Innovative sustainable economy | Interreg Euro-MED | Co-funded by the European Union

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June 2025

Guide for the design and implementation of the Innovative Sustainable Economy (ISE) Mission Transformative Innovation Policy Labs (TIPLabs)

https://innovative-sustainable-economy.interreg-euro-med.eu/

Deliverable ID

Project acronym	Dialogue4Innovation
Project title	Dialogue4Innovation
Project mission	Strengthening an innovative sustainable economy
Project priority	3 Better Mediterranean Governance
Specific objective	6.6 Actions to support better cooperation governance
Type of project	Institutional Dialogue Project
Project duration	01/01/2023 – 30/09/2029 (81 months)

Deliverable title	Guide for the design and implementation of the Innovative Sustainable Economy (ISE) Mission Transformative Innovation Policy Labs (TIPLabs)
Deliverable number	D.2.1.1
Deliverable type	Report
Work package number	WP2
Work package title	TRANSFER
Activity name	Conceptual framework for multilevel transformative innovation
Activity number	A.2.1
Partner in charge (author)	Generalitat de Catalunya
Partners involved	
Citation	Chaimae Essousi, Tatiana Fernández, Ferran Dalmau, Alasdair Reid, Elvira González, and Cynthia Echave. Guide for the design and implementation of the Innovative Sustainable Economy (ISE) Mission Transformative Innovation Policy Labs (TIPLabs). Interreg Euro-MED, 2025.

Document history

Versions	Date	Document status	Delivered by
Version 1.0	June 2025	Draft for publication and sharing	GENCAT

Abbreviations

ISE	Innovative Sustainable Economy
TP	Thematic projects
C4I	Community4Innovation
D4I	Dialogue4Innovation
TIPLabs	Transformative Innovation Policy Labs

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Executive Summary

The Dialogue4Innovation project, the Institutional Dialogue initiative of the Innovative Sustainable Economy (ISE) Mission, promotes Transformative Innovation Policy Labs (TIPLabs) as a collective, challenge-driven process to more effectively address place-based challenges relevant to the ISE Mission. TIPLabs aim to strengthen the contribution of interregional cooperation projects and Smart Specialisation Strategies (S3) — or other regional sustainability strategies — to the goals of the ISE Mission.

This guide provides a shared conceptual framework and practical guidelines for the design and implementation of nine pilot TIPLabs within the Dialogue4Innovation project. These first-generation TIPLabs, to be deployed in 2025 and 2026, will tackle place-based challenges through a systemic and transformative innovation approach, while supporting greater alignment and synergy between regional strategies (such as S3) and ISE Mission initiatives. TIPLabs are structured around a three-session innovation camp that leads to the development of a collective action plan, supported by a Monitoring, Evaluation and Learning (MEL) framework.

A second version of this guide, incorporating the lessons learned from the pilot TIPLabs, will be published at the end of 2026.

Introduction

The world faces an increasingly urgent need to accelerate the transition from a development model based on the overexploitation of natural resources to one that is more sustainable and compatible with planetary boundaries. The triple planetary crisis—climate change, biodiversity loss, and pollution—is becoming ever more visible and is already affecting daily life.

The Mediterranean region, as a densely populated and climate-sensitive area, is particularly affected by these complex challenges. Addressing them requires a profound transformation of our systems of production and consumption—such as food, energy, mobility, and housing. These transformations must ensure social equity, environmental sustainability, and economic competitiveness.

The social, economic, and environmental challenges facing our societies—highlighted by United Nations 2030 Agenda Sustainable Development Goals[1] (SDGs), the EU's Competitiveness Compass[2], the European Union's Green Deal[3], the EU Missions[4] and, at the Mediterranean level, the 2030 GreenerMed Agenda[5], —are systemic, complex, and deeply interconnected. There are no perfect or universal solutions. These challenges cannot be tackled through science, technology, or public policy alone. They require diverse forms of innovation, developed through collective processes involving a wide range of actors at all levels of governance. These transformations require efforts from all levels of governance, particularly from regions, municipalities and communities.

The **Innovative Sustainable Economy (ISE) Mission[6]** of the Interreg Euro-MED Programme builds on the legacy of the Interreg MED 2014–2020 Programme and its thematic communities on green growth, blue growth, and the cultural, social, and creative sectors. The ISE Mission adopts a broader scope, fostering technological, social, and institutional innovation to support the transition to more sustainable production and consumption models across Mediterranean regions.

The ISE Mission promotes collaboration among innovation actors across the Mediterranean to support a just transition to a circular economy. It does so through two governance projects and 19 thematic projects focusing on marine resources, agri-food systems, industrial transition, and

[1] See: https://sdgs.un.org/goals
[2] See: https://commission.europa.eu/priorities-2024-2029/competitiveness_en
[3] See: https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal_en
[4] See: https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/fundingprogrammes-and-open-calls/horizon-europe/eu-missions-horizon-europe_en
[5] See: https://ufmsecretariat.org//ufm-environment-agenda/#greener
[6] See: https://innovative-sustainable-economy.interreg-euro-med.eu/

resource valorisation[7]. Regional and local strategies—such as Smart Specialisation Strategies (S3) or other relevant planning instruments—play a central role in mobilising actors to co-create transformative innovations that address territorial societal challenges, while balancing economic competitiveness, environmental sustainability, and social well-being.

The **Dialogue4Innovation** governance project, part of the ISE Mission, aims to strengthen connections and synergies between regional initiatives and the ISE Mission thematic projects. It seeks to foster strategic alliances that align territorial efforts with the overarching goal of promoting an innovative and sustainable Mediterranean economy.

This guide aims to support the creation of such alliances—challenge-driven, place-based, and transformative—by providing a shared conceptual framework and practical tools. It is based on the assumption that aligning ISE Mission projects with place-based challenges (e.g. through S3) can generate a virtuous cycle of mutual reinforcement, amplifying the impacts of both regional development and interregional cooperation efforts.

The guide proposes a shared conceptual foundation, methodologies, and collaborative spaces to help translate the ISE Mission's transformative approach into regional strategies and investment priorities. The Transformative Innovation Policy Labs (TIPLabs) proposed here are intended to offer such collaborative spaces. This guide is designed to support the implementation of a first generation of nine TIPLabs in 2025–2026. A second edition of the guide, updated with lessons learned, will follow in 2026.

Chapter 1 defines the characteristics of the sustainability challenges that both regional and ISE Mission projects are addressing, providing examples from the MED. Chapter 2 discusses why transformative innovation is relevant to addressing sustainability challenges in the MED and chapter 3 makes the case of why it is important to align S3 regional initiatives and ISE Mission projects.

Chapter 4 presents the transformative innovation policy approach to the ISE Mission, while Chapter 5 develops the concept of ISE Mission TIPLabs.

Finally, chapter 6 provides the guidelines to design and implement the TIPLabs structured in a three-sessions innovation camp, an action plan and a Monitoring Evaluation and Learning (MEL) framework.

[7] See: https://innovative-sustainable-economy.interreg-euro-med.eu/our-projects/

1. Why sustainability challenges require systemic approaches

1.1 Characteristics of sustainability challenges

Sustainability challenges are inherently complex and systemic, often referred to as "wicked problems." These are large-scale, multifaceted issues that affect societies across multiple dimensions and involve deeply interrelated factors, making them difficult to address effectively. Such challenges typically span the social, economic, environmental, and political domains, and are characterised by the following features:

- **Interconnectedness**
  These issues are linked to multiple sectors and systems, so that changes in one area can have ripple effects in others. For example, climate change, economic inequality, and public health crises are deeply intertwined with education systems, infrastructure, and governance structures.
- **Multiple stakeholders**
  Sustainability challenges engage a broad range of actors—governments, businesses, civil society, international organisations, and the general public—each with different perspectives, interests, and goals. This diversity makes coordination, alignment, and consensus particularly challenging.
- **Uncertainty and unpredictability**
  The scale and complexity of these problems mean that even well-intentioned interventions can have unexpected outcomes. Feedback loops, emergent behaviours, and unintended consequences are common, complicating planning and evaluation.
- **Long-Term impact**
  These challenges unfold over long time horizons. Their root causes are often embedded in historical processes, and their resolution requires sustained, multi-year or even multi-decade efforts.
- **Value conflicts**
  Addressing sustainability issues involves reconciling conflicting values, interests, and priorities. For instance, balancing economic growth with environmental protection can lead to fundamental disagreements between stakeholders with differing worldviews.
- **Lack of clear solutions**
  There are no straightforward, one-size-fits-all solutions. Tackling these issues requires systemic approaches that combine innovation, cross-sector collaboration, and adaptive learning in response to changing conditions.

Examples of complex sustainability challenges include:

- **Climate change**, which has environmental, economic, and social implications and requires coordinated action at local, national, and global levels.
- **Inequality**, a multidimensional issue affecting access to income, education, healthcare, and opportunities.
- **Urbanisation and infrastructure**, which demand sustainable development strategies while addressing growing urban populations and reducing social disparities.
- **Agriculture and food systems**, which often face tensions between environmental sustainability, economic viability, and social equity.
- **Water scarcity** is a critical complex challenge for the region (see Box 1).

Box 1. Water Scarcity and Sustainable Irrigation in the Mediterranean Agriculture

In the Mediterranean, the wicked problem of water scarcity and sustainable irrigation touches on environmental, economic, and social dimensions. It exemplifies the difficulty of finding solutions that balance agricultural needs with sustainable water use, especially as climate change exacerbates water shortages across the region.

The problem: the Mediterranean region faces increasing water scarcity due to several factors:

Climate change: Higher temperatures and reduced rainfall are leading to droughts and less available freshwater for agriculture.

Intensive agriculture: The region's agricultural sector is heavily dependent on irrigation, particularly for water-intensive crops like olives, grapes, citrus fruits, and vegetables. Over-extraction of groundwater and inefficient irrigation systems are depleting water reserves and degrading ecosystems.

Competing demands: Water resources are needed for multiple purposes, including agriculture, urban development, industry, and tourism, leading to conflicts over water use, especially during droughts.

Soil salinisation: In coastal areas, overuse of groundwater for irrigation is leading to saltwater intrusion, degrading soil quality, and threatening long-term agricultural productivity.

Why it's a wicked problem:

Interconnectedness: Water scarcity in the Mediterranean is not just an agricultural issue. It is tied to broader environmental, economic, and social factors. For instance, droughts affect urban water supplies, tourism, energy production, and ecosystem health. Water shortages exacerbate rural poverty and migration to cities, further straining resources.

Multiple stakeholders: Farmers, urban residents, governments, environmental groups, and

businesses (such as tourism operators) all have different needs and interests when it comes to water use. Finding solutions that balance these competing demands is difficult, and there is no clear consensus on how to allocate scarce water resources.

No clear or simple solutions: While improving irrigation efficiency through technology (e.g., drip irrigation) can reduce water use, it requires investment and technical knowledge, which may not be accessible to smallholder farmers. Alternative solutions, like shifting to drought-resistant crops, can impact local economies, as traditional crops like olives and grapes are culturally and economically important.

Uncertainty and unpredictability: Climate models predict that the Mediterranean will experience more frequent and severe droughts, but the exact timing and scale of these changes are uncertain. This makes long-term planning difficult, as farmers and policymakers are unsure how to prepare for future water availability.

Value conflicts: There are often conflicting priorities between short-term agricultural productivity and long-term environmental sustainability. While farmers may need to extract more water during drought periods to maintain crop yields, this can further deplete already stressed water reserves, harming ecosystems, and future agricultural potential.

Interconnected issues:

Biodiversity loss: Decreased water availability affects wetlands and natural habitats, threatening biodiversity.

Food security: Agriculture is vital to the region's food supply, and water shortages threaten the stability of food production.

Economic and social stability: Agriculture is a major economic sector in many Mediterranean countries. Declining agricultural productivity due to water shortages can increase rural poverty and trigger migration, leading to broader social instability.

Possible responses (and their trade-offs):

Adopting water-efficient technologies: This could involve upgrading irrigation systems to more efficient methods like drip irrigation, but it may be costly and require government subsidies or technical assistance for farmers.

Trade-off: High upfront costs and technical challenges for small-scale farmers.

Promoting drought-resistant crops: Farmers could shift to crops that are better adapted to drier conditions, such as barley or certain types of legumes.

Trade-off: This could change traditional agricultural practices and reduce the production of high-value crops like olives and grapes, affecting local economies and cultural heritage.

Improved water governance and allocation: Governments could implement stricter regulations on water use, prioritise sectors for water allocation, and encourage water-saving practices.

Trade-off: This could create tension between sectors (e.g., agriculture vs. tourism) and lead to social conflicts, especially during severe droughts.

Rainwater harvesting and desalination: Expanding the use of alternative water sources, like desalination plants or rainwater collection, could help supplement freshwater supplies.

Trade-off: Desalination is energy-intensive and expensive, potentially increasing reliance on non-renewable energy sources, while rainwater harvesting is limited by rainfall patterns.

Example Interreg MED project: https://clepsydra.interreg-euro-med.eu/

1.2 Systems change

Our societies are organised through sociotechnical systems that produce and deliver essential goods and services such as food, healthcare, mobility, education, and energy. These sociotechnical systems operate within broader social-ecological systems, where natural ecosystems are shaped—and often strained—by the overexploitation of resources.

Systems change refers to a fundamental transformation in how systems function: how our needs are met, how services are provided, and how the health of ecosystems is preserved. Sociotechnical systems are composed of interconnected elements—such as infrastructures, technologies, regulations, markets, power relations, and human behaviours. These systems are typically stable and resistant to change because they are organised to fulfil specific purposes. Within them, technical components (like innovations and infrastructures) and socio-institutional components (such as laws, networks, values, and norms) are deeply intertwined. As a result, technological innovations alone are insufficient to transform existing systems; system change also requires shifts in policies, institutions, and behaviours.

Although systems are designed to serve a particular purpose, their real-world outcomes often diverge from intended goals. For instance, the dominant economic system was built to drive growth. Yet, while achieving this objective, it also contributes to climate change, biodiversity loss, pollution, and social inequality—outcomes that are widely regarded as harmful. These negative effects are not incidental; they are embedded in the system's original design, which was shaped under historical conditions very different from today's context of globalisation, resource constraints, and advanced technologies.

Systems thinking is the ability to perceive and understand the interconnections and dynamics

within a system that either support or hinder systemic change. Conventional linear thinking is poorly suited to tackling complex environmental and social problems, which require more holistic and integrated approaches. Table 1 illustrates the key differences between conventional thinking and systems thinking.

Table 1. Differences between conventional thinking and systems thinking

Conventional thinking	**Systems thinking**
The connection between problems and their causes is obvious and easy to trace.	The relationship between problems and their cause is indirect and not obvious.
Others are to blame for our problems and must be the ones to change.	We unwittingly create our own problems and have significant control or influence in solving them through changing our behaviour.
A policy or an action designed to achieve short-term success will also assure long-term success.	Most quick fixes have unintended consequences. They make no difference or make matters worse in the long run.
To optimise the whole, we must optimise the parts.	To optimise the whole, we must improve relationships among the parts.
Problems can be tackled by many independent simultaneous initiatives.	Only a few key coordinated changes sustained over time will produce large systems change.

Source: D. P. Stroh (2015)

Systems thinking directs attention to the root causes of problems—such as incentives, regulations, power structures, technological designs, and dominant cultural beliefs—and to the interrelationships between system components. The **iceberg metaphor** is a helpful tool for distinguishing between visible symptoms and the deeper systemic structures that generate them (see Box 2).

Box 2. The Iceberg metaphor[8]

The image of the iceberg helps us to understand why a system is functioning as it does and what are the causes producing the problems we see on the surface. The capacity to influence the system increases with the understanding of the system's structure. There are different representations of this image. This one distinguishes three levels, each one informed by a specific question and generating a different action.

- The event's level is what we see most easily.
- The patterns of behaviour or trend, linking many events over time.

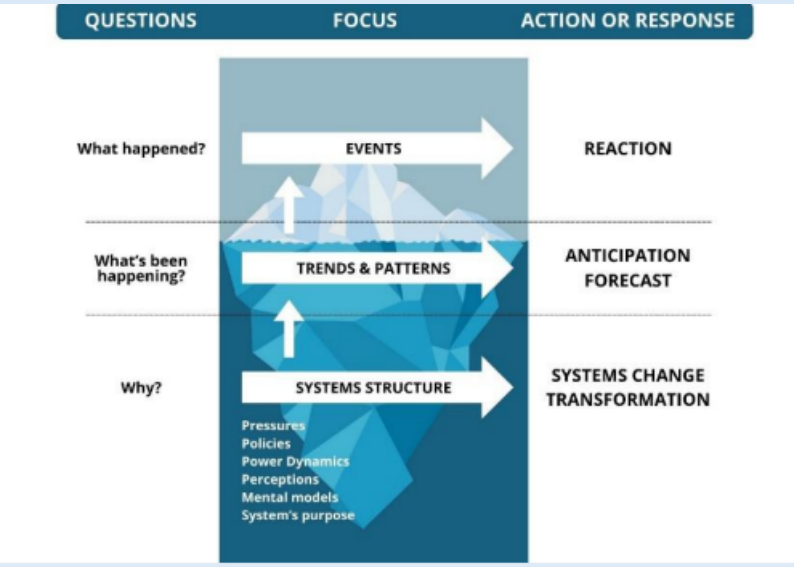
[8] The text and the image are from D. P. Stroh (2015), "Systems Thinking for Social Change: a practical guide to solving complex problems, avoiding unintended consequences, and achieving lasting results". Chelsea Green Publishing.

- The system structure (the 90% of the iceberg) shaping trends and events. It includes tangible elements, such as policies or power dynamics, that shape the performance of the system. But it also includes intangible elements, such as perceptions (what people believe or assume to be true about the system) and the underlying intentions or purposes people seek to realise, which drives people's behaviour.

Often, we focus our attention and spend most of the time on the first two levels, the visible part of the iceberg:

- Responding to individual events as they emerge (what happened?). These kinds of reactions are the more visible and immediate and, therefore, the more tempting.
- Trying to understand trends and patterns (what has been happening?) to anticipate the future based on the past.

But the root causes of the complex problem are in the underlying systems structure. System change requires acting on the underlying structures and mindsets that are continuously reproducing the problems we want to address. This requires acting at the levels of policies, governance, markets, technology, infrastructure, investments, or cultural values, which is the focus of the transformative innovation policy approach that this guide follows (see chapter 0).



2. Why the transformative innovation policy frame?

In the context described above, the **transformative innovation policy** frame[9] represents a relatively new approach to research and innovation policy. It seeks to foster the systemic changes needed to achieve the Sustainable Development Goals (SDGs) through a holistic, multi-level approach. This frame recognises that addressing today's societal challenges requires more than technological advancement—it calls for integrated change across markets, business models, infrastructures, investment flows, policies, and social values.

The transformative innovation policy frame coexists with two earlier policy frames:

- The **first frame**, developed after the Second World War, holds that public policies should promote economic growth by addressing market failures—primarily through public investment in knowledge generation, especially by the private sector.
- The **second frame**, which emerged during the 1980s amid early globalisation, places greater emphasis on the competitiveness of firms. It highlights the role of national and regional innovation systems in generating and commercialising knowledge. Research and innovation policies under this frame focus on building linkages, networks, clusters, and fostering entrepreneurship.

While both of these traditional frames have contributed to growth and innovation, they are not equipped to tackle the systemic and complex challenges that our societies now face. The issues encapsulated by the Sustainable Development Goals are inherently multidimensional, interconnected, and persistent. They cannot be resolved by science and technology alone, nor by conventional policy tools acting in isolation.

The transformative innovation policy approach calls for **collaborative, interdisciplinary, and mission-oriented** responses to these challenges. It emphasises coordinated, multi-level interventions involving a wide range of actors, all working toward a shared directional goal: the transformation of **sociotechnical systems**—the systems that provide essential services and products to society, such as food, mobility, health, energy, and education.

Box 3 presents an example of such a sociotechnical system.

[9] See Schot, Johan & Steinmueller, W. Edward, 2018. "Three frames for innovation policy: R&D, systems of innovation and transformative change," Research Policy, Elsevier, vol. 47(9), pages 1554-1567. Schot et al. 2022; Ghosh, 2022.

Box 3. Sociotechnical systems – an example for the circular economy

A sociotechnical system refers to an interconnected network of people, technologies, institutions, and processes that work together to achieve specific goals or functions. These systems encompass both the social components (such as organisations, regulations, and cultural norms) and the technical elements (like tools, machines, and infrastructure). Sociotechnical systems emphasise the interdependence of social and technological aspects, meaning that changes in one part of the system often affect the others.

The waste management and recycling system is an example of a sociotechnical system designed to collect, process, and repurpose waste materials, moving away from the traditional linear "take-make-dispose" economy to a more circular one where materials are reused and recycled. It encompasses both the technological infrastructure for handling waste and the social frameworks that govern waste behaviours, policies, and economic incentives. It depends on the interaction between technologies (recycling infrastructure, collection systems), and societal factors (consumer behaviour, regulations, business practices). The goal is to transform waste into resources, but achieving this in a sustainable, large-scale way requires balancing complex technical, social, and economic challenges.

In the framework of Interreg Euro-MED, the **REPper, eWAsTER, and VERDEinMED projects[10] are working to increase the opportunities for resource recovery and reuse in the region**, trying to change the perspective and stop talking about 'waste' when it can be a resource.

It is also worth highlighting that the **transformative innovation policy frame** is inspiring a new generation of **Smart Specialisation Strategies (S3)** that are increasingly focused on sustainability and the Sustainable Development Goals (SDGs).

During the 2014–2020 period, S3 strategies primarily aimed to support place-based economic transformation and competitiveness. In contrast, for the 2021–2027 programming period, the SDGs have become central to most S3 frameworks. These new strategies pursue **economic development models that enhance people's well-being without compromising the environment or breaching planetary boundaries.**

The original S3 guide (Foray et al., 2012)[11] proposed four guiding principles for the design and

[10] See: http://innovative-sustainable-economy.interreg-euro-med.eu/wp-content/uploads/sites/2/isemission_tps_posters_resource-valorisation.pdf

[11] Foray, D., Goddard, J., Goenaga X. B., Landabaso, M., McCann, P., Morgan, K., Nauwelaers, C., Ortega-Argilés, R., Guide on Research and Innovation Strategies for Smart Specialisation (RIS3 Guide), Smart Specialisation Platform, European Commission, 2012.

implementation of first-generation strategies, rooted in the **second frame of research and innovation policy.** Building on this foundation, Miedzinski et al. (2021)[12] updated these principles to **reorient S3 towards sustainability and alignment with the SDGs.** These updated principles are more consistent with the **transformative innovation policy frame** and are summarised in Table 2 below.

Table 2. Guiding principles of S3 oriented towards sustainability and the SDGs

Four principles S3	Original principle	Directionality towards SDGs	Systemic transformation	Responsibility and reflexivity
Choices and critical mass	S3, based on a limited number of priorities selected based on countries' and regions' own strengths and international specialisation.	Choice areas focalized on localized societal challenges. Priority on building a critical mass of R&I capacities and on building interregional and international partnerships for addressing SDGs.	Focus on innovations with a potential to foster systemic transformation of the region towards more sustainable modes of production and consumption. Critical mass for building innovation potential to foster transitions of key regional systems (energy, mobility, food…) The choice of strategic challenges becomes the new prioritization process.	The choices of priority areas and transition pathways to be underpinned by an assessment of their economic, social and environmental impact and value created. Reflection on how to ensure that transitions are just.
Competitive advantage	S3 should mobilise talent by matching research and innovation capacities and business needs through an Entrepreneurial Discovery Process.	Need to redefine competitiveness, ensuring that developing a sustainable competitive economic advantage does not come at social and environmental costs.	Focus on developing systemic foundations for future regional resilience.	Reflection on the potential implications of strategic choices driven by building competitive advantages for social groups and the environment (for example, choice of

[12] Miedzinski, M., Ciampi Stancova, K., Matusiak, M. and Coenen, L., Addressing sustainability challenges and Sustainable Development Goals via Smart Specialisation. Towards a theoretical and conceptual framework, EUR 30864 EN, Publications Office of the European Union, Luxembourg, 2021, ISBN 978-92-76-42380-5, doi:10.2760/410983, JRC126448.

		Stronger focus on collaboration, including experimentation projects, with other regions facing similar challenges.		suppliers.
Connectivity and clusters	S3 should develop worldclass clusters and provide arenas for related variety and cross-sector links, internally in the region and externally, which drive specialized technological diversification.	Providing incentives for partnerships, clusters, and networks to develop a shared vision and alignment towards place-based social and environmental challenges.	Developing and supporting challenge-oriented or mission-oriented partnerships, clusters, and networks engaged in transformative innovation to develop alternatives addressing place-based social and environmental challenges.	Ensuring the new challenge-oriented or mission-oriented cross-sectoral partnerships, clusters, and networks include all relevant stakeholders and are not captured by incumbents.
Collaborative leadership	S3 should support efficient innovation systems as a collective endeavour based on public-private partnership (quadruple helix) and provide an experimental platform to give a voice to unusual suspects.	Ensuring that leaders of the process subscribe to and embrace the orientation towards sustainability and the SDGs.	Experimenting with new forms of governance suitable for orchestrating long-lasting multi-actor and multi-level processes of change.	Ensuring that decisions taken on priorities and transition pathways as well as the forms of leadership and governance of transitions have a broad social mandate.

Source: Based on Miedzinski et al. (2021)

3. Why it is important to align the ISE Mission projects with regional sustainability priorities

The State of the Environment and Development in the Mediterranean report, published in 2020 by the United Nations, identifies eight major threats to the region's environment and proposes corresponding areas for action and transition (see Box 4). These challenges are systemic in nature and transcend national borders, requiring integrated, multi-level responses. To address them effectively, new forms of collective action are needed—anchored in innovative models of interregional cooperation among public administrations, businesses, universities, research and technology centres, civil society organisations, and citizens.

Box 4. Threats and areas of actions for the Mediterranean environment

Major threats to the Mediterranean environment

1. Climate change affects the Mediterranean significantly more than the world average, particularly with warmer air and sea surface temperatures all year round. While the average air temperature is worldwide about 1.1 °C higher than pre-industrial times, the Mediterranean temperatures are above to 1.5 °C higher. The Intergovernmental Panel on Climate Change (IPCC) further expects temperature increases in the region of 2 to 3 °C by 2050, and 3 to 5 °C by 2100.
2. Population densities in coastal areas have continued to increase at unsustainable rates over the last decade. Over 1965-2015, urban pressures increased in 75% of Mediterranean countries; particularly, built areas doubled or more than doubled within one kilometre from the sea. Consequently, biodiversity and especially natural coastal ecosystems and their services (e.g. carbon capture, flood control) decreased. Urbanization also resulted in the loss of agricultural land.
3. Health impacts from atmospheric pollution are most severe in urban and port areas, with pollution measured well beyond WHO recommended standards. The low quality of fuels in some countries, emissions from ships, and high shares of aged vehicles in motor vehicle stocks contribute to explaining the annual 228,000 early deaths from air pollution in Mediterranean countries.
4. Health impacts from lack of water supply and wastewater treatment facilities, particularly on the southern and eastern rims of the region, contribute to a range of diseases, undermining population well-being and labour productivity.
5. Waste and its management remain a challenge in many countries. Around 730 tonnes of plastic waste end up daily in the Mediterranean Sea. Plastic waste represents 95 to 100% of

marine floating waste and 50% of litter on sea beds. In tonnage, plastic could outweigh fish stocks in the near future. Many coastal uncontrolled landfill sites are found, particularly on Easter and southern shores.

6. Fisheries practices threaten fish resources: 78% of assessed stocks are over-fished, while 18% of the catches are discarded. Fisheries represent the number one threat to fish populations in the Mediterranean Sea. Aquaculture is growing fast with high dependency on fish meal from sea catches, large nitrate and phosphorus effluents, as well as genetic modification of natural fish stocks.
7. Fossil fuels overall dominate energy supply in the Mediterranean region, with heavy environmental and health impacts (e.g. CO2, water acidification, particulate matters). An energy transition is imperative, focusing on energy efficiency and larger shares of renewable sources in the energy mix, in line with international agreements.
8. Excessive use of chemical and pharmaceutical products generate increasing concerns, particularly in northern Mediterranean countries. Only about 700 out of 70,000 chemical substances on the market have been studied for their risk impacts, with focus on those used with 'high tonnage'. Endocrine disruptors penetrate the environment directly (e.g. herbicides, insecticides, and fungicides) or indirectly (e.g. metabolic degradation of pharmaceuticals through treated wastewater). They have effects on fish and amphibians, as well as on children and human reproductive health.

Areas of action for a sustainability transition

1. Major changes in production and consumption patterns are urgently needed in the Mediterranean region to progress decisively towards inclusive sustainable development, with focus on climate change concerns, biodiversity protection and restoration, circular economy, and transition towards blue/green economy.
2. Inclusive development must address inequalities and involve civil society in decision and action. Women can play a major role: i) in promoting sustainable household consumption and investment (e.g. in food/agriculture, energy), and ii) in entrepreneurship and economic development. Younger generations and their demands and potential for action are central to short-and long-term progress, including in countries with strong population increases.
3. Moving towards food and water security is key for inclusive sustainable development and requires: integrated water resources management, the use of new non-conventional water resources, water demand management with proper pricing (e.g. in agriculture), quantity and quality of food with attention to their health impacts.
4. Moving towards energy efficiency and reliance on low-carbon energy solutions is also key.

The energy sector is too often supported by considerable fossil fuel subsidies, going well beyond those needed for social purpose. Its environmental impacts are to be addressed at energy facilities, including primary production, electricity production plants, and refineries.

5. Moving towards sustainable tourism requires the cooperation of the multiple actors in the sector. Their commitments to more sustainable models are required to capture economic, social and environmental benefits. This is particularly important in Mediterranean countries, which host about one third of world tourism.
6. Moving towards a sustainable transport sector requires attention to addressing the environmental impacts of infrastructure, vehicles, and traffic management. This includes investment and maintenance in road, rail, port, and airport facilities; pollution control of new and in use vehicles, transition to electric and hydrogen technologies; reduction of the environmental impacts of civilian and military maritime transport at port and at sea; urban traffic police, urban public transport, control of straights and canals; legal and illegal movements of maritime transport of freight and passengers, etc.
7. Industry and mining should improve: i) resource use in the context of a circular economy with reduction, reuse and recycling of waste, ii) attention to the production and use of chemicals and their impacts on humans and the environment.
8. Growth in the blue economy is expected in marine aquaculture, offshore energy, fish processing, shipbuilding repair and dismantling, maritime equipment and ports, maritime and coastal tourism. The economic benefits of the blue economy are accompanied by threats to the health of marine and coastal ecosystems through i) seawater acidification, sea temperature and level increases, shifts in currents, biodiversity and habitat losses, ii) pollution (e.g. from agriculture and industry, chemicals, nutrients, and plastics) and iii) overfishing, and other resource sustainability and efficiency issues. The implementation of Marine Spatial Planning and Integrated Coastal Zone Management needs to be rigorously strengthened to allow for a sustainable blue economy compatible with the restoration of the health of strained ecosystems and halting the relentless encroachment on the marine and coastal environment.

The alignment of local and regional efforts and ISE Mission projects to address sustainability challenges shared by diverse MED regions is a step in this direction, offering an opportunity to strengthen networks and enhance interregional collaboration[13]. This alignment becomes most

[13] The proposed approach can be extended to other kind of projects and initiatives, such as the regional innovation valleys and I3, Horizon Europe projects and other Interreg programmes.

effective when:

1. **Smart Specialisation Strategies (S3)** and other regional development strategies are aligned with the goals of the ISE Mission.
2. **ISE Mission projects** are, in turn, aligned with the local and regional priorities articulated in S3 or other strategic frameworks at the local, regional, or national level.

ISE Mission projects often convene diverse actors from different countries and sectors, creating platforms for knowledge exchange and the development of innovative practices. However, they can also **benefit from the regional insight and strategic focus of local strategies** such as S3, which are grounded in specific territorial needs and assets. Conversely, regional strategies can draw value from transnational projects by incorporating new ideas, tools, and innovations into their regional innovation ecosystems.

For ISE Mission projects, this means involving regional stakeholders from the outset—particularly those working directly on the identified challenge in each MED territory. This ensures that the outcomes of interregional cooperation are **relevant, applicable, and actionable** at the local level.

To facilitate this alignment, S3 and regional stakeholders must also remain open to opportunities and innovations emerging from ISE Mission projects. Active engagement between regional policymakers and the broader ISE Mission community can help identify synergies and adapt regional strategies to reflect shared priorities—such as innovations in sustainable energy, as described in Box 5.

Experience from the Interreg MED Programme 2014–2020 shows that several MED projects successfully collaborated with regional and local stakeholders to address place-based challenges with lasting impact. One example is the **Interreg MED Renewable Energy project**, which illustrates the importance of grounding interregional work in regional needs and capacities (see Box 5). However, such engagement rarely occurs during the early phases of project design, particularly during the identification of challenges and co-creation of project ideas.

As mentioned in the introduction, this guide proposes to **build alliances between MED interregional projects and place-based initiatives**, creating a virtuous cycle of mutual reinforcement. These alliances amplify the impact of Interreg Euro-MED projects by ensuring relevance, ownership, and place-based applicability.

Building such alliances requires:

- **Common frameworks and tools** to identify shared sustainability challenges relevant to both ISE Mission priorities and regional strategies (e.g. S3),
- **Shared diagnosis and systemic approaches**, based on collaboration across sectors and

disciplines, and

- **Knowledge co-creation** among stakeholders, fostering a holistic understanding of how to manage complex challenges with long-term, dynamic, and systemic perspectives.

These alliances are ultimately focused on **sustained, transformative change and long-lasting impact.**

The next chapters present a conceptual framework and a methodological approach for building such multi-level, challenge-driven interregional alliances (Chapter 4), and explain how the **Transformative Innovation Policy Labs (TIPLabs)** developed under the Dialogue4Innovation Project can support them (Chapter 5).

Box 5. Energy Transition in Mediterranean Islands

Despite the efforts done to increase renewable energy production in Europe, there is still a heavy reliance on energy imports from outside the continent. In 2023, the European Union (EU) registered an overall energy dependency of more than 63% distributed by the state members. Islands and island regions are specifically vulnerable due to their territorial characteristics, the lack of energy supply and high external dependence. Mediterranean islands face additional the vulnerabilities to climate risks such as rising temperatures, rising sea level and severe fires. The Clean Energy for all European Citizens package refers to islands and island regions as ideal test sites for pilot initiatives on clean energy transition, making them beacons at the international level.

Skopelos is a Greek interconnected island of Sporades archipelago located in the western Aegean Sea, with an area of about 96km2 and 4,960 inhabitants. The renewable energy capacity is limited to PV stations, which produce up to 0.21MW, while the peak demand for the whole island equals 10MW and the average demand is around 2.5MW.

The Problem:
Skopelos presents a high dependence on external energy supply, but there is limited space for renewable energy infrastructures. On the other hand, the abandonment of agricultural areas and the shift from intensive use of the forest ecosystem (livestock and fuel use) to the virtual abandonment of these activities has created conditions prone to the development of large forest fires.

Why It's a Complex Problem:
Islands have relevant limitation of space and prioritising land uses becomes a complex problem to achieve energy supply, protect biodiversity and maintain economic activities such as agriculture and leisure activities.

Interconnected Issues:

- Clean energy supply: increase renewable energy production by forest biomass management.
- Biodiversity: Preserve biodiversity while reusing forest biomass.
- Food security: Recover agriculture areas to provide local food.
- Economic and social stability: Maintain affordable access to energy to citizens, but also to local economic activities to make them sustainable overtime.

Capitalisation results:

The Interreg MED Renewable Energy project facilitated the transfer and capitalisation of the results produced by the community of 6 modular/thematic projects. To achieve this, the project launched a call for action inviting municipalities from around Mediterranean countries of the north shore, to apply their challenges and test the tools produced by the community of projects. The call targeted local entities from rural, islands and small urban cities. As a result, 9 Flagship Cases were selected to follow technical support through training and coaching connecting the experts and researchers who developed the tools with local authorities to analyse their cases and benefit from the application of the tools.

As for Skopelos, PRISMI and ForBioenergy projects contributed to this knowledge transferring experience with the guidance and support of DAFNI Network and AEGEA Energy and Environment Agency. The scope of the flagship case was to analyse the potential energy production originating from the residual forest biomass. Processing raw biomass into solid biomass fuel (pellets, briquettes, woodchips) could be used locally in appropriate heating boilers to contribute to the island's energy supply or branded as a high-value local product and exported to the rest of Sporades archipelago or even mainland Greece.

From March 2021 to May 2022, the team of experts, researchers, and local policymakers, define the scope of three scenarios characterizing the spatial data to determine:

- Which forest locations should be exploited?
- What is the level of forest biomass potential on the island?
- How much energy is expected to be produced annually?
- Where should the production site of wood pellets be located?

Currently, Skopelos as part of the DAFNI Network, continues developing the Forest Biomass Plan as part of the energy transition pathway of the island.

Example Interreg MED project:

https://etuinitiative.eu/the-etu/#toolbox / https://etuinitiative.eu/flagship-cases/

4. The transformative innovation policy approach applied to the ISE Mission

This chapter introduces a conceptual framework based on the **transformative innovation policy** approach. It aims to support actors involved in the ISE Mission ecosystem—as well as practitioners of S3 and other local or regional strategies—in developing **shared understandings** of sustainability challenges in MED territories. This shared understanding can help identify opportunities for **complementarities and synergies** between ISE Mission projects and place-based initiatives.

As discussed in chapter 2, the transformative innovation policy frame (Schot & Steinmueller, 2018; Schot et al., 2022; Ghosh, 2022) is a strategic and proactive approach to shaping innovation that aims to drive **substantial, systemic change** in society, the economy, and the environment. It goes beyond traditional innovation policy—which typically focuses on economic growth and technological progress—by emphasising the need to transform the systems that underpin our daily lives.

The starting point of this approach is the recognition that today's societal challenges **cannot be addressed by science, technology, or policy in isolation**. Instead, they require the **transformation of sociotechnical systems**—such as those for energy, mobility, food, and education—and fundamental shifts in dominant practices or "business as usual."

Two core concepts of this approach are presented in the next sections:

- **The multilevel perspective** (Section The multilevel perspective)
- **Transformative outcomes** (Section 4.2. The transformative outcomes)

4.1 The multilevel perspective

Sociotechnical systems are the organised structures through which societies meet essential needs—such as food, mobility, health, energy, and education. These systems are shaped by stable networks of actors, institutions, norms, technologies, and infrastructures, all governed by a shared and standardised set of rules and practices known as a **regime** (or the "business as usual").

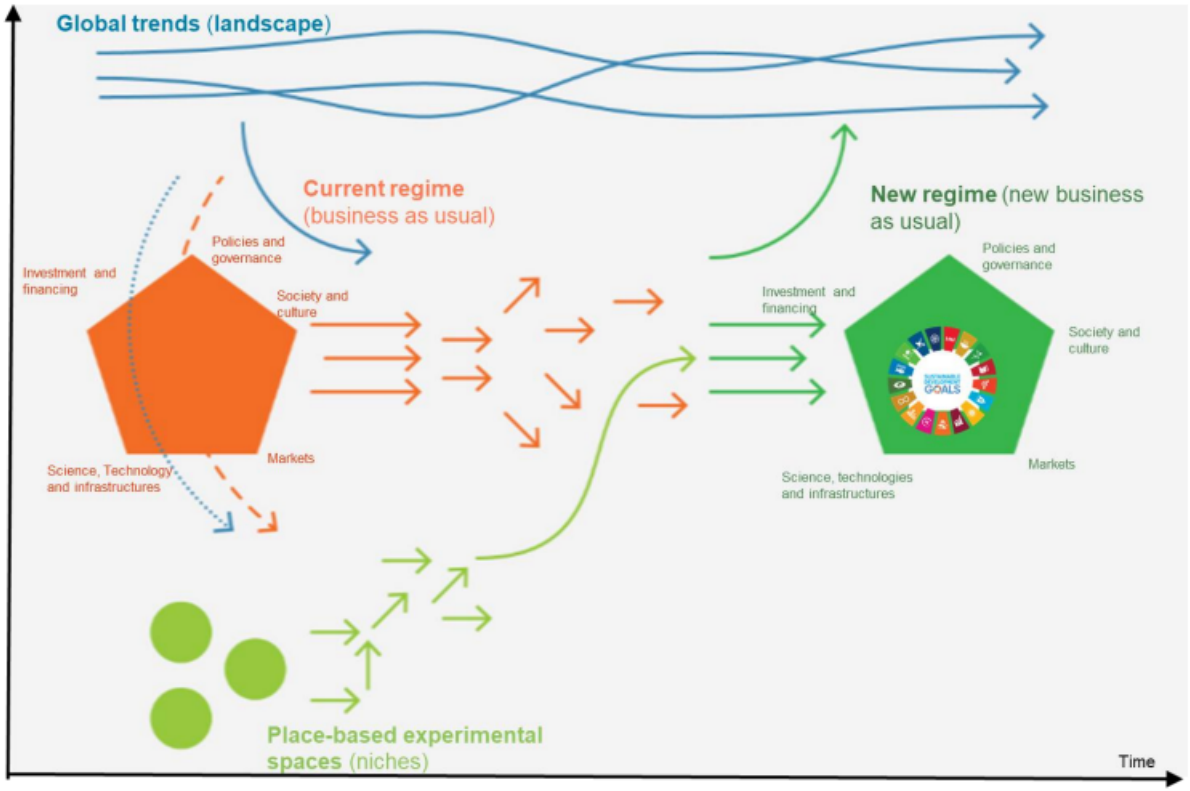
Alongside these regimes exist **niches**—protected spaces where innovative practices and technologies are developed and tested as **alternatives to dominant approaches**. These niches serve as laboratories for future-oriented experimentation and can offer pathways toward more sustainable systems.

System transformation is viewed as an **evolutionary process** in which different variables interact

and co-evolve over time and across dimensions. As illustrated in Error! No és una autoreferència de marcador vàlida., external or global developments—referred to as the **landscape level**—such as climate change, demographic shifts, geopolitical conflict, or global economic pressures, can **destabilise existing regimes**. Regimes are often slow to respond due to their structural rigidity and internal inertia. When they fail to adapt effectively, they become dysfunctional or vulnerable, opening **windows of opportunity** for niches to grow and potentially reshape or replace the dominant system.

In this perspective, transformation arises from the **dynamic interactions between the landscape, regimes, and niches.** While no single actor can control the transformation process, many actors—including governments, research organisations, businesses, and civil society—can influence it. In particular, public policies and innovation ecosystems can **accelerate change** by supporting experimental spaces and facilitating the scaling of more sustainable alternatives.

Box 6 illustrates how this multilevel framework can be applied to **agricultural transformation in the Mediterranean region.**



Source: Based on Schot and Geels (2007)[14].

[14] Geels, F. W. and Schot, J. (2007). Typology of Socio-technical Transitions Pathways.

Figure 1. Multi-level perspective and the transformation of sociotechnical systems

Box 6. Applying the multilevel approach to the agriculture transition in the MED

Applying the multilevel approach to Mediterranean agriculture reveals a complex interplay between external pressures (climate change, policy reforms), the dominant agricultural regime (intensive, water-dependent farming), and innovative niches (agroecology, waterefficient technologies). As landscape pressures mount, particularly due to climate change, niches are increasingly gaining traction, slowly influencing, and transforming the traditional agricultural regime toward more sustainable, circular practices.

1. Landscape Level (external context)

The landscape consists of broader external pressures and long-term trends that influence agriculture but cannot be controlled by individual actors in the system. These might include:

- Climate change: The Mediterranean region is highly vulnerable to climate change, with rising temperatures, more frequent droughts, and water scarcity becoming increasingly common. These changes put pressure on agricultural systems to adapt and adopt more sustainable practices.
- Demographic pressures: Population growth in urban areas and migration patterns can shift demand for food and agricultural products. Additionally, rural depopulation in some Mediterranean countries reduces the available agricultural workforce.
- Global market trends: Shifts in global food demand, trade policies, and price volatility in agricultural commodities can affect the stability and profitability of Mediterranean farming systems.
- Environmental degradation: Soil erosion, salinisation, and biodiversity loss are widespread issues, pressuring the region to adopt conservation practices.
- EU and national policy: Agricultural policies, such as the EU's Common Agricultural Policy (CAP) and Green Deal, promote sustainable agriculture, providing funding for eco-friendly practices, organic farming, and climate resilience.

2. Regime Level (dominant agricultural system)

The regime represents the dominant agricultural practices, norms, regulations, and technologies in the Mediterranean. These are relatively stable but under pressure from landscape-level changes. Key features of the current regime include:

- Conventional agriculture: The dominant agricultural system in the Mediterranean is largely intensive and water-dependent, particularly for crops like olives, grapes, citrus

fruits, and vegetables. This system relies heavily on irrigation, chemical inputs (fertilizers, pesticides), and monocultures, which have contributed to environmental issues like water depletion and soil degradation.

- Water-intensive crops: The focus on high-value, water-demanding crops such as olives, citrus, and vineyards has shaped agricultural practices for centuries, but it is becoming increasingly unsustainable in the face of water scarcity.
- Policy and subsidy structures: Traditional agricultural systems in the region are often supported by government subsidies that encourage high production levels rather than sustainability. The CAP, though evolving, has historically favoured intensive practices.
- Agricultural cooperatives and traditional knowledge: Mediterranean agriculture also features a strong tradition of cooperatives and smallholder farms, which have developed localized knowledge systems over generations. However, these systems face modernization pressures and struggle to compete with industrialized farming.

3. Niche Level (emergent alternatives)

The niche level consists of innovative practices, technologies, and ideas that challenge the current regime but are not yet dominant. In the Mediterranean agricultural context, these might include:

- Agroecology and Permaculture: Niche farming practices like agroecology and permaculture are gaining traction. These practices emphasize biodiversity, soil health, minimal water use, and natural inputs, offering sustainable alternatives to intensive agriculture. Initiatives such as organic farming and regenerative agriculture fall within this space.
- Water-Saving Technologies: Innovations in irrigation technology, such as drip irrigation and precision agriculture, are emerging in response to water scarcity. These technologies are designed to optimize water use by delivering it directly to the roots of plants, reducing waste.
- Climate-Resilient Crop Varieties: Breeding and promoting drought-resistant crops and varieties adapted to the Mediterranean climate are niche activities. Traditional and ancient crops like barley, legumes, and certain drought-resistant cereals are being reintroduced to reduce dependency on water-intensive crops.
- Circular Economy Practices: Circular agriculture initiatives, such as using agricultural waste (e.g., crop residues) for bioenergy production or composting, are gaining momentum in some areas. These practices reduce waste and enhance sustainability.

- Agri-food Cooperatives with a Sustainability Focus: New forms of cooperatives and farmer networks are emerging that focus on sustainability, organic certification, and local markets. These networks aim to revitalize rural areas while promoting eco-friendly practices.

Tension Points and Interaction Between Levels

- Landscape Pressures on the Regime: Increasing water scarcity due to climate change, environmental degradation, and policy changes are creating tension for the current agricultural regime. The push for more sustainable practices, as seen in the EU's Farm to Fork strategy and CAP reforms, is pressuring farmers to adopt new practices that reduce water usage, limit chemical inputs, and improve environmental sustainability.
- Niches Interacting with the Regime: While niche innovations like agroecology, organic farming, and water-efficient technologies are growing, they face barriers from the entrenched practices and subsidy structures that favour conventional farming. However, these niches are slowly gaining more attention due to increasing external pressures, consumer demand for sustainable products, and policy incentives for climate adaptation and sustainability.
- Landscape Changes Supporting Niches: The growing public awareness of climate change and environmental issues is creating opportunities for niche innovations. Global and European sustainability agendas (e.g., the European Green Deal) are providing funding and policy support for the adoption of agroecological practices and water-saving technologies.

4.2 The transformative outcomes

Transformative outcomes[15] is an approach developed to evaluate progress toward system's change. They are embedded within three overarching **processes of transformation**, each comprising four specific outcomes. These outcomes can be used to **evaluate and guide** the work of Living Labs, Transformative Innovation Policy Labs (TIPLabs), and similar initiatives, which may contribute to one or more of them.

The three macro-processes and their associated outcomes are:

[15] Based on Gosh et al. (2021). To deepen in transformative outcomes framework, see: https://tipconsortium.net/wp-content/uploads/2021/05/Transformative-Outcomes-1.pdf

1. Building and nurturing niches

This process refers to the **early-stage development** of new initiatives, technologies, or practices that may serve as alternatives to the dominant regime. An innovation alone does not constitute a niche. To evolve into a niche, an innovation must become **contextualised, supported by a user base**, connected to institutions, embedded within specific markets, and shaped by a shared learning process among practitioners.

The four transformative outcomes in this process are:

- **Shielding**: Creating protected spaces to explore and experiment with alternative ideas, technologies, and practices without immediate pressure from the dominant regime.
- **Learning**: Facilitating structured reflection and dialogue on experiences, barriers, and needs. This includes questioning underlying assumptions and values associated with current practices.
- **Networking**: Engaging more actors and building new relationships across sectors, disciplines, or geographies to support alternative approaches.
- **Navigating Expectations**: Co-developing shared visions, narratives, and objectives through inclusive stakeholder engagement.

2. Expanding and mainstreaming niches

To achieve systemic change, a niche must grow beyond its initial protected space. It must attract new users, be replicated in diverse contexts, and eventually **gain sufficient critical mass** to challenge dominant systems and practices.

The four transformative outcomes in this process are:

- **Upscaling**: Expanding the reach of alternative practices—measured by increased adoption, user base, networks, or market share.
- **Replicating**: Adapting and applying niche innovations in different territories, sectors, or institutional settings.
- **Circulating**: Enhancing the flow of ideas, experiences, tools, and resources across multiple niche initiatives to strengthen their collective impact.
- **Institutionalising**: Embedding alternatives into mainstream regulations, policies, standards, programmes, or organisational routines.

3. Opening up and unlocking regimes

This process involves **transformative change within dominant regimes**, as actors begin to

engage with niche alternatives and reflect critically on the limitations of the current system. It entails shifts in values, perceptions, and institutional frameworks that enable more sustainable practices to emerge and thrive.

The four transformative outcomes in this process are:

- **Destabilising**: Introducing new regulations, incentives, or structural changes that disrupt and weaken entrenched, unsustainable practices.
- **Deep Learning**: Regime actors re-evaluate their assumptions, recognising that traditional approaches are insufficient to address long-term threats such as climate change or demographic shifts.
- **Niche–Regime interactions**: Creating interfaces for learning and collaboration between niche actors and regime institutions, fostering mutual influence and gradual transformation.
- **Changing perceptions**: Regime actors adopt new perspectives on challenges and opportunities emerging from landscape-level changes (e.g. climate risks, social or geopolitical trends), leading to more openness to systemic alternatives.

5. ISE Mission Transformative Innovation Policy Labs (TIPLabs)

Within the ISE Mission, the promotion and diffusion of transformative innovation and systemic approaches to address complex challenges is being pursued through Transformative Innovation Policy Labs (TIPLabs). TIPLabs aim to bridge the transnational dimension with regional realities, strengthening coordination, coherence, and alignment of actions by working with regional and local actors in interregional projects, and by facilitating the exchange of knowledge and good practices (see **Error! No s'ha trobat l'origen de la referència**).

A **first generation of nine pilot TIPLabs** will be launched by partners of the Dialogue4Innovation project. These TIPLabs will engage committed groups of stakeholders, including local and regional authorities, in a **learning-by-doing process**. This pilot phase aims to demonstrate the added value of the approach in enhancing stakeholders' capacity to translate innovation outcomes into policies and practices.

These TIPLabs will be supported by Dialogue4Innovation through a comprehensive assistance package including:

- Methodological tools (such as this guide),
- Capacity-building activities,
- Knowledge exchange initiatives, and
- Tailor-made expertise from the project's partners.

Following a **monitoring, evaluation, and learning (MEL)** process, insights from the pilot TIPLabs will inform a **second generation**, which will be rolled out in additional Mediterranean territories. This guide offers a reference for the first generation of TIPLabs; a second, revised edition will be published at the end of 2026 (see Table 4 in the Annex: *Roadmap for the Deployment of TIPLabs in the ISE Mission*).

5.1 Concept and elements of TIPLabs

Transformative Innovation Policy Labs (TIPLabs) are structured processes designed to tackle place-based challenges that are relevant both at regional and MED levels, using a **systemic and transformative innovation approach.**

TIPLabs are:

- **Place-based**: They are grounded in the realities of the territories where they operate.
- **Collaborative**: They engage with affected organisations and people, and work in partnership with universities, RTOs, and actors involved in ISE Mission projects.
- **Learning-focused**: They do not aim to deliver ready-made solutions. Rather, they foster **learning and participatory understanding** of complex challenges.
- **Co-creation spaces**: They enable **co-creation of transformative innovation actions** to address localised challenges.

Core elements of a TIPLab:

- **A convening space**: A physical or virtual venue, supported by the host entity, providing logistical and organisational support.
- **Facilitation**: Professional facilitators and trainers guide the process, help build trust, resolve conflict, and support co-creation. TIPLab facilitators are trained by experts from the Dialogue4Innovation project (see **Error! No és una autoreferència de marcador vàlida**).
- **Conceptual and methodological tools**: A shared framework for transformative innovation (explained in chapter 5), complemented by Innovation Camps and other tools (explained in chapter 6).
- **Participants**: A diverse group of actors directly affected by or involved in the challenge. Multiple perspectives are essential to ensure an inclusive understanding and legitimate co-created actions.
- **Collective action plan**: The TIPLab results in a shared action plan emerging from discussions, analysis, and commitments by participants.
- **Monitoring, Evaluation, and Learning (MEL)**: A framework to follow up on the TIPLabs, track the implementation of action plans, and assess systemic transformations at regional and interregional levels.

Box 7. Contribution of the Dialogue4Innovation project to developing the common framework and tools

The **Institutional Dialogue platform** of the ISE Mission works in developing and strengthening skills, abilities, competences, resources and knowledge transfer to individuals, organisations and communities to address common challenges, such as:

- Methodological guides: toolkits, resources, and other materials for TIPLabs implementation in the Mediterranean.
- Monitoring, Evaluation and Learning (MEL) framework guide.

- Two-day innovation camps each year: as a meeting space oriented towards collective transformative actions for the ISE Mission community and regional practitioners during a two-day workshop, capacity and community building.
- Capacity building for TIPLabs: providing the necessary tools to respond effectively to current and emerging issues and to enable them to become more self-reliant, sustainable, and resilient through trainings and working sessions for facilitators and experts.
- MOOCs, the EuroMed Academy and summer schools.
- Leasing and advocacy activities in hand with the thematic community and Mission ecosystem (ISEC HUB, ISE CoP…).

Read more about the work of the Mission here:
https://innovative-sustainableeconomy.interreg-euro-med.eu/our-work/

5.2 Expected results of TIPLabs

The **expected results** from TIPLabs activities include:

1. **A shared systemic understanding** of challenges and opportunities at both regional and MED levels. This includes adopting a systems change perspective that moves beyond linear solutions and enhances strategic decision-making capacity. TIPLabs are expected to foster stronger synergies between funding sources (e.g., Interreg, Horizon, ERDF).
2. **New or strengthened multi-actor alliances** that tackle place-based challenges from a MED perspective, integrating diverse dimensions and actors from different territories.
3. **Transformative innovation solutions** co-created by regional and ISE Mission actors, contributing more effectively to place-based sustainability challenges and amplifying the impact of Interreg Euro-MED initiatives.

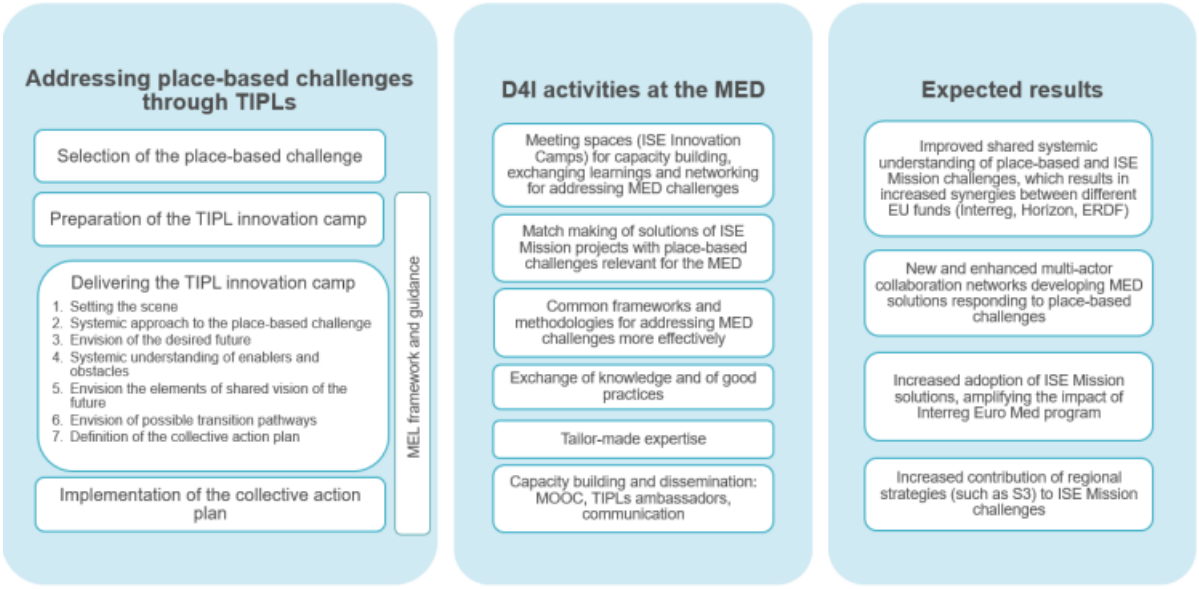


Figure 2. The TIPLabs journey, D4I support activities and expected results

6.Guidelines for designing and implementing the ISE Mission TIPLabs

This chapter outlines the process and key steps for designing and implementing the first generation of nine ISE Mission TIPLabs, to be developed by the partners of the Dialogue4Innovation (D4I) project.

TIPLabs are conceived as **challenge-driven processes** aimed at addressing **complex, place-based challenges** that are **also relevant for the ISE Mission**. Each TIPLab follows a structured **"innovation camp" journey**, consisting of three collaborative sessions designed to co-create a **collective action plan**, followed by the application of a **monitoring, evaluation, and learning (MEL)** framework.

Innovation camps are facilitated spaces where multiple territorial actors come together to collectively address systemic and complex challenges using transformative innovation methodologies. These camps are not just workshops but strategic interventions that promote learning, co-creation, and long-term change.

The TIPLab design and implementation process consists of **five key steps**:

1. **Selection of the place-based challenge and preparatory desk work**
   The challenge should be relevant to regional strategies (e.g. S3) and aligned with the ISE Mission.
2. **Preparation of the innovation camp and design of the process dynamics**
   This involves selecting participants, designing sessions, and setting objectives.
3. **Delivery of the three innovation camp sessions**
   These result in the co-creation of a **collective action plan**.
4. **Implementation of the collective action plan**
   This step is led by local stakeholders and goes beyond the scope of the D4I project.
5. **Reporting and Monitoring, Evaluation, and Learning (MEL)**
   MEL enables tracking, analysis, and strategic learning from TIPLab processes and outcomes.

While the implementation of the collective action plan (Step 4) is beyond the direct remit of the D4I project, the project supports Steps 1–3 and Step 5 at the MED level, including guidance, capacity building, and follow-up.

The following sections provide practical guidance for implementing each of the four steps supported by the D4I project.

6.1 Selection of the place-based challenge and preparatory desk work

The first step in designing a TIPLab is to **select a complex, place-based challenge** that aligns with the priorities of both the **ISE Mission** and **regional development strategies** (such as Smart Specialisation Strategies, S3). The challenge should already be under active consideration by relevant local actors (public administrations, civil society, businesses, universities, or RTOs), but where existing efforts have not yet achieved the desired transformative outcomes.

For a TIPLab to be effective, it is essential that these actors possess:

- **Agency** and **expertise**,
- **Interest** in adopting a systemic and transformative approach, and
- **Commitment** to the TIPLab process.

To ensure relevance and local ownership, the following preparatory activities are required:

1. Delimiting the challenge

The starting point is to clearly identify the **place-based challenge** to be addressed. It must be both **complex** and **locally relevant**, requiring new, collaborative, and systemic approaches. This includes:

- Delimiting the **territory** and **scope** of the challenge,
- Conducting a **desk-based analysis** of key issues, causes, and consequences, and
- Identifying relevant stakeholders and their roles.

2. Defining a directional goal

A directional goal **provides a clear, long-term orientation** aligned with the Sustainable Development Goals (SDGs) and relevant global and regional priorities. It serves as a guiding objective that helps align diverse stakeholders and supports the co-creation of a shared vision during the innovation camp sessions.

3. Mapping the main actors

This mapping process identifies:

- The **organisations** that should be involved in the TIPLab with competencies related to the challenge,
- The **individuals** with strong commitment and influence,
- Existing **initiatives and actions** at local, regional, or ISE Mission levels,
- The **networks and relationships** among key stakeholders.

4. Conducting a systemic analysis

Drawing on the **multilevel perspective** (explained in Chapter 5), a systemic analysis should identify forces that **accelerate or hinder** change. This includes:

- **Landscape-level trends** (e.g. climate change, demographic shifts),
- **Dominant practices** contributing to the challenge, across dimensions like governance, markets, infrastructure, finance, and culture,
- **Alternative practices or innovations** (niches) that offer promising solutions.

5. Identifying opportunities for collaboration

The final preparatory step is to identify:

- **ISE Mission projects and actors** already working on similar challenges,
- Relevant **regional strategy actors** (e.g. from S3 communities), and
- **Tools and resources** for potential collaboration.

A valuable resource for this is the Catalogue of Innovative Sustainable Economy Solutions, regularly updated by the Mission. It includes:

- Capacity-building tools,
- Sustainability evaluation methodologies,
- Circular business models,
- Databases, papers, and more.

Box 8. ISE Mission focus areas

The ISE Mission clusters 19 thematic projects of the Interreg EuroMED first call to address challenges in four prioritised areas[16], which are the following:

- Marine resources: this area includes economic activities related to oceans, seas, and coasts, such as aquaculture, fisheries, blue biotechnologies, and marine renewable energy. The Mediterranean Sea offers diverse biological, mineral, and energy resources but suffers from overfishing, ocean acidification, and inadequate marine spatial planning. These issues are driven by intense human activity and unsustainable resource management.
- Agri-food systems: This area encompasses all activities from farm to table, including the entire food value chain. Mediterranean agri-food systems are rich, featuring permanent crops, legumes, fresh vegetables, cereals, and livestock. However, they face frequent extreme weather, land degradation, and coastal soil salinization.

[16] See: https://innovative-sustainable-economy.interreg-euro-med.eu/our-projects/

- Industrial transition: This area aims to support the EU's goal of climate neutrality and digital advancement, focusing on innovation and economic adaptability. Promoting the competitiveness of SMEs is central to this effort. The industrial transition in the Mediterranean encourages sustainable consumption and production, integrating sustainability into public and private investment decisions. Challenges include socioeconomic inequalities, high resource consumption, and ineffective fiscal policies.
- Resource valorisation: This area is a priority in the Mediterranean and focuses on converting waste products from economic activities into useful materials, following the circular economy's 10 Rs model. Short loops retain the most value by keeping products close to their original state; medium-loops capture value through producer reinvolvement; long-loops salvage material value after the original function is lost. This approach aims to avoid considering these materials as 'waste'.

6.2 Preparation of the innovation camp

Once the challenge has been selected and analysed, the next step is to prepare the innovation camp. Key elements to consider include:

1. Organising entities

The entities promoting the TIPLab and hosting the innovation camp must hold legitimacy, meaning they are recognised and accepted by the actors affected by the selected challenge. These entities should clearly demonstrate their commitment not only to the innovation camp but also to the challenge and the stakeholders involved.

2. Context, objectives, and expected results

The first design task is to define the context, objectives, and expected outcomes of the innovation camp. These elements must be clearly articulated before developing the session agendas and selecting participants.

3. The Participants

Participants should be selected based on the stakeholder mapping from the desk research phase. It is essential to ensure diversity, including actors directly affected by the challenge, those with the capacity to act, and those with relevant knowledge and experience. Participants are expected to join in a personal capacity, motivated by their commitment to the challenge.

Pre-camp meetings with selected participants are advisable to build trust, provide detailed information on expectations and logistics, and establish shared goals. These meetings also help make the working sessions smoother and more productive.

4. The Team

Innovation camps require careful preparation by a multidisciplinary team responsible for designing the process, facilitating sessions, and documenting the process and results. Team members should be familiar with the territory, challenge, and stakeholder landscape.

Main team responsibilities include:

- **General coordination**: A lead coordinator oversees the planning, facilitation, and coherence of the innovation camp. General coordinators prepare and distribute a detailed and updated **organisation and logistical plan** (outline of the event, schedule, methodologies, and structure of the sessions…) to the whole team.
- **Technical and logistical support**: Ensuring venues, materials, registration, refreshments, and a detailed agenda are prepared.
- **Facilitation**: Facilitators should understand the context and objectives, guide discussions, and help achieve desired outcomes. Advance training and simulation of sessions are recommended.
- **Documentation**: Capturing and synthesising key inputs and learnings through notes, photos, or recordings is vital for reflection and continuity.

6.3 Delivering the innovation camp

TIPLabs should be designed according to each challenge, territory and the stakeholders engaged. The proposal for the first generation of ISE Mission TIPLabs is to structure the innovation camp in **three working sessions**. The three working sessions should cover the following seven blocks:

1. Setting the scene.
2. Systemic approximation to the place-based challenge.
3. Envision of the desired future.
4. Shared and systemic understanding of the current situation and of the enablers and obstacles in relation to the desired vision of the future.
5. Envision of the main elements of the shared vision of the future.
6. Exploring possible transition pathways.
7. Definition of a collective action plan.

The dynamics of each of the three working sessions must be designed considering the objectives, the expected results of the innovation camp, the participants, resources, and the time schedule. The next section presents guidelines and examples for the design of the three working sessions covering the seven blocks.

A first recommendation is to start and end each working session with a plenary session to share the agenda, expectations, learnings and next steps.

The methodological frameworks and tools of the guide have been tested in Catalonia's S3 (which uses innovation camps as a methodological tool) and in the second D4I Innovation Camp organised in Barcelona in May 2024. The main objective of this innovation camp was to validate the methodological frameworks and tools provided in this guide with the ISE Mission community and S3 practitioners, using as a case study the problem of depopulation in rural and remote areas.

1. Setting the scene

Main objectives:

- Welcome participants to engage in participative and creative work.
- Contextualising the objectives of the work and expectations.
- Distributing all necessary information (organisational, logistical, etc.) for a successful innovation camp.

The opening session is key to presenting the context and objectives of the innovation camp, the agenda, the spaces, and resources available, and the foreseen exercises and its templates. Key elements for organisers to consider are:

- Keynotes or roundtable formats are useful to understand the context and the methodological approach (why transformative innovation, characteristics of sustainability challenges, conceptual framework, and methodological approach).
- Understanding and successfully translating the objectives and the expected results of the innovation camp.
- Acknowledging the participants and present stakeholders. For instance, screening a survey is useful to identify sectors, projects and initiatives, entities attending, their interests and expectations.
- The use of digital tools such as Mentimeter or Miro can help to share the reflections of participants and groups in plenary sessions in more creative ways. Breaks are important for networking, identifying common interests, and building complicities that can evolve in collaborations beyond the innovation camp.
- Combining the opening session with icebreakers (see Box 9) can put attendants in a highly participative and creative predisposition.

Box 9. Icebreakers

Icebreakers are friendly and dynamic exercises to do in group activities:

- They encourage active participation, interaction, build trust, and set a proactive energy among participants.
- They are a good way to transit between one working session to the other in a more relaxed space.
- They need to be related and relevant with the content to support the objectives of the innovation camp and not totally disconnect from the workflow of the sessions.

There are many resources online for icebreakers.

In some cases, it can be interesting to propose icebreaker dynamics helping participants to understand the characteristics of complex problems and systems (uncertainty, interdependence, non-linearity, etc.). An example is the Complex Triangles dynamic. Other options can be found in The Systems Thinking Playbook.

2. Systemic approach to the place-based challenge

Main objectives:

- Making sense of the place-based challenge collectively, visualising the diverse perspectives.
- Understanding the complexity of the place-based challenge.
- Understanding the related problems, their main causes, and consequences.

To facilitate the engagement of the discussion, it is useful to use a template. During the Dialogue4Innovation innovation camp in Barcelona, a Problem Wheel template was useful (Figure 3). Some of the questions used to guide the discussions were the following:

- What is the problem we need to address?
- Why is it a problem?
- What are the consequences? Who are the winners and losers?
- What opportunities can be detected by addressing this problem?

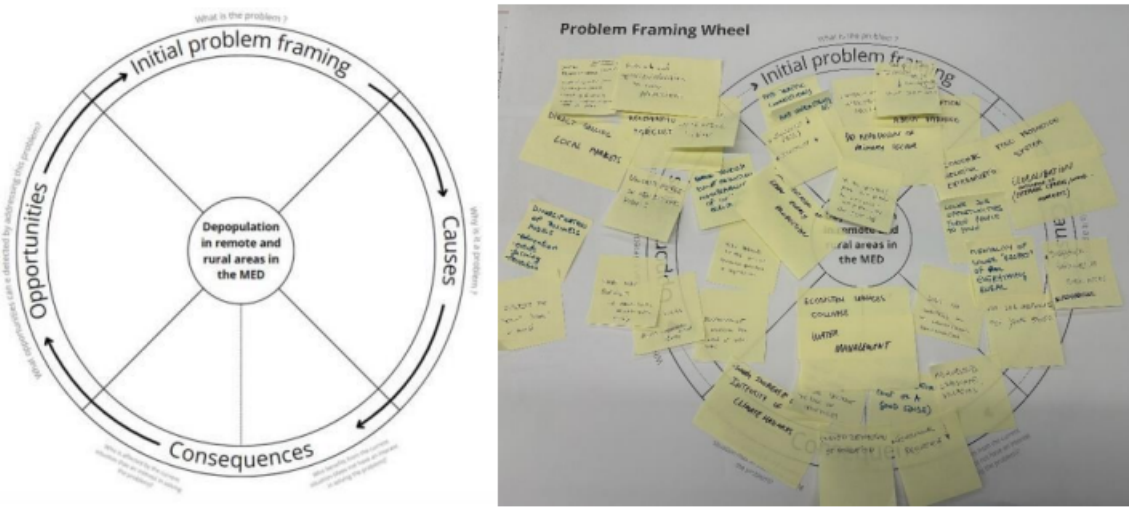


Figure 3. Problem Wheel template

In this exercise, participants discuss and identify the main elements for each dimension and clearly write them on one post-it each (simple and descriptive tags).

This is a first brainstorming, and, therefore, there are no right and wrong contributions, the aim is to have as many perspectives and views on the table as possible. Since we are dealing with complex problems, it is not possible to find consensus.

During the discussions, it can be useful to remind participants of the characteristics of complex problems, using the following template.

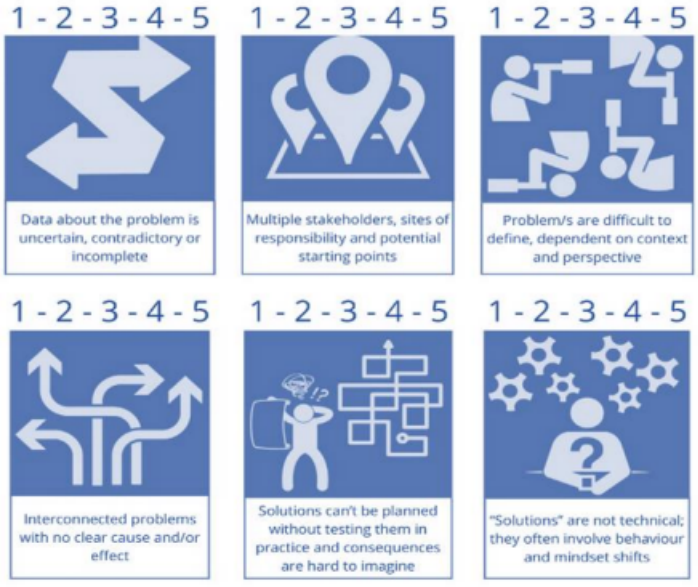


Figure 4. Characteristics of complex problems

To set the scene, other exercises can be useful as well, depending on the objectives of the session. Box 10 presents an alternative approach for facilitating the participants to develop shared understandings of place-based challenges.

Box 10. Developing shared understandings of place-based challenges using satellite images

The context of this example is an innovation camp in la Cerdanya, in Catalonia, aiming at increasing the resilience of the landscape in this mountain area.

Participants in the innovation camp were asked to discuss the changes in this territory in the last decades and the changes in this territory for the next decades. For this discussion, they made use of satellite images of urban and rural areas, natural parks, agricultural lands and forests. The objectives of the exercise were:

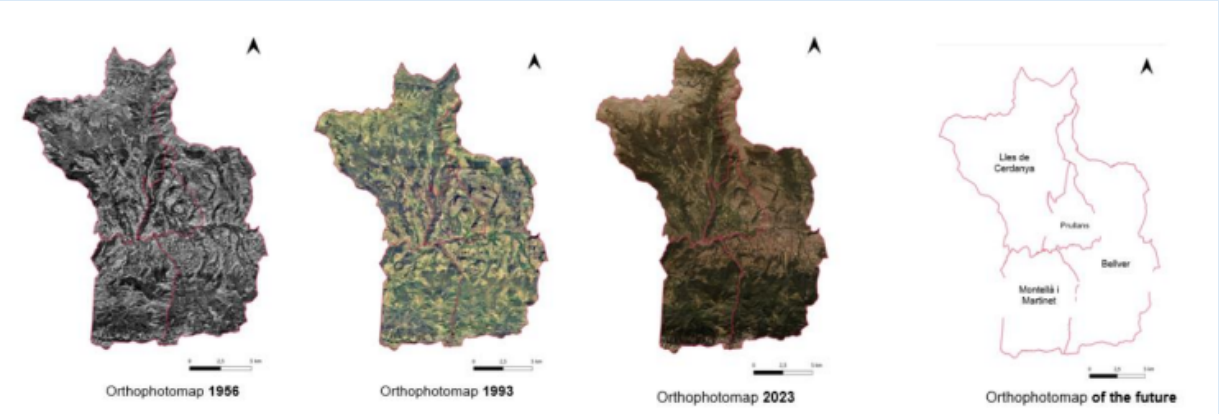
- To develop a shared understanding of the challenges of this territory.
- To realise the huge changes the territory has undergone in the last decades.
- To realise that in the next decades there will be many changes in the territory.

In a first dynamic, participants reflected in groups on the changes in the landscape of Cerdanya over time (from 1956 to 2023), based on the satellite images of the territory. They also defined a shared vision of the future for the year 2050.

In a second dynamic, they defined the characteristics of the present landscape and the shared desired future landscape, based on the following variables: conservation of biodiversity and natural and cultural heritage; forest management and fire prevention; agricultural and livestock activity; management of hunting fauna; water availability, and tourism.

Finally, in a third dynamic, the participants identified the changes necessary to achieve the shared vision of the future based on the Pentagon template with the five dimensions of the socio-technical systems (see Figure 5 below) politics and governance; investments and financing; culture and society; science, technology and infrastructure and markets).

Images of the satellite maps of La Cerdanya, used in the innovation camp



Source: adapted maps developed by the Forest Science and Technology Centre of Catalonia (CTFC).

3. Envision of the desired future

Main objective:

- Defining a shared vision of the future that participants want to aspire collectively.

Based on the directional goal, participants define a shared vision of the future in relation to the place-based challenge, a vision to which they commit to devoting efforts. This vision is an aspirational state, it establishes a final situation desired for a territory or for a system as regarding the challenge, by a determined timeframe (e.g. 2030, 2050, etc.).

The purpose of this vision is not to establish objectives, but to reconcile the expectations of different actors and to guide and align their efforts to inspire and co-develop new actions to respond more effectively to the challenge and the problems associated with it.

The vision should be ambitious and inspiring, but also based on present reality; in other words, it should take both global trends and the assets of the territory into account.

During the innovation camp, stakeholders need to align in a shared vision of the future. The key learning of this discussion is for stakeholders to be aware of to what extent they are working in the same direction, and if it is not the case, to what extent they need to align directionality when mobilising collective efforts and resources.

Box 11. Examples of envisioning a shared vision of the future

The process of defining a shared vision starts with establishing a **guiding star**, which is an aspirational state for the long-term horizons[17]. Shared visions of the future are related to a place-based challenge, and stakeholders need to be inspired and aligned with the vision. Some examples of shared visions of the future that have been put in place in the framework of Interreg projects, in the ISE Mission, in S3 and in the framework of system mapping exercises follow:

- Example of a guiding star related to the challenge of depopulation in rural and remote areas in the Mediterranean: "**Stronger, more connected, resilient, and prosperous rural and remote areas**". During the 2nd Innovation Camp in Barcelona (2024), this EU shared vision of the future was used in the working sessions[18].
- Example of guiding star regarding the challenge of micro-plastics pollution in the

[17] See: http://social-labs.org/wp-content/uploads/2014/12/Systems-Mapping-Omidyar-Workbook-012617.pdf

[18] See: https://ec.europa.eu/commission/presscorner/detail/en/ip_21_3162

Mediterranean (see Box 13): "**Mediterranean Sea without plastic pollution**" (systems map).

- Example of guiding star related to the revitalisation and resilience of rural areas and communities: "**revitalised and resilient rural areas from an ecological, social and economic standpoint**" (systems map).
- Example of guiding star related to an holistic approach to health: "**A society that conceives of health as a state of physical, mental and social well-being, intrinsically connected to both the local environment and the health of the planet**." (systems map).
- Example of guiding star related to impact investments and financial systems supporting sustainable transitions: "**An investment system that enables systemic transitions to sustainable and socially just futures**" (systems map).

4. Shared and systemic understanding of the current situation and of the enablers and obstacles in relation to the desired vision of the future

Main objectives:

- Understanding that system's change requires simultaneous changes in many dimensions and by very different actors.
- Developing a shared systemic understanding of the elements and forces of the current situation hindering or enabling to advance towards the shared vision of the future (the desired system or new business as usual).

Following the transformative innovation policy approach (see Chapter 0), the main resistances to change can be found in five different dimensions of the current sociotechnical system:

- **Policies and governance**: factors related to the policies and governance necessary to support, coordinate and establish the legal framework (e.g. weak local governance).
- **Markets**: factors related to markets and users that frame consumer preferences and business interests around the type of services and products requested (e.g. prices).
- **Science, technology and infrastructure**: factors related to the development of technological innovation, tools, infrastructures (e.g. digital connectivity).
- **Investment and financing**: factors related to business and industry that define the operation of commercial relations and operation of value chains (e.g. lack of investment in rural areas).
- **Society and culture**: factors related to cultural and social values and attributes (e.g. rural life).

Moreover, the **biophysical characteristics** of the region also need to be considered.

The template of the pentagon, with the system's structural dimensions, supports the discussion and the analysis of the elements hindering or enabling the necessary systems changes to move forward the desired vision of the future. The template of the iceberg (see Box 2 in Chapter 1) can also be useful to explain that sustainability problems cannot be address only by solutions or innovations designed to respond to detected needs (events or trends).

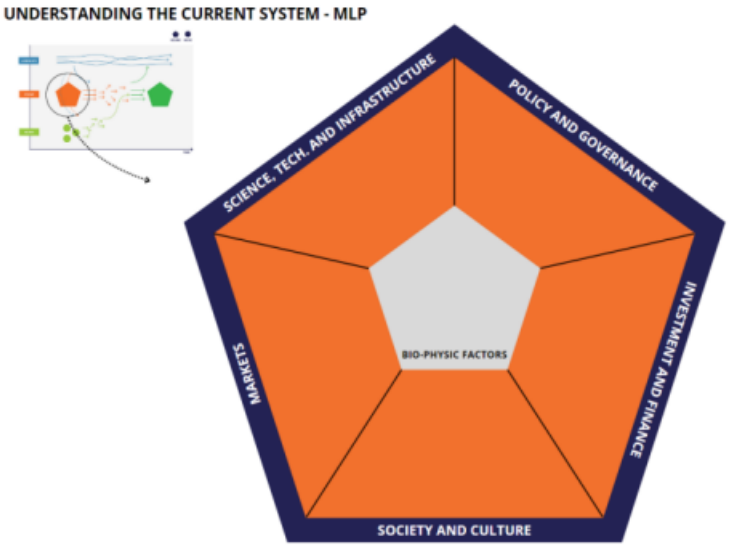


Figure 5. Sociotechnical system's structural dimensions

5. Envision of the main elements of the shared vision of the future

Main objectives:
- Envisioning and defining the structural dimensions.
- Envisioning the new "business as usual" of the shared vision of the future.

This is an envision exercise in which participants are invited to imagine the desired future in more detail from different perspectives. Since the future is unknown, imagination plays a big role in this exercise. But at the same time, it is important to have a connection of the desired future to the current situation. In the Dialogue4Innovation innovation camp in Barcelona, the exercise was the following:

- Participants should imagine they are in the future (e.g. 2050 or 2070) and the shared vision of the future is a reality, it is the new business as usual.
- Participants are asked to redefine the main elements identified in the previous exercise (described in 7.3.4.) for the 2070 system. They can select some of them, and they can add new ones, but it is important that there be a connection between the current dimensions in the

present and in 2070.

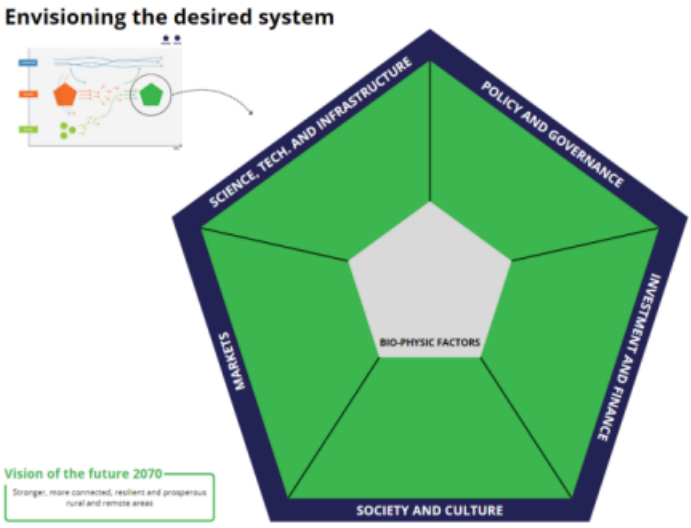


Figure 6. Envisioning the desired system

Working on this shared vision of the future leads participants to question dominant visions and practices and to rethink and redefine their role in relation to the challenge, other actors, and transformation processes. This is the basis for the next exercise, in which participants are invited to identify actions for system's change.

More detailed results of this exercise can be found in Chapter 3 of the Report of the Dialogue4Inovation Innovation Camp in Barcelona[19].

Box 12. Understanding and mapping the forces affecting complex challenges

The elements and the forces hindering and facilitating changes in the desired direction are very diverse and are strongly linked through causal relationships that give rise to patterns or dynamic loops. Therefore, it is quite complex to develop a shared understanding of a challenge that integrates the multiple perspectives of the relevant actors.

The methodology developed by the Omydiar Group allows for a facilitated process in which multiple actors participate in the co-creation of a systems map illustrating the different elements and forces hindering or facilitating addressing a challenge in a desired direction.

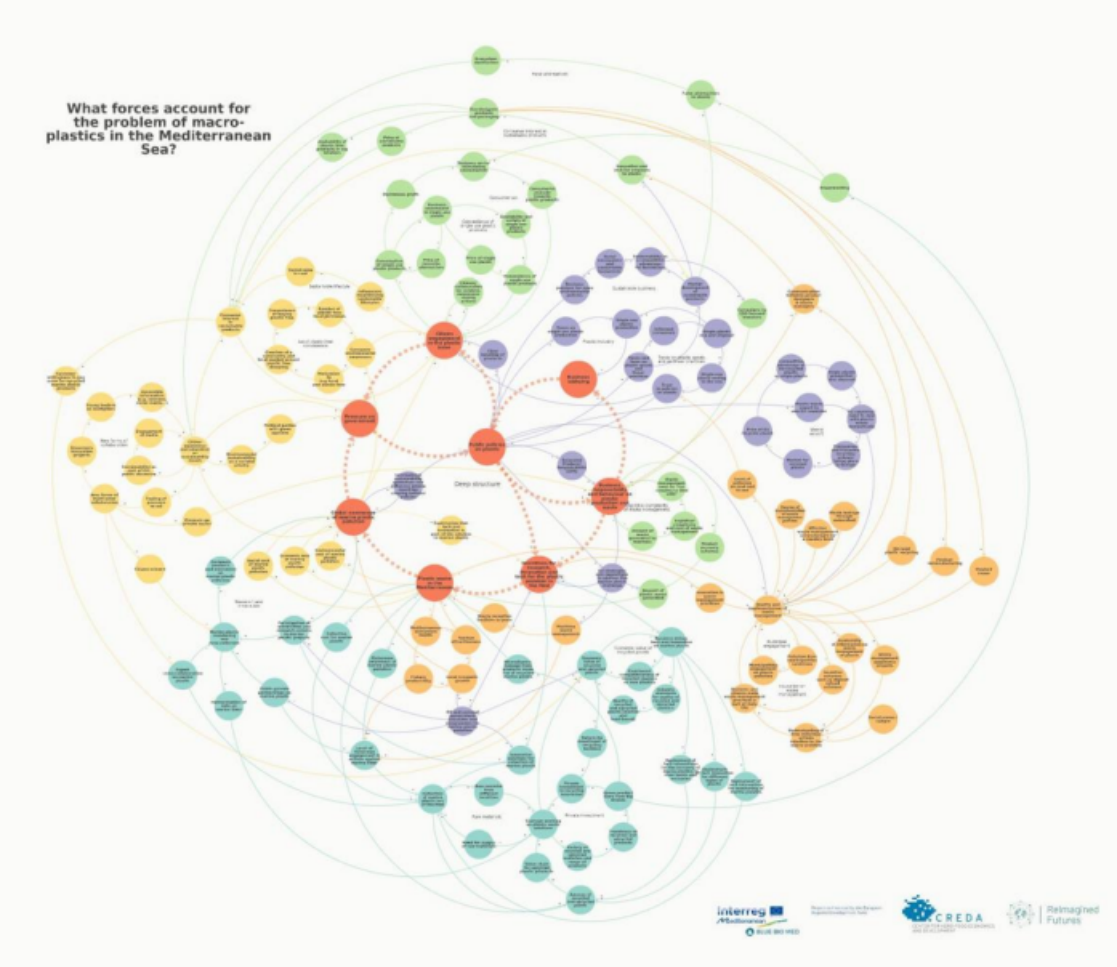
For example, in BLUE BIO MED project (Interreg MED 2014-2020) more than 60 MED stakeholders worked together to co-develop a mapping of forces and factors influencing the

[19] See: https://innovative-sustainable-economy.interreg-euro-med.eu/wp-content/uploads/sites/2/innovation-camp-report.pdf

problem of macroplastics pollution in the Mediterranean Sea. The desired vision of the future in the map (the guiding star) was a Mediterranean Sea without plastic pollution, while the framing question for creating the map was "What forces account for the problem of macroplastic in the Mediterranean Sea?"

This kind of map allows stakeholders, working with a common purpose, to analyse complex challenges with a systemic approach and from different perspectives. Integrating multiple perspectives empower actors to generate new shared narratives about the challenge, the forces, and factors influencing it and the opportunities to change the dynamics of the current system through a portfolio of mutual reinforcing actions.

Systems mapping on the challenge of macro-plastics pollution in the Mediterranean



Source: BLUE BIO MED project. *Systems map elaborated by CREDA with the support of Reimagined Futures*

6. Envision of possible transition pathways

Main objectives:

- Deep shared understanding of the challenge, the related problems and opportunities, and the possible pathways forward.
- Understanding that transitions are not linear, they require compromises, managing conflicts, letting some things go, reconfiguring others, and supporting the emergence of new ones.
- Envisioning possible transitions pathways and the accompanying actions for system's change.

Shared visions of the current and desired situations are key to changing the mindset of actors, as well as their view of the system that they are part of. And comparing the current situation/system with a vision of how the desirable situation/system would be if the challenges were successfully resolved and that the problems no longer existed, allows stakeholders to understand the challenges and related opportunities, obstacles, and costs in all their dimensions.

This kind of exercise helps actors to become aware of how their actions interact with other actors so that, if they successfully coordinate, they can have more influence and impact on the system. This change of perspective is key for participants to shift from individual solutions towards coordinated and collective actions with transformative impact.

The 2 loops template is a useful support for this exercise. As described above, in the D4I innovation camp in Barcelona (2024), participants were asked to imagine they are in 2070 and the desired vision of the future is the new business as usual. Then they were asked to imagine what actions, initiatives, innovations or policies were undertaken in the past (being the past the current situation) that made possible the system's transformation.

This exercise can be simple or become more sophisticated. For example, participants can be asked to place the actions in the timeline, or to combine actions to generate changes at the different levels of the iceberg in terms of events, patterns, structures (see Box 2). They can also propose actions in some or all the dimensions of the pentagon. Participants can also be asked about what practices need to stop, which ones can be reoriented and how, and which ones need to emerge.

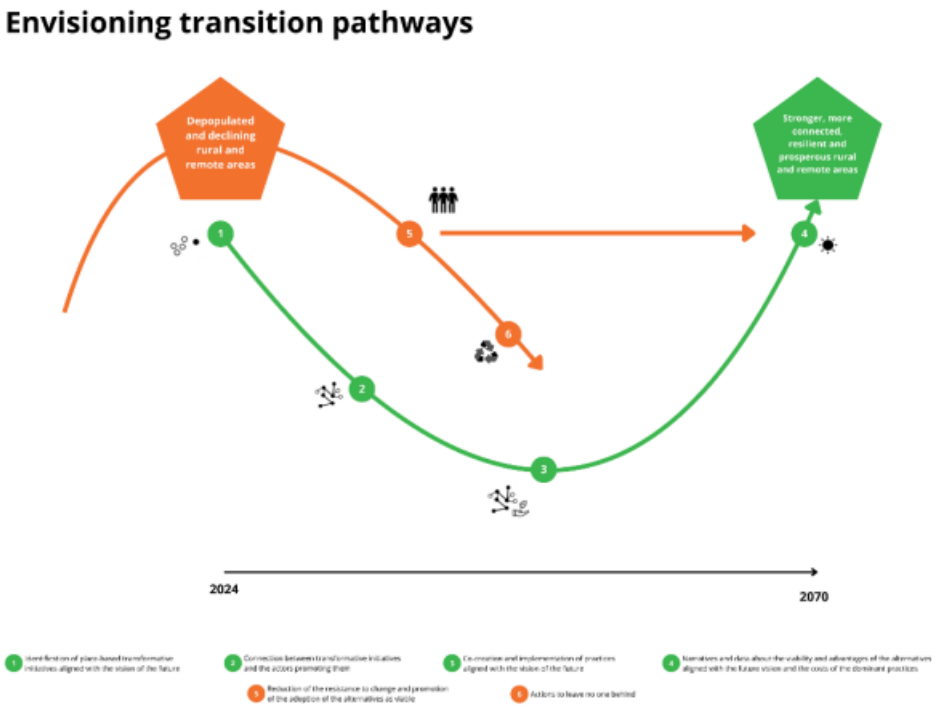


Figure 7. Envisioning transition pathways

For instance, during the working sessions in the 2nd D4I innovation camp in Barcelona, this exercise showed interesting results as participants identified key leverage points. Participants discussed which elements of the current system are necessary to ensure no one is left behind in a transition pathway towards the desired system, such as guaranteeing public housing, change of mindsets and narratives, education programmes, health prevention programmes. When identifying elements related to the emergence of transformative initiatives (niches), participants identified actions such as investments in secure internet connections across rural areas, community engagement and cooperation spaces in rural municipalities, experimentation and learning hubs, or alternative housing models.

Brainstorming what kind of leverage points are needed to bring forward the new business as usual, while letting go elements from the previous system is key to pass through to the next phase, in which actions need to be prioritised and selected for implementation by the TIPLab actors.

More detailed results of this exercise can be found in Chapter 3 of the Report of the Dialogue4Innovation Innovation Camp in Barcelona[20].

[20] See: https://innovative-sustainable-economy.interreg-euro-med.eu/wp-content/uploads/sites/2/innovation-camp-report.pdf

7. Definition of the collective action plan

Main objectives:

- Identifying possible actions to be undertaken by the participants and their institutions.
- Identifying opportunities for synergies and complementarities between ISE Mission projects and regional initiatives.
- Defining the collective action plan, thereby specifying the actions and the actors implementing them.
- Elaborating simple theories of change about how the actions contribute to address the place-based challenge and to ISE Mission priorities.

The definition of the collective action plan starts with the prioritisation of the actions that have been collectively brainstormed and discussed in the previous steps. This prioritisation should consider:

- The transformative potential of the actions to contribute to the challenge. This guide provides several tools to assess the transformative potential of the actions, such as the pentagons, the iceberg (see section 1.2.), or the Table 3 below.
- The capacity of the actors involved in the TIPLab to implement the actions, in terms of expertise, resources, and competences. The selection of priority actions should answer the following questions:
  - Who are the actors, and how do they need to cooperate?
  - Which other actors need to be engaged?
  - Which resources are necessary and which ones are available (by whom)?

While the structure and content of the collective action plan is upon the regional stakeholders engaged in the TIPLabs to decide, all action plans should be based on the results of the previous phases of the innovation camp (when the place-based challenge was analysed with a systemic approach, and the vision of the future, the obstacles and enablers and possible pathways discussed and identified).

The action plans should consider how each action contributes to the desired systemic change. It is important to discuss and make visible how each action will contribute to:

- the complex place-based problem addressed, and
- to the wider ISE Mission priorities, if it is the case.

Since the intention of the actions should be to have a sustained impact contributing to system's change, this should be done for the short, the medium and the long terms (see Table 3).

Table 3. How the actions aim to address the place-based challenge and contribute to systemic change

Term	Goal	Assumption
Short	To contribute to solving the problem	Explain how you think the action will contribute to solving the problem. Usually, this is at the niche level. For example, providing new or adapted responses or practices that remove obstacles or open new possible pathways for systems change.
Medium	To influence the dynamics around the challenge	Explain how you think the action will influence the dynamics around the challenge. Usually, this is related to the expansion, upscaling and adoption of the innovative responses or practices in the territory and in other territories (through interregional exchange and collaboration).
Long	Systemic change	Explain how you think the action will contribute to the desired systemic change.

Source: the authors.

6.4 Reporting and monitoring, evaluating and learning (MEL)

The first generation of TIPLabs is expected to deliver two main outputs:

- A report detailing the process, dynamics, learnings, and results of the respective innovation camp. This can be complemented by visual materials such as videos, photographs, or infographics.
- A collective action plan outlining the initiatives and actions to be promoted, along with a corresponding theory of change (as developed in Section 6.3.7).

As noted earlier, the implementation of the action plan extends beyond the scope of the Dialogue4Innovation project and is the responsibility of the stakeholders and actors involved in each TIPLab and the respective place-based challenge. Given that these action plans aim to trigger systemic transformations, their implementation will be a long-term and complex process involving the interaction of many actors, dynamics, and contextual factors.

To enable effective follow-up of both the TIPLabs and their associated action plans—while accounting for evolving contexts and interlinkages with other local and MED-level initiatives—a **formative evaluation approach** is proposed. This approach focuses on supporting learning and adaptation throughout the process rather than measuring success based solely on predefined outcomes.

The methodological basis for this evaluation will be provided in a dedicated **Guide for Monitoring, Evaluation and Learning (MEL)** frameworks, to be published by the end of 2025. This guide will offer tools and strategies for capturing learnings, identifying emerging patterns of change, and supporting the continuous improvement of TIPLabs and their contributions to systemic transformations.

Annex

Annex I. Roadmap for the deployment of ISE Mission TIPLabs

Table 4. Roadmap for the deployment of the first and second generation of ISE Mission TIPLabs

Output	Calendar
Publication of the methodological guide for TIPLab	June 2025
Tendering procedure to hire consultants (experts & facilitators) and set up the local team for each TIPLab pilot.	First semester 2025
Online training for TIPLab appointed experts and local teams	September 2025
3rd ISE Innovation Camp in Portugal	23-24 October, Portugal (Faro)
The TIPLab is a learning journey to address the place-based challenge with a transformative innovation policy approach. It consists of: • Preparation, organisation and facilitation of 3 regional stakeholder workshops (for each TIPLabs innovation camp) to address the challenge and identify possible actions, with the local stakeholders, following the methodology described in this guide and with support from D4I. • Adaptation of the D4I monitoring, evaluation and learning framework to the local context and implementation to the TIPLab.	October 2025 – October 2026 (flexible duration)
Guide for monitoring evaluation and learning frameworks	First draft February, publication end 2025
Online trainings on the methodology to be applied and on the monitoring, evaluation and learning frameworks	First semester 2026
Preparation of the call for the 2nd generation of TIPLab	Second semester 2026
Training for ambassadors	Second semester 2025 - Second semester 2026
Implementation of the 2nd generation of TIPLab	2nd sem 2027 – 2nd sem 2028

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