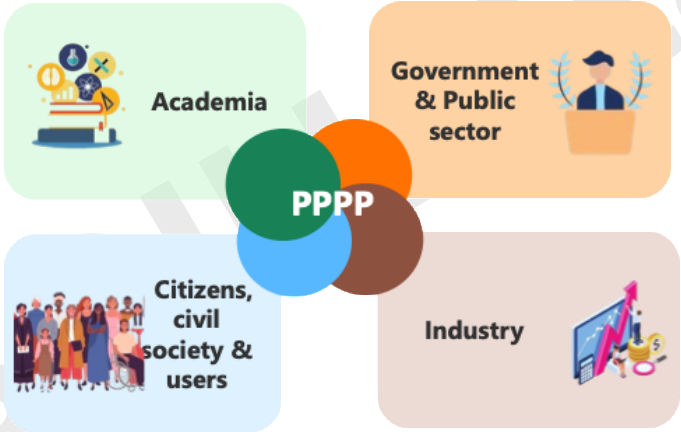
Governance Model - Definition

Within a Living Lab approach,
the Governance describes the way that a Living Lab
research or activity at the strategic or operational level is managed and organized *

Direct contribution of the Quadruple Helix stakeholders



- Financial
- In-kind
- Organisational
- Decision-making process

Source: UNaLAB Handbook

Why LLs need a Governance Model

Ensure sustainability, stability & viability

Communicate effectively

Act in accordance with ethics, integrity, and responsible code of conduct

New ways of handling societal challenges

Avoid failure

Have a starting point for improvement

Different Types of Host Organization

- Private company
- Academia & Research centre department
- Cluster
- Public Regional or City Structure
- Mutualistic organisation
- Not for profit

Importance of a Host Organisation in a Living Lab

ROLE OF THE HOST ORGANISATION

- Central coordinating entity, orchestrating activities.
- Provides necessary infrastructure, resources, and leadership.
- Ensures efficient operation and attainment of objectives.
- Acts as a neutral party fostering collaboration among stakeholders.

IMPORTANCE OF SELECTING THE RIGHT HOST ORGANISATION

- Crucial for success and sustainability of the Living Lab.
- Must effectively coordinate activities, foster collaboration, and support innovation.
- Provides infrastructure, resources, and leadership to drive initiatives forward.
- The LL branch should be contributing to its vision and mission.

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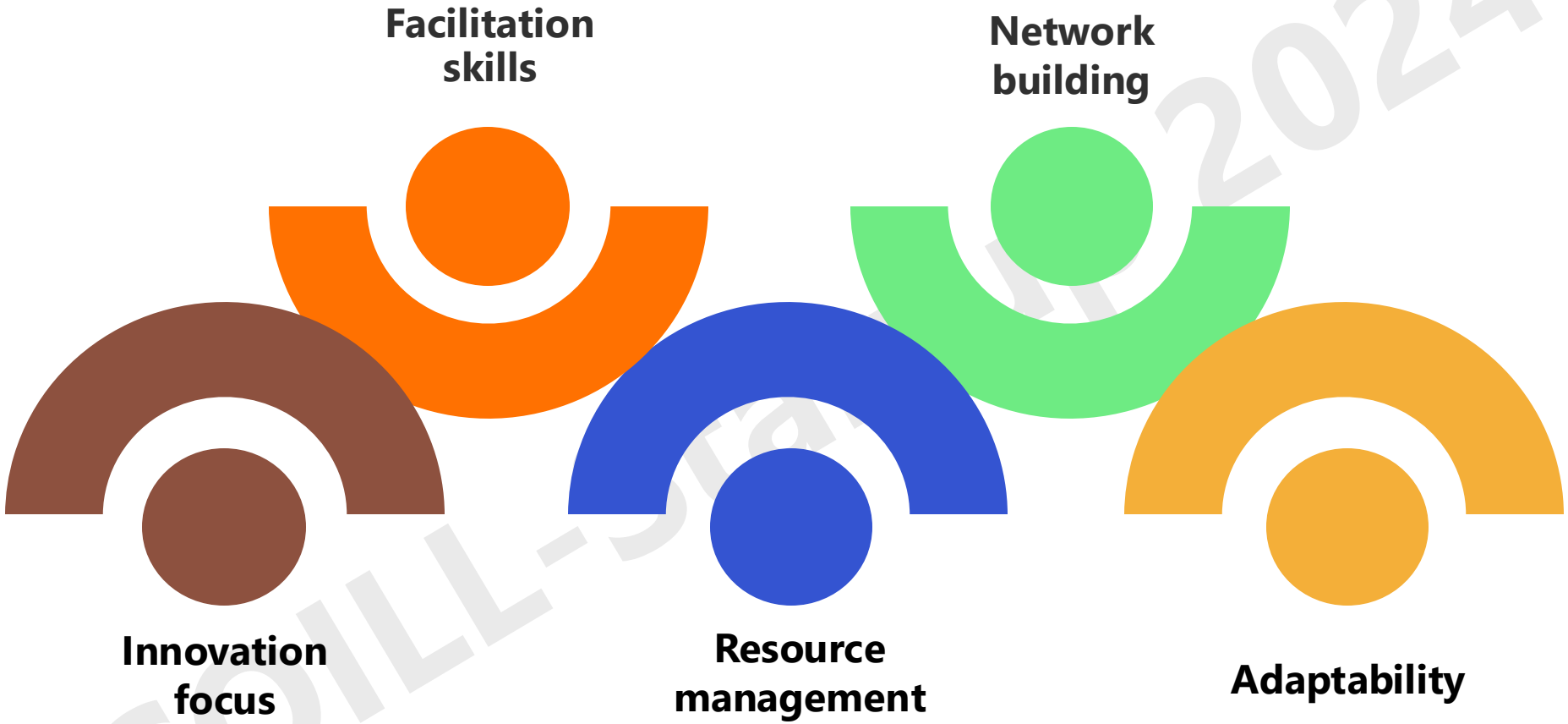
Key Traits and Skills for a Host Organisation



Questions to Ask When Identifying a Host Organisation

- How has the organisation demonstrated its commitment to Open Innovation?
- What experience does the organisation have in facilitating multi-stakeholder projects?
- How effectively does the organisation manage resources like space, equipment, and funding?
- How robust is the organisation's network with relevant stakeholders?
- How has the organisation adapted to changes and managed feedback in previous projects?

Different types of governance models

Aspect	Hierarchical Governance	Collaborative Governance	Networked Governance	Decentralized Governance	Market-Based Governance
Decision-making Authority	Centralized at the top	Shared among stakeholders	Distributed across network	Decentralized to units/entities	Driven by market forces
Stakeholder Collaboration	Limited, top-down	Extensive collaboration	Collaboration across organizations	Participatory, local involvement	Limited, based on market interactions
Communication Flow	Top-down	Multi-directional	Multi-directional	Multi-directional	Market-driven
Governance Structures	Formal hierarchy	Steering committees, advisory boards	Partnerships, alliances	Tailored structures for local contexts	N/A
Coordination Mechanisms	Hierarchical structures	Regular meetings, digital platforms	Joint planning sessions, regular meetings	Coordination at regional/international levels	N/A
Autonomy and Flexibility	Limited autonomy	Shared decision-making, flexibility	Distributed autonomy, flexibility	High autonomy, flexibility	N/A
Decision-making Processes	Centralized, formal processes	Consensus-building, transparent processes	Collaborative decision-making	Participatory processes at local level	N/A
Focus on Efficiency	Yes	Yes	Yes	Yes	Yes

Developing a LL governance model

01 **Participants**	Who are the participants?	• Identifying central stakeholders contributing to the Living Lab activities and their specific roles
02 **Payments**	Who is paying or contributing?	• What is the budget? • How will the experiments be financed? • In-kind contributions?
03 **Decisions**	How are decisions taken?	• Define how the supporting structures should be designed (e.g. who handles it, who has responsibility to engage with stakeholders, who can write and sign contracts, etc…) • Day-by-day activities • Project implementation
04 **Communication**	What is the communications strategy?	• Define Internal & external communication
05 **Benefit**	What does each participant get?	• Money • Social impact • Prototypes, products services, intellectual property

Governance models Canvas

PURPOSE

MOTIVATION
Why do we do it? Needs and opportunities

WHO is at the Living Lab?
Name the organisations

PUBLIC SECTOR	ACADEMIA/RESEARCH	PRIVATE SECTOR	CIVIL SOCIETY

How do they **CONTRIBUTE?**
Financial, in-kind, personnel, representation, etc.

How are **DECISIONS** made?

STRATEGIC LEVEL	OPERATIONAL LEVEL

Adapted from Virtual Learning Lab, ©Fernando Villariño, Library Living Lab – CVC-ENoLL

Business Models in Living Labs

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What is a business model?

It is a set of decisions that define…

What you will ***offer***, to ***whom***, and ***why***

How you will ***organise*** yourself to do this in a ***financially viable*** manner

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Business models of Living Labs

Business Model

DEFINES how the Living Lab **delivers value to customers, users, and stakeholders** at large

PERSUADES them to **pay for this value** or to **embrace the LL proposals**

CONVERTS these payments into **profit** or these proposals into **solutions**

A Business Model reflects management's **hypothesis** about customer and user **desires, preferences**, and how the Living Lab can best organize to meet these needs, receive **payments**, and achieve **profitability**, and/or to achieve their **goals**.

Business Plan and Business Model

BUSINESS PLAN

- Rigid and detail-specific strategies and tactics
- Useful for outlining detailed operational and financial strategies
- Less adaptable to changing circumstances and unique environments of LLs and LHs.

BUSINESS MODEL

- Flexible conceptual frameworks that evolve with changing conditions
- Allow LLs and LHs to respond to new opportunities and challenges, fostering innovation, strategic agility, and long-term sustainability.

Why business modelling?

Sustainability

Coping with the complexity of partnership, after the (initial) project financing has ended

Value Creation

Analysing, stimulating and protecting the created value within the partnership

Business Creation

Ensuring market for products/services and the roll out to market, also no economic value (upscaling)

Growth & Exploitation

Build out of the ecosystem and new strategic lanes to take

What does a BM capture?

Assumptions about user behaviour and priorities

A Living Labs setting widens the scope to include the full set of stakeholders from the Quadruple Helix.

Selection of target groups and value proposition

Definition, scoping and differentiation of products and services.

Configuration

Partner resources, and responsibilities allocation among partners in the system.

Value capture model

In a Living Lab setting, the collaboration of stakeholders in the value network is a necessity to capture value.

Phases of business modelling

Initialisation and preparation

In this phase, establishing partnerships to expand the regional network and develop a business plan is essential for ensuring the long-term viability of the Living Lab. These initial steps lay the groundwork for future business development.

Living Lab operation

This phase focuses on providing user-centric innovation services to facilitate new business development. Establishing relationships among Living Labs in a network can leverage economies of scale and scope, tapping into larger user communities and complementary innovation services.

Upscaling and commercialisation

This phase embeds the Living Lab into the international innovation system. Strategies to capitalize on network effects will become more mature.

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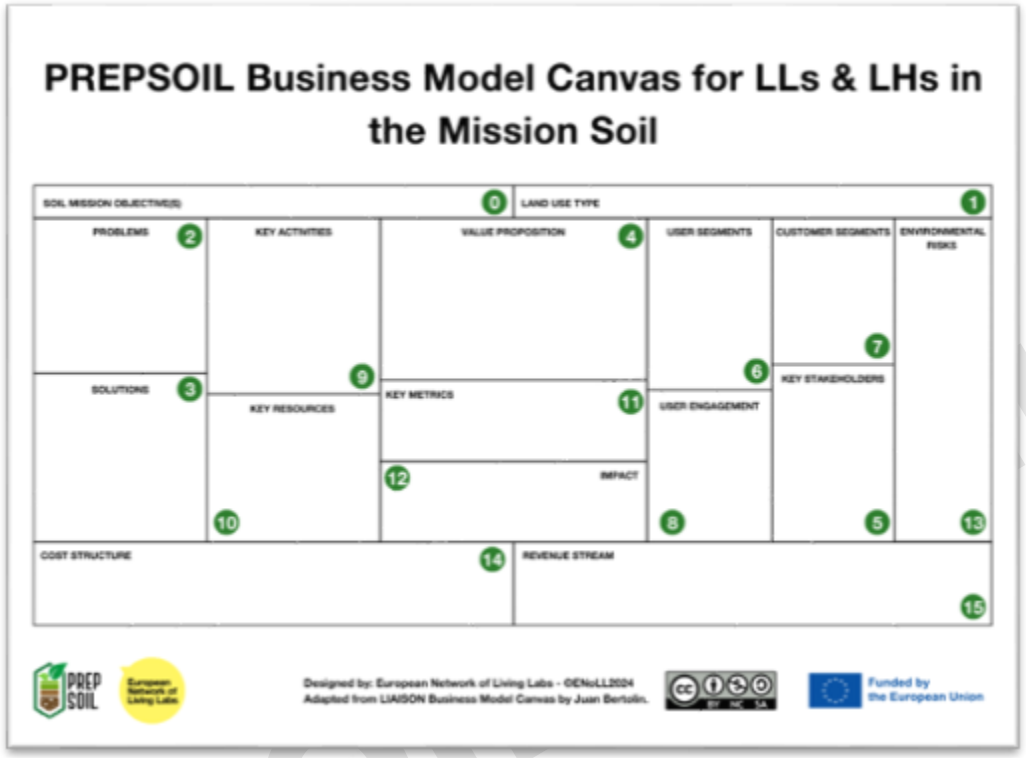
Business Model Canvas & SOILL Training

PREPSOIL Business Model Canvas for LLs and LHs in the Mission Soil



PREPSOIL - Business Model Canvas for Soil Living Labs and Lighthouses: https://zenodo.org/records/12819107

SOILL PREP SOIL Joint upcoming training

Spring 2025

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Final considerations

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Challenges in setting up a Living Lab

- Assessing and measuring effects and effectiveness
- Establishing suitable governance arrangements
- Creating a common vision
- Addressing individual interests and conflicting ideas
- Overcoming lack of structure
- Achieving balanced representation
- Ensuring motivation to participate
- Integrating existing economic and political networks

Living Labs pitfalls and challenges

Theoretical & methodological challenges

for Living Labs working in academia

- Lack of comparative/cross-cultural & quantiative studies
- New data collection and analysis methods in real-life setting
- Integrating social & technical aspects of LL activities
- Scalability of the results

Governance & Process-related challenges

- Multi-business collaboration and the issue of openness
- Visibility and dissemination of the LL activities
- Flexbility and fast changing requirements
- Financial & technical challenges

Actors Motivations, Needs and Expectations

- Building commitment with stakeholders
- Identifying relevant parties and contacts
- Ensuring continuous and active participation

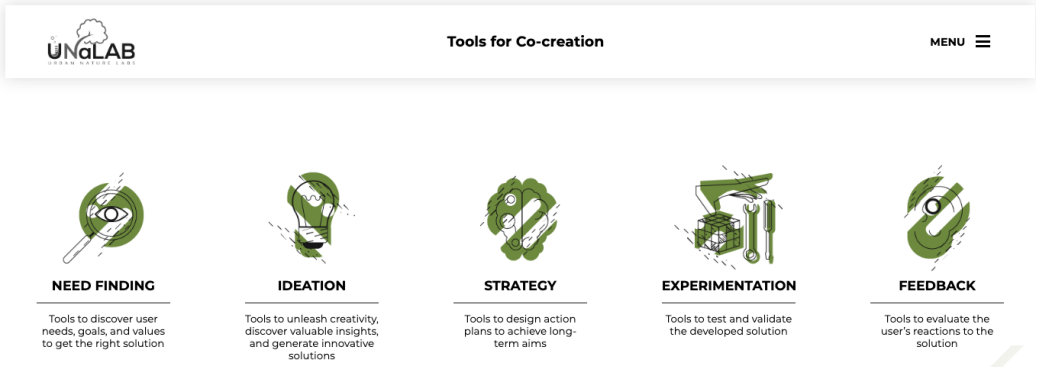
Ethical Challenges

- Informed Consent
- Unwitting participation
- Privacy and use of participants data

How to avoid pitfalls?

Do not reinvent the wheel!

- Living Lab methodology handbooks
- Co-creation toolkits
- Start from existing communities
- Build on project results
- Attend dedicated trainings
- Learn from existing successful living labs!



SISCODE TOOLBOX FOR CO-CREATION JOURNEYS

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Some tools to help you along the way…

1. Define Vision, Mission, and purpose
   - **SWOT analysis**
2. Define the Value Proposition
   - **Solutions (products/services) identification**
3. Stakeholders' identification
   - **Stakeholder mapping into the quadruple helix**
   - **Customers, users, stakeholders' mapping & identification**
4. Develop a Governance model
   - **Governance Model Canvas**
5. Design a Business model
   - **Business Model Canvas**
   - **Business Plans**

Q&A

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Now it's time for you… …to write up your LL!

Further readings & references (i)

- Mission Soil - https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe/eu-missions-horizon-europe/soil-deal-europe_en
- Mission Soil Implementation Plan - https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe/eu-missions-horizon-europe/soil-deal-europe_en#:~:text=Mission%20implementation%20plan
- Foresight report Mission Soil - https://research-and-innovation.ec.europa.eu/document/download/06a2fe99-402a-43d0-ac23-d11134578147_en
- Mission Soil Platform - https://mission-soil-platform.ec.europa.eu/

- PREPSOIL taxonomy:
  - Full deliverable - https://zenodo.org/records/13255005
  - Guidelines - https://zenodo.org/records/13255032
- PREPSOIL Business Model for Soil Living Labs:
  - Full Deliverable - https://zenodo.org/records/12919420
  - Guidelines - https://zenodo.org/records/12819107

- ILVO collaboration platform - www.llaebio.be
- UNaLAB Handbook - https://unalab.eu/en/documents/urban-living-lab-handbook
- UNaLAB – Tools for co-creation - https://unalab.enoll.org
- SISCODE Toolbox for co-creation Journeys - https://siscodeproject.eu/wp-content/uploads/2019/09/toolkit-27092019-1.pdf
- SCORE webinars: Living Lab Integrative Process - https://www.youtube.com/watch?v=dhNPNVSbacA&list=PLUoJeHsSUlVHIQFwTpEymBD1X4mSB-0kL

Further readings & references (ii)

- **3-layered model** - © Dr. Dimitri Schuurman, imec – Ugent https://biblio.ugent.be/publication/5931264/file/5931265.pdf
- **Quadruple Helix** - 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 .
- **Quintuple Helix** - 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
- **Harmonized evaluation framework (ENoLL) -** Vervoort, K.; Konstantinidis, E.; Desole, M.; Onur, O.; Trousse, B.; Woodcock, A.; Garatea, J.; Petsani, D.; Ponomareva, A.; Roset Pérez, B.; Gamboa, G.; Bamidis, P. (2024). A harmonized assessment method and KPIs for evaluating Living Labs. Proceedings of the XXXV IISPIM Innovation Conference. https://doi.org/10.5281/zenodo.11581077

PROJECTS

SOILL https://www.soill2030.eu

NATIOONS https://nati00ns.eu

PREP SOIL http://prepsoil.eu

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What's next?

Please help us improve & share your honest feedback with us!!

Slides will be shared with all registrants & SHLLs contacts after the training

Recordings will be available on a private YouTube link

1h Q&A session (Jan 2025) for those watching the training through recordings
Q&A document will be shared with you all

Save the dates shared soon for the upcoming trainings……

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What other trainings are available?

SHLL Principles, Setup, and Tools

✓

SHLL Monitoring & Evaluation

Q1 2025

Stakeholder engagement & co-creation

Q1 2025

Soil Literacy & Knowledge

Q1 2025

SHLL Stability & Business Models

Q2 2025

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Thank you

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