

The background features several thick, stylized arrows and paths in shades of yellow and orange. Some paths are straight, while others are curved or zig-zagging. Small white circles are placed at various points along these paths, suggesting nodes or steps in a process. The overall aesthetic is clean and modern, with a focus on movement and direction.

CO-CREATING SUSTAINABLE FUTURES

**A GUIDE FOR DESIGNING AND
FACILITATING MULTI-STAKEHOLDER
GOVERNANCE TRANSITION
PROCESSES AND SPACES**

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FOREWORD

JULIO LUMBRERAS MARTÍN

The world stands at a crossroads. We are acutely aware of the immense challenges we face: population dynamics—urbanization, aging, pandemics, and migrations; lack of access to basic services—basic habitability, water and sanitation, and sustainable modern energy; or the already evident surpassing of planetary boundaries—primarily climate change and biodiversity loss. Against this backdrop, we are witnessing a progressive fracture of the social contract that maintains balance in democratic societies.

In this difficult scenario, we cannot afford to overlook the international agreements that remain in force, particularly the 2030 Agenda for Sustainable Development and the Paris Agreement on Climate Change. Furthermore, with the aim of reviving these agreements, the United Nations has recently launched a “pact for our future” and is promoting multiple additional initiatives to respond to sustainability challenges.

All these agreements repeatedly emphasize the urgency of achieving deep and sustained collaborations among public, private, and social actors. However, the transition from declarations of intent to changes in relational practices is happening very slowly. We observe nearly insurmountable barriers to generalizing cooperative practices that surpass the prevailing competitive logic. Under these conditions, one might ask how spaces are established to foster this productive and creative engagement among actors and how these spaces are maintained over time.

This guide precisely addresses these questions. With a rigorous and practical approach, it presents methodologies to foster collaboration in solving complex challenges. Starting from a systemic vision and thinking, it proposes establishing change processes that involve interconnected simultaneous actions, far from linearity and designed to adapt to changing contexts. Moreover, it inherently emphasizes the need to experiment, innovate, and continuously learn.

The guide offers guidelines to drive transition processes through so-called “transition tables” whose design and execution are appropriate for addressing complex challenges, requiring the involvement of all concerned actors. We aim for this guide to serve as an inspirational resource for anyone or any organization interested in contributing to the transformation towards sustainability, particularly those working on urban transformation.

The real-world experiences that inform this work demonstrate how the active involvement of universities is crucial for the public sector to collaborate with private enterprises, social organizations, and the scientific community. Universities are well-positioned to design innovative solutions through collaboration, given their legitimacy and ability to attract other agents. Additionally, they can prioritize and strengthen interdisciplinary research lines and academic programs that address the complexity of social challenges.

Furthermore, the physical space occupied by universities—their campuses—serves as a gathering point and creates safe conditions, which are the foundation of the indispensable trust needed to establish sociotechnical transition processes.

For this reason, this guide holds special significance for professors, researchers, and university staff who wish to engage in the facilitation and orchestration of transformative initiatives, such as transition tables. It is no surprise that the Spanish Network for Sustainable Development (REDS) — the Spanish chapter of the UN Sustainable Development Solutions Network (SDSN) — is a sponsor of this guide, incorporating it into a series of practically-oriented publications that the Network has published in recent years. All these publications share the goal of enhancing the role of universities in the dissemination and implementation of the Sustainable Development Goals (SDGs); among them are “Getting Started with the SDGs in Universities,” “Accelerating Education for the SDGs in Universities: A Guide for Universities, Colleges, and Tertiary and Higher Education Institutions,” and “Net Zero on Campus: A Guide and Accompanying Toolkit for Universities and Colleges to Accelerate Climate Action Worldwide.”

Moreover, the guide is oriented towards urban transformation. Among the challenges mentioned, cities play a fundamental role, as they are home to most of the population (in Spain, 80%) and account for over 65% of energy consumption and more than 70% of greenhouse gas emissions in Europe. Therefore, the guide constitutes a useful and impactful tool for developing urban transformation roadmaps with a systemic approach involving all relevant city actors. By creating “transition tables” in cities, we will contribute to addressing challenges and transforming our cities into healthier, more sustainable spaces with higher quality of life and opportunities for all citizens.

Julio Lumbreras Martín

Tenured professor at UPM and researcher at itdUPM

MANIFESTO

WHY?

Recent reports from the Intergovernmental Panel on Climate Change (IPCC, 2022) continue to provide physical evidence of persistent and complex global environmental problems, particularly climate change. Cities play a central and crucial role, responsible for the majority of global emissions and energy consumption. The urban domain also concentrates most of the world's population, with projections indicating that 68% of people will live in cities by 2050 (UN-HABITAT, 2022). Additionally, social injustice is increasingly prevalent both within and between cities.

In this scenario, urban sustainability challenges are persistent and urgent, prompting the scientific community to consider ways to accelerate urban sustainability. A systemic transformation is needed across social, organizational, economic, cultural, and political spheres, ultimately questioning what kind of societies we want to build. This approach highlights the need for innovative initiatives that foster not only technological change, but also good governance in our cities and territories. Consequently, cities seek new transformative governance approaches to accelerate change durably and inclusively. These approaches aim to promote cities' transformative capacity and innovative initiatives, as well as create spaces that value collective sharing and learning to accelerate the transition to sustainability.

This complex task cannot be addressed solely by a single actor, such as a municipality, or a particular sector. As a result, there is increasing recognition of

the need for what has been called “radical collaboration.” Over the years, collective efforts have been shown to enhance the social, economic, political, and ecological impact of the transition. Actors can pool resources, combine different capabilities and strategic objectives, gather multiple perspectives on the nature of the problem, and achieve an amplifying effect in their organizations or social environments. Addressing transformation as a collective effort also helps reconcile the uncertainties associated with the complex and systemic nature of the challenge while seeking an impact on sustainability.

These strategies aim to go beyond simply enabling collaboration by bringing people together or coordinating different activities and tasks. They focus on designing mechanisms, structures, and approaches for radical collaboration. Multi-stakeholder co-creation and participation spaces can contribute to this goal. These spaces bring together diverse actors from different sectors, including the public sector, private sector, civil society, academia, and media. By including different perspectives on sustainability, knowledge, and experiences, the debate is enriched, allowing for the generation of more robust and inclusive solutions. This approach improves the effectiveness of urban sustainability projects, particularly those with ambitious goals. These spaces also facilitate transformative social learning, promote social change, and lead to collective action towards the common goal of sustainability, contributing to systemic action.

However, these groups must adhere to the principles of a just and inclusive transition, being aware that co-optation and abuses of power may occur, as in any participatory process. It is important to include measures to prevent such issues. This involves creating a space for dialogue, reflection, and learning, ensuring fair representation and voice for diverse groups in collectively shaping knowledge, roadmaps, projects, and solutions. The importance of these processes lies in the fact that it is essentially people and their synergies who can truly achieve transformative change in our cities and territories.

This guide is particularly relevant in cities and contexts with little participatory tradition, where decision-making processes related to the transition toward sustainability have rarely been addressed collectively. It considers the unique characteristics of these cities and territories without dwelling on the precautions or obstacles in governance that these contexts (lacking participatory experience or tradition) may present. Instead, we emphasize the added value that social, academic, political, and institutional willingness to work differently brings to these contexts to generate change through social innovation initiatives.

This approach does not seek to provide a single, rigid formula, but rather a flexible and adaptable framework that can be adjusted to different contexts. Each situation presents unique particularities that require personalized solutions adapted to its specific environment. It is important to adjust this approach to the realities and specific needs of each context, as well as to the needs of each system and the actors involved. By avoiding standard solutions, greater effectiveness, relevance, and long-term sustainability can be achieved in promoting transformation towards a more sustainable future.

The guide presented in this document, as well as the knowledge of the authors, is considered a flexible and constantly evolving work. We have no doubt it will be enriched through experience and its use in various contexts. As authors, we would greatly appreciate the opportunity to learn about your experiences and interests regarding this guide.

BASIC ELEMENTS

CONCEPTS & TERMS

This section aims to simplify the complexity of the guide and the process by defining concepts and terms that will be commonly used, including their acronyms.

CONCEPTS

→ **Transition Roundtable (TR):** A participatory governance approach where diverse actors collaborate on a city or system's transition to sustainability. It seeks representation from various profiles and areas of action while ensuring the group's operability. Over several sessions, whose number and duration depend on the TR's ambition, new ways of doing, thinking, and organizing in a city are fostered, leading toward a paradigm shift to achieve sustainability. A steering core group manages the TR, guiding and facilitating the process, aiming to co-create a roadmap and implement demonstrative projects derived from it.

→ **Steering Group (SG):** The team guiding the TR's proper development. It is responsible for defining preliminary TR objectives, conducting system analysis, establishing the initial list of actors, planning and convening sessions, and providing methodology. It can comprise academic institutions, public administration, other social institutions, or preferably a representation of all. These multidimensional coalitions are fundamental as they provide initial support, mediation,

sustenance, and protection for collective experimentation. However, after learning and development, the TR should be able to operate independently without the SG if TR members consider it necessary and viable.

→ **Multi-Stakeholder Approach:** Throughout this manual, actors participating in the TR include the public sector, private sector, civil society, academia, and media. This approach recognizes the importance of having diverse perspectives, knowledge, and resources represented in a process or project. It allows for greater inclusion, diversity of ideas, and more robust solutions. By involving different actors, the aim is to strengthen the legitimacy, equity, and sustainability of actions undertaken.

→ **Constitutional Statutes:** Provide formality, solidity, and commitment to the group, fundamental aspects for a TR. They address ideological and formal aspects. Like the Roadmap and TR, they should be agreed upon and considered as continuously evolving. A standard structure for TR statutes could include: (1) Group objectives; (2) Commitments and values; (3) Formal and legal aspects, such as group access, participation, communication, or data handling; (4) Initial working group members and their functions within the TR; and (5) Structure and tasks by responsible parties, including the SG, within the TR.

→ **Roadmap:** A detailed strategy for achieving desired objectives based on a collective, clear, and consensual vision. It is reflected in a basic document that evolves continuously within the TR. A standard Roadmap structure should include: (1) A system background and issues to address; (2) Process objectives; (3) TR members and functions; (4) Demonstrative projects with tasks and responsibilities; and (5) A work plan and project schedule.

→ **Demonstrative Projects:** “Transition experiments” derived from the Roadmap. These projects, co-created over different sessions among stakeholders, are intended to be improved and scaled, eventually replacing dominant practices and unlocking new solutions that accelerate the transition. They can serve as models for larger projects and as a basis for public or private policy development. Demonstrative projects should be realistic and implemented with long-term sustainability ambitions. Given the urgency of climate problems, they should motivate institutionalization and integration, avoiding getting stuck in an experimentation stage.

→ **Demonstrative Project Committees:** Specialized working groups formed within the TR to develop Demonstrative Projects. They comprise TR members who volunteer based on interest or expertise, complemented by key individuals not yet part of the TR. They define project objectives, goals, and development strategies, reflected in a detailed and realistic work plan considering technical, economic, social, and environmental aspects, as well as potential obstacles and adverse effects.

TERMS

→ **Facilitation:** Fundamental for the Transition Roundtable's success. The facilitation team establishes an atmosphere of trust and respect, encourages equitable participation, and leads activities stimulating individual and collective reflection. It includes innovative activities, adding dynamism to the group, fostering participation and reflection, and guiding the group to define concrete actions and make decisions.

→ **System:** A complex set of interconnected or interdependent components working together, including people, organizations, technologies, infrastructure, policies, and cultural norms. Systems theory recognizes these components as deeply interrelated, with changes in one affecting others. In this guide, "system" generally refers to components in a field that can be influenced, such as energy or food systems.

→ **Reflexivity:** A transversal, iterative, and critical element in the TR's work plan. It promotes collective reflection, learning, and critical review through specific participatory spaces, strategies, and activities. Monitoring and evaluation of the TR should accompany this reflexive approach. Academia can play a fundamental role in providing knowledge and tools to strengthen reflexivity and rigorous analysis of TR results and processes.

→ **Social Justice and Inclusivity:** Key pillars for developing a city's sustainability strategy. This approach aims to accelerate transitions responsibly, formulating strategies that leave no one behind and prioritize well-being, social justice, and inclusivity. The TR should advocate for balanced representation in terms of gender, age, origin, and predominant minority groups, while incorporating viewpoints and voices typically excluded from these processes. Opposing voices, when possible, should not be excluded.

→ **Systematization:** A process of collecting, analyzing, and organizing experiences, practices, and learnings acquired throughout the process reflectively and systematically. It involves documenting actions, results, impacts, and lessons learned to generate knowledge and enhance understanding. This process should begin in the preparation stage and continue through follow-up, promoting reflexivity, communication of actions and processes, and internal and external group transparency.

→ **Stakeholders:** Individuals, groups, or organizations with an interest in, concern about, or affected by a particular project or process. They can be directly or indirectly impacted by its outcomes, activities, or decisions, and they often have the power to influence or be influenced by the process. Stakeholders are TR participants and may include investors, government agencies, community groups, private companies, organizations, associations, individuals, and the general public.

→ **Funding:** TR work unfolds through voluntary member participation. A budget facilitates group operations, actions, and processes. While fundraising through calls or public projects is valuable, public-private collaboration is emphasized. Universities and research centers can play a fundamental role, as their innovative and experimental nature can foster transition processes within research project frameworks.

METHODOLOGY

→ **System Thinking:** An approach to analyzing and understanding complex systems, focusing on relationships between system parts and their interactions to generate global behavior. It is used in various fields and directly relates to finding solutions for highly complex problems. This approach identifies behavior patterns and relationships in complex systems, seeking solutions that address specific problems while considering their impact on the entire system.

Studying relationships between system elements uncovers the structure and root causes of observed behaviors and problems, offering more complete and innovative solutions to complex challenges.

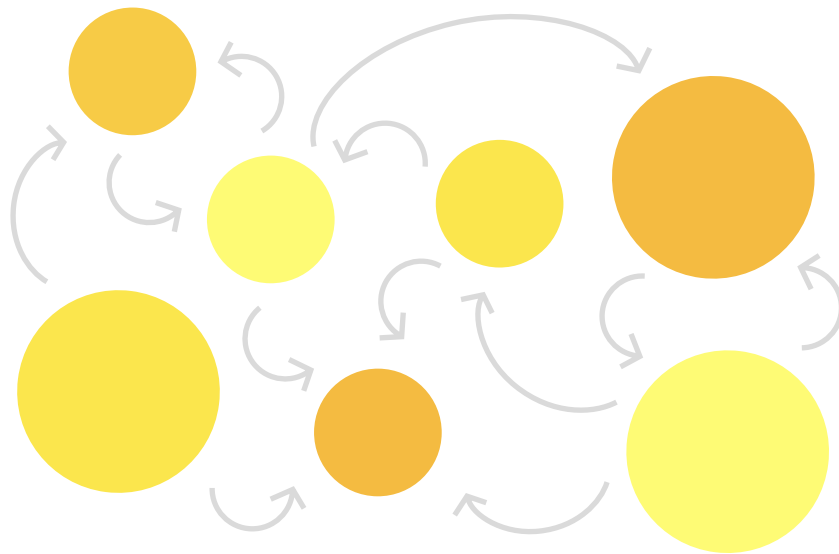


Figure 1. System Thinking.

→ **Design Thinking:** A creative, user-centered methodology for solving problems requiring non-linear approaches and generating innovative solutions. It focuses on deeply understanding user needs to develop effective and appealing solutions, emphasizing collaboration, creativity, and experimentation. The process includes observation and empathy with users, problem definition, idea generation, prototyping, and iteration based on user feedback. This iterative process allows teams to refine solutions as they gain greater knowledge and understanding of users and problems.

While popular in product and service design, Design Thinking is also used in business management, education, healthcare, and sustainability.

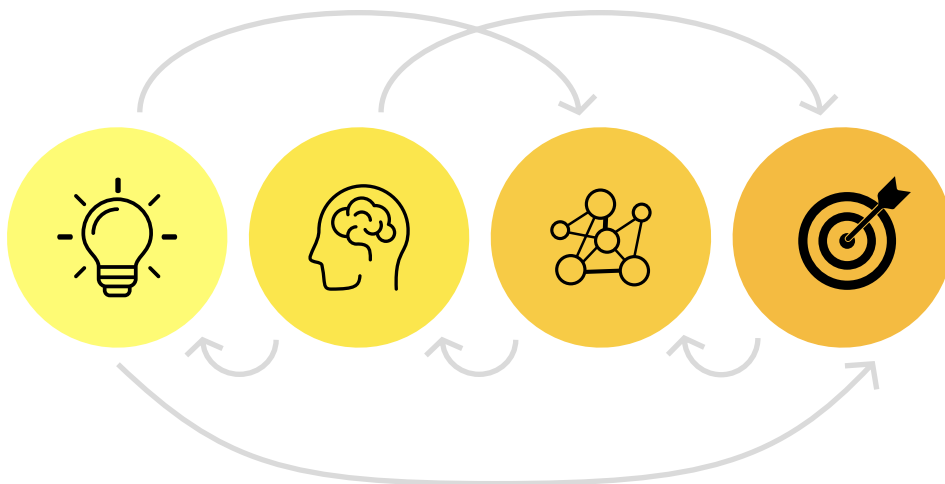


Figure 2. Design Thinking.

→ **Transition Thinking:** An approach based on System Thinking that recognizes the need for profound and systemic changes to address complex current climate challenges. It understands change processes as uncertain and complex, involving multiple interconnections and feedback loops, moving away from linearity and predictability. This approach is based on the understanding that current systems are unsustainable and require transformation towards more equitable, regenerative, and resilient systems. It implies a paradigm shift from maximizing economic growth to a more holistic, sustainability-focused perspective, achieved through social, organizational, economic, cultural, and political changes. Transition Thinking considers the active participation of various actors affected by the change process, seeks ways to involve affected communities significantly, and promotes experimentation, innovation, and continuous learning.

It aims to identify and promote transformative solutions and practices, focusing on identifying barriers, drivers of change, path dependencies, and possible transition pathways leading to desired transformation. Additionally, it considers the need to mitigate risks and negative impacts of change and seeks ways to ensure the sustainability and resilience of systems undergoing change.

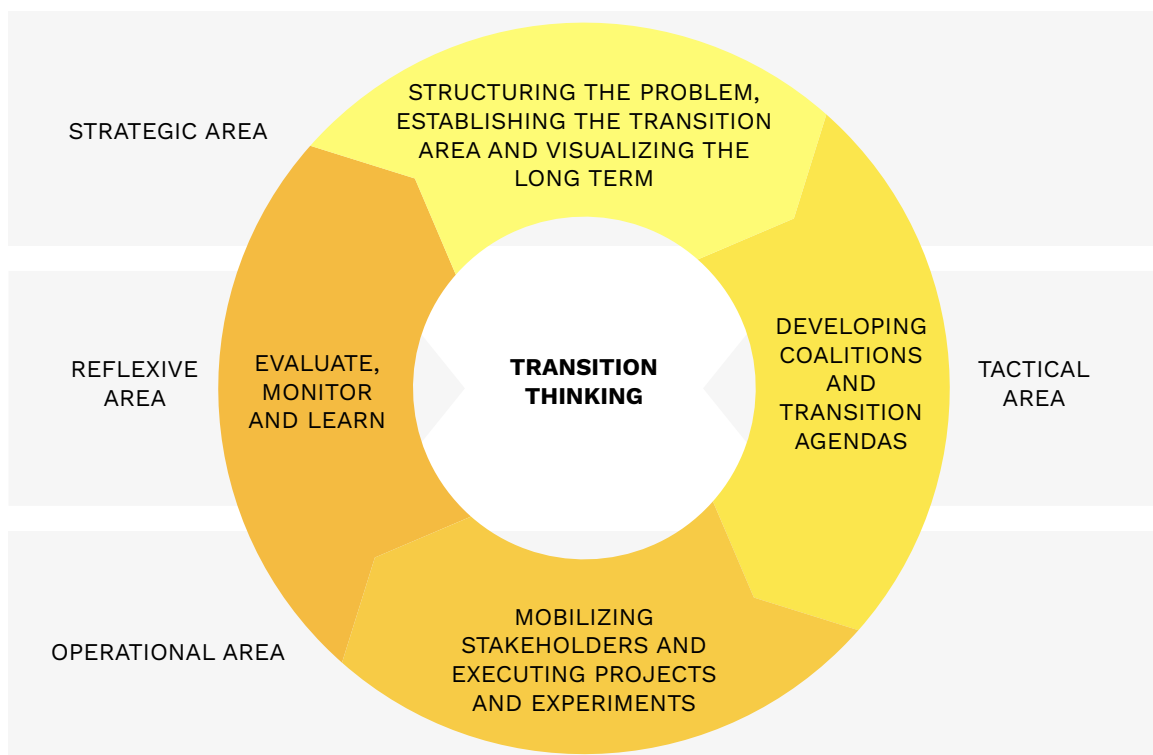
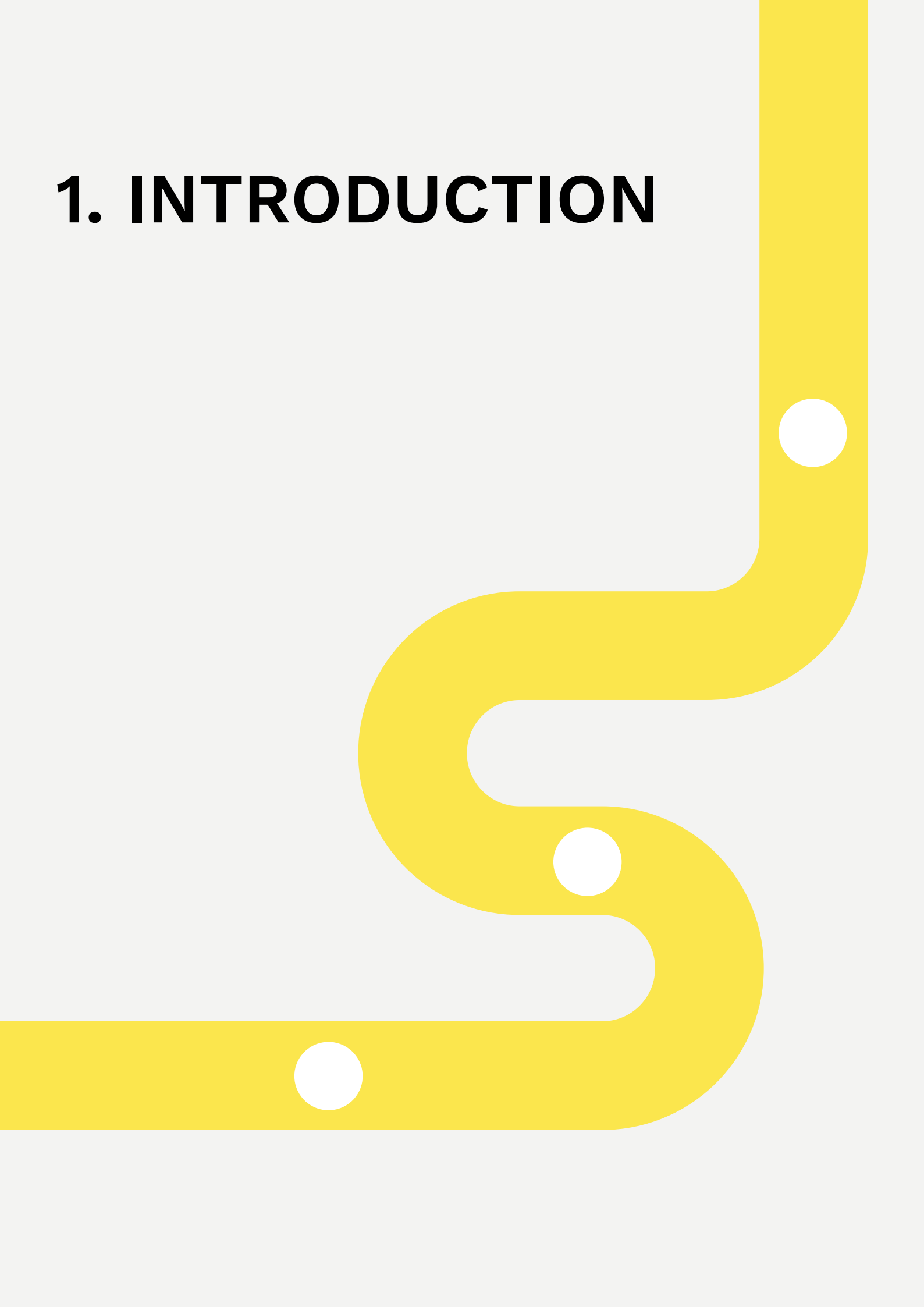


Figure 3: Main purposes. Designed by authors based on Loorbach, 2010.

1. INTRODUCTION



The purpose of this section is to reduce the complexity of the manual, and therefore of the process, by defining concepts and terms that will be commonly used.

WHAT?

This manual aims to facilitate the design and implementation of Transition Roundtables (TR) with two main purposes: 1) To create experimental multi-actor governance instruments for collective reflection that can be effective and long-term, 2) To apply a tool to co-create a roadmap for sustainability transition. These TRs are understood as communities of practice or spaces for learning, exchange, and co-production of knowledge, which constitute innovative initiatives themselves.

This publication emerges to support sustainability initiatives often associated with key territorial and urban instruments and policies, such as national, regional, and local strategic policies and sustainability plans carried out by individuals or entities wishing to use a multi-stakeholder model. It is also of great interest as support for developing initiatives linked to the Urban Agenda Platform and Mission-oriented policies (e.g., the European Union Mission on Climate-Neutral Cities).

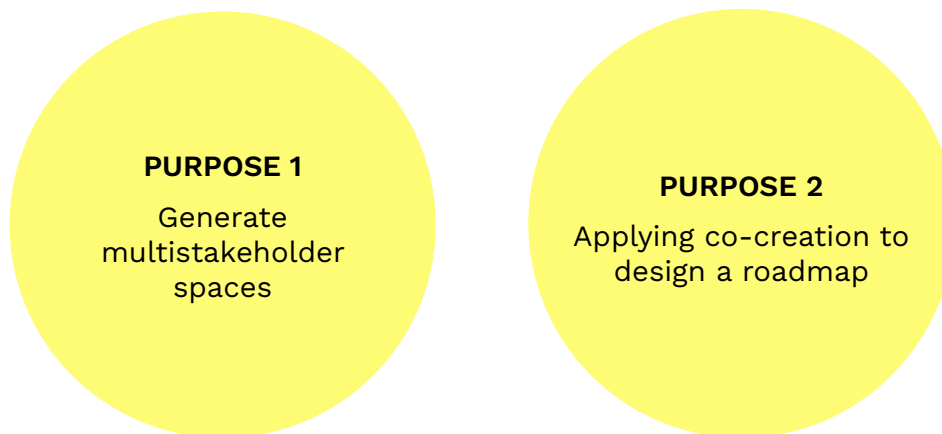


Figure 4. Purposes of this Guide.

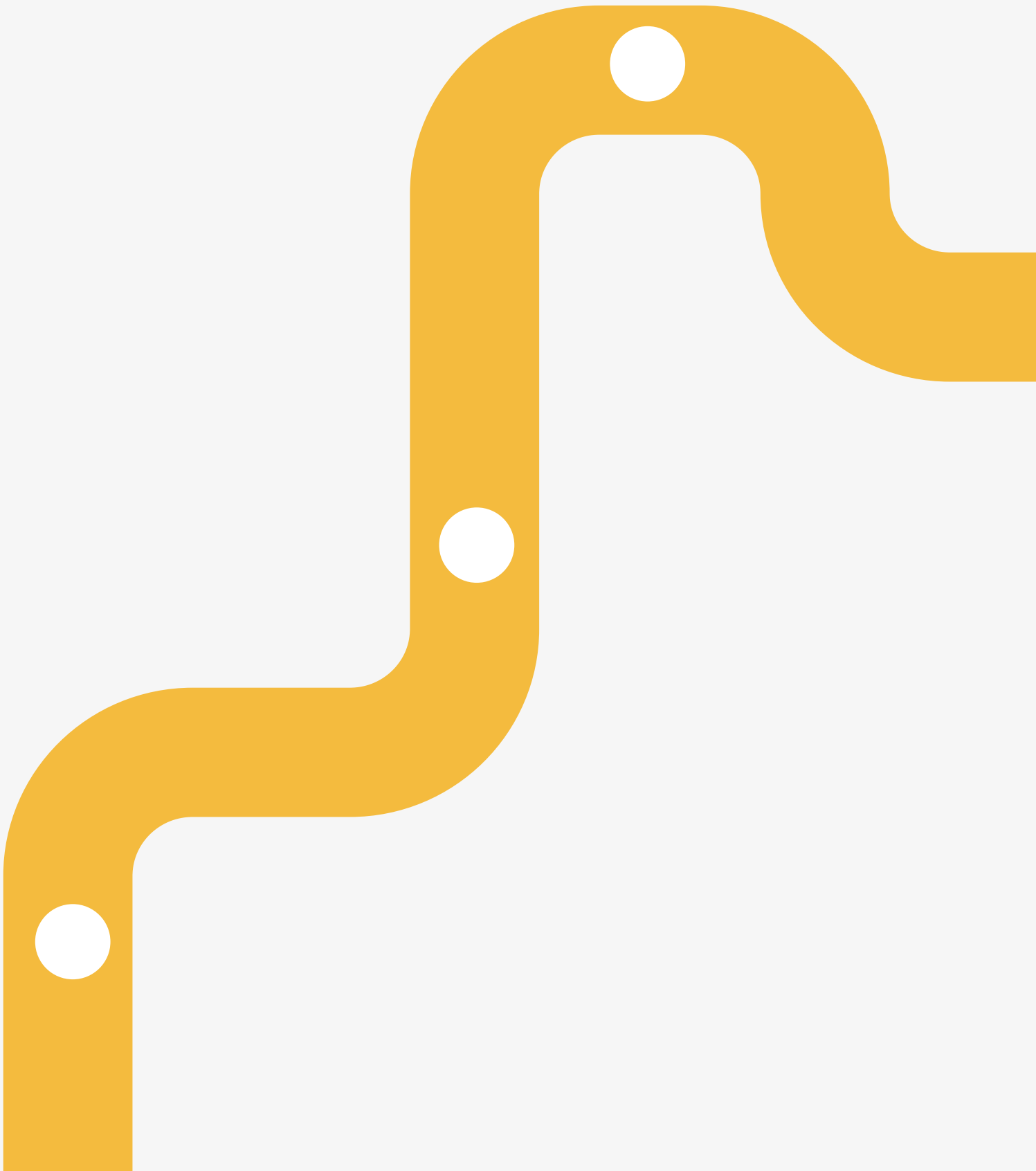
WHO?

We start from the premise that sustainability transition and system transformation are favored and accelerated when diverse actors beyond public administration are involved. Therefore, this manual is specifically aimed at change agents seeking practical methodological tools to launch initiatives that extend the search for and implementation of sustainability solutions. These agents may be part of public administration, a consortium, a partnership, or an initiative aimed at ultimately transforming the system itself.

HOW?

To seek solutions, we propose a journey that begins by collectively systematizing various challenges, identified with a bottom-up approach. The aim is to generate a detailed strategy for achieving desired sustainability goals from a collective vision, in the form of a roadmap. During the process, it is essential to connect proposed policies with specific innovative demonstrative projects. This approach addresses both challenges and solutions, not only in the long term, but also in the short term. All this is intended to overcome obstacles typically related to the lack of good governance in city decision-making processes, derived from various reasons including democratic deficiencies (such as lack of representativeness, inclusion of citizens in decision-making, and dependence on certain political sectors) and obstacles associated with changes due to political cycles.

2. MULTI-STAKEHOLDER CO-CREATION



1. PREPARATION



STEP 1 Establishment of the Steering Group (SG)



STEP 2 Understanding the System



STEP 3 Stakeholder Mapping

2. CONSTITUTION



STEP 1 Establishing the Transition Roundtable (TR)



STEP 2 Planning the Sessions

3. ROADMAPMING



STEP 1 Group Construction



STEP 2 Communication



STEP 3 Context



STEP 4 Visioning



STEP 5 Searching for Strategic Guidelines



STEP 6 Identification of Demonstrative Projects



STEP 7 Committees



STEP 8 Roadmap Closure

4. FOLLOW-UP



1. PREPARATION

The objective of this phase is for the steering group to analyze and understand the system.

- **STEP 1** Establishment of the Steering Group (SG)
- **STEP 2** Understanding the System
- **STEP 3** Stakeholder Mapping

Who is responsible for this phase?

The objective of this phase is for the steering group to analyze and understand the system.

STEP 1

ESTABLISHMENT OF THE STEERING GROUP (SG)

The SG composition typically reflects **a strategic mix of actors who are experts in the system** or subjects being addressed, depending on the TR's objectives and context. This manual proposes an SG that includes at least three sectors: the public sector, academia, and civil society.

- The **public sector**, to provide formality and direct connection with urban realities and policies
- **Academia**, to protect the process's independence from external interests and ensure comprehensive consideration of existing objective knowledge about the system or subjects addressed. Academia can also lead reflexivity processes, monitoring and evaluation, and systematization.
- **Civil society**, to balance the SG, through a committed representative, such as a foundation or non-governmental organization directly related to the system or subjects addressed.

ROLES OF THE STEERING GROUP

The SG stands out for its greater involvement, commitment, and work compared with other TR actors. It provides stability throughout the process and is considered the driving force behind the TR. Additionally, they are responsible for identifying actors and defining the group and initial work plan (which will be presented openly to the TR for reconsideration), as well as for systematizing the process and pooling physical, human, and economic resources at the beginning of the TR.

Moreover, the SG is tasked with ensuring transparency and good communication, as well as the commitment and willingness of the different actors who are members of the TR. In addition to the above, the role of the SG includes safeguarding relationships among the individuals comprising the TR and ensuring equal relationships and participation.

Other functionalities will be determined according to the needs of the group forming the TR, such as aspects related to the dissemination of agreements reached or the activities themselves. It is also the responsibility of the SG to draft preliminary statutes, although the content and structure must be agreed upon and validated openly and participatively by all TR actors, promoting ownership of the statutes and commitment to them by TR members.

The SG should facilitate the process without assuming total control or predetermining outcomes. Instead, it should focus on building trust among actors and with the process itself, fostering a transformative TR. The SG must cultivate impartiality and openness to reflection and continuous learning. Both objectives and the initial work plan should be considered as continuously evolving. Ongoing collective reflection should be extended as a persistent element in the TR's work plan, giving rise to specific spaces, strategies, and activities for this purpose.

The SG must maintain the premise that both the objectives and the initially defined work plan must be considered under continuous construction and improvement. Therefore, the ongoing collective reflection should not be relegated to an anecdotal and internal aspect, but should be extended as an element in the work plan of the TR itself, giving rise to specific spaces, strategies and activities for that end. Given the importance of this point, it will be expanded in section 3.



Figure 5. Goals of the Steering Group (SG).

STEP 2

UNDERSTANDING THE SYSTEM

Assembling a TR requires flexibility and adaptation to changing needs rather than applying a rigid recipe. A holistic understanding of the system (energy, food, mobility, water, etc.) brings the transition experience closer to achieving profound, context-appropriate, and effective long-term results. This understanding should encompass the context, actors, topics addressed, and territorial scales affected (region, city, municipality, and neighborhood).

Initially, approach this analysis through:

1. Study of academic literature and relevant regulatory and documentary frameworks.
2. Compilation of a list of all actors involved in the system.
3. Engaging in conversations or conducting interviews with these actors to elucidate implicit relationships and expectations and identify new strategic actors.

➤ SEE TOOL 1. System Analysis - p. 50

➤ SEE TOOL 2. Actors Mapping - p. 51

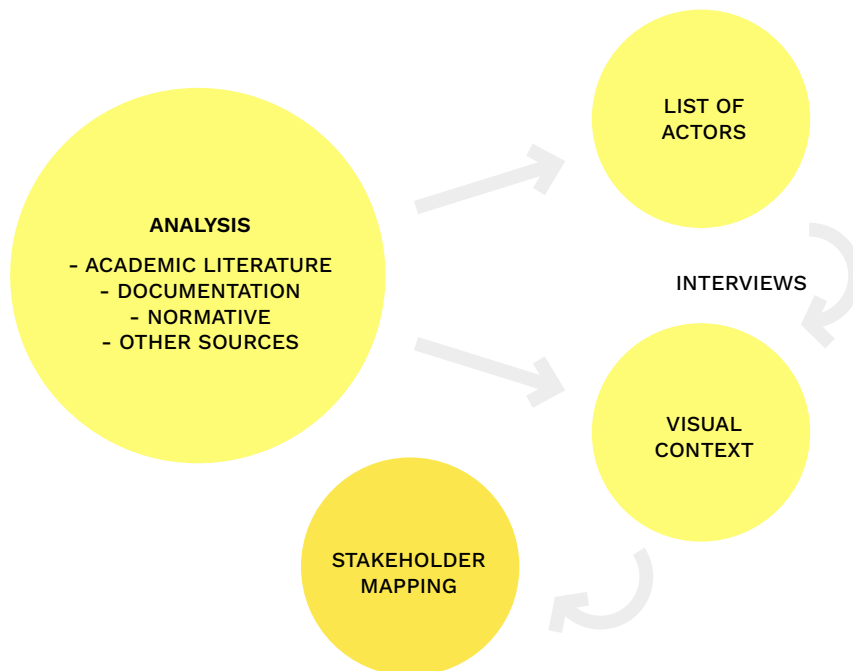



Figure 6. Understanding the System.

STEP 3**STAKEHOLDER MAPPING**

Based on the system analysis and preliminary conversations, create an initial list of actors for the TR. To analyze this universe of actors:

1. Evaluate the initial list and place actors on a sociogram according to their interest in participating in the TR (low to high) and their influence on the system (low to high).
2. Map actors both in favor of and against the change required for the transition to sustainability.
3. Identify front-runners: actors with exceptional enthusiasm and willingness to support the system's transition to sustainability
4. Include actors from the five helices of innovation: academia, public sector, private sector, civil society, and media.
5. Group actors into clusters or associations, establishing relationships between them for further analysis and definition of intermediaries or key actors.
6. Include actors at different levels: local, regional, and national.
7. Ensure representation of social, political, and administrative actors alongside technological and specialized actors to promote a fair and inclusive transition strategy.

 SEE TOOL 3. Actor Assessment - p. 52

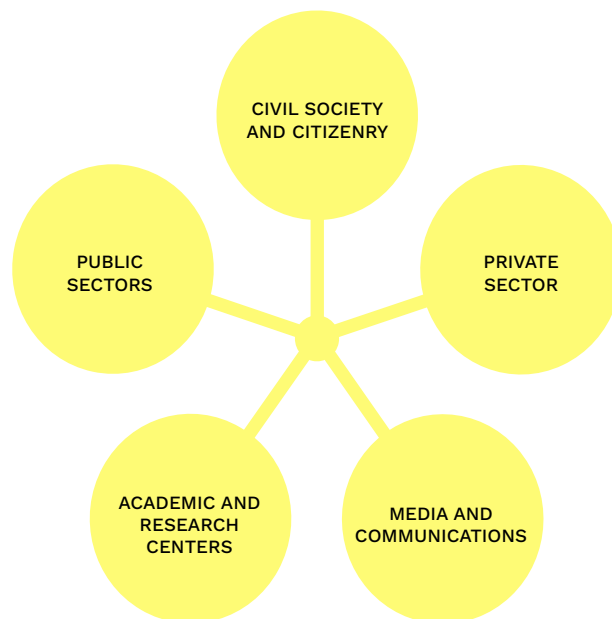


Figure 7. Five Helices of Innovation.

PREPARATION PHASE

ADAPTATION TO CONTEXT: Understand the social, economic, cultural, and environmental dynamics specific to the region. Adapting to the context also enables the utilization of specific opportunities and advantages that may exist in a particular area. This may include the use of local natural or energy resources, identification of key economic sectors, or strengthening the participation of specific local actors in the transition process. This allows for a more effective response to existing regulatory and policy frameworks. This entails aligning transition strategies with relevant policies and regulations, which can hinder or facilitate the implementation and scalability of proposed solutions. By considering local challenges, resources, and opportunities, the likelihood of achieving significant and sustainable results on the path to sustainability is increased.

IMPORTANCE OF FACILITATION: The facilitation team is vital in creating an appropriate atmosphere for co-creation, managing group dynamics, promoting equitable participation, and stimulating creativity and innovative thinking. They are also responsible for guiding the group toward decision-making, delving into problems, identifying challenges, seeking solutions, and defining concrete actions.

EXPERIMENTATION IN THE URBAN CONTEXT: Embrace new, innovative approaches rather than relying solely on tried-and-tested strategies. Experimentation allows for iterative and adaptive exploration of solutions to complex sustainability challenges. This necessitates positioning cities as innovation hubs and primary catalysts to enable the takeoff and acceleration of transitions.

SYSTEM INERTIA: Ensure TR relevance and support within institutional policies. Address the tendency to focus on technological aspects by intentionally including diverse perspectives and social considerations.

INDEPENDENCE AND TRANSPARENCY: Establish mechanisms to safeguard against undue influence or co-option, particularly in contexts where participatory practices are not well-established. Encourage diverse perspectives and involve academia to provide neutral monitoring and oversight.

2. CONSTITUTION

During this phase, the transition table is assembled, and meetings are planned.

- **STEP 1** Establishing the Transition Roundtable (TR)
- **STEP 2** Planning the Sessions

Who is responsible for this phase?

The steering group, in a balanced manner.

STEP 1

ESTABLISHING THE TRANSITION ROUNDTABLE (TR)

Following the actor mapping and interviews, select a viable number of members to ensure a balanced representation of the described categories and characteristics. This number may range from 20 to 25 participants for an initial working group, depending on process capacity and the facilitation team. Members participate as representatives of specific institutions or organizations, contributing ideas, perspectives, information, proposals, knowledge, and interests of their organizations. This approach avoids reliance on individuals and fosters continuity of the transition table over time.

Select actors based on their role and influence capacity as representatives of institutions and organizations from different innovation helices. Additionally, other hybrid or intermediary actors representing entities capable of connecting actors from different categories (e.g., public-private innovation centers or foundations, may be included to provide flexibility in the design of the transition table. To ensure a multi-scale logic in the transition table and process, it is also necessary to identify and specify actors within different governance levels. Special attention should be paid to power relations among them and to ensure diversity representation mechanisms (gender, age, ethnicity, social class, etc.). Failing to do so risks working on a transition that overlooks the most social aspects and protection of the most vulnerable sectors in favor of more technological aspects, resulting in a less fair and inclusive transition strategy, contrary to the intended purpose of such participatory governance instruments.


Aim for a manageable group size, but remain flexible based on circumstances. Allow the chosen actors to validate and potentially expand the participant list in the first work session. Keep the list open throughout the process to include new actors based on relevance or interest.

STEP 2

PLANNING THE SESSIONS

After analyzing the socio-technical system, stakeholder universe, and selecting TR actors, plan the sessions as follows:

1. Create and share a document summarizing the system analysis and stakeholder universe with all actors.
2. Establish roles within the SG and others, considering leadership roles, managing meeting schedules, internal and external communication, meeting minutes, session design, designing visual materials for sessions if applicable, session moderation and facilitation, time management, securing physical meeting spaces (if in-person), sourcing speakers, and fundraising.
3. Plan and schedule sessions in agreement with actors, developing a proposed timeline including the number of meetings, duration, and frequency. TR actors will validate this planning.
4. Design sessions. The SG can either define the entire process in advance or have a preliminary script to adapt as the sessions progress. Adhere to a set number of sessions determined by the SG to prevent the process from dragging on excessively. Share the proposal with the group or communicate the agenda for each meeting at the beginning of the session or when sending invitations.
5. Establish mechanisms for public dissemination to promote the role and activities of the TR in the city.

 SEE TOOL 4. Working Plan - p. 53

CONSTITUTION PHASE

COORDINATION AND COOPERATION: Ensure coherence and effectiveness of transition policies and measures by involving various actors and levels of government. Establish fluid communication channels and collaboration between governance levels to exchange knowledge, resources, and best practices. View relationships between governance levels as horizontal and complementary rather than hierarchical.

DISSEMINATION AND OUTREACH: Communicate results and progress effectively to the general population and specific interest groups. This raises awareness, engages citizens, facilitates communication between governance levels and interest groups, and improves decision-making efficiency.

3. ROADMAPMING

STEP 1 Group Construction

→ MEETING 1. Preliminary meeting with actors

STEP 2 Communication

→ MEETING 2. Communication

STEP 3 Context

→ MEETING 3. What context are we working in?

STEP 4 Visioning

→ MEETING 4. Visioning

STEP 5 Search for Strategic Guidelines

→ MEETING 5. Search for Strategic Guidelines

STEP 6 Identification of Demonstrative Projects

→ MEETING 6. Identification of demonstrative projects

STEP 7 Committees

→ MEETING 7. Definition of demonstrative projects

→ MEETING 8. Deepening into demonstrative projects

→ MEETING 9. Practical elements to implement the project

→ MEETING 10. Return to plenary

STEP 8 Roadmap Closure

→ MEETING 11. Reflexivity

3. ROADMAPPING

In this phase, the collective work begins, which is the main element of the process. The practical process of creating the roadmap for the transition to sustainability has been divided into five steps or phases with ten meetings:

- **STEP 1** Group Construction
- **STEP 2** Communication
- **STEP 3** Context
- **STEP 4** Visioning
- **STEP 5** Search for Strategic Guidelines
- **STEP 6** Identification of Demonstrative Projects
- **STEP 7** Committees
- **STEP 8** Roadmap Closure

Note that this process should be flexible and adaptable to the needs of the group and context. The order and number of activities are recommendations based on experience and literature.

It is highly beneficial to have a facilitation team for the meetings to provide dynamism and facilitate creativity and idea generation, ensuring distributed and horizontal participation. Consider using digital tools like Miro (www.miro.com) or Mentimeter (www.mentimeter.com) or analog tools like post-its and flip charts

Who is responsible for this phase?

The entire TR (SG and actors from the 5 helices).

STEP 1

GROUP CONSTRUCTION

During this phase, outline the specific problem to be collectively addressed. Share the TR objectives and knowledge obtained from the system analysis to establish a common foundation for work. Define the statutes that will shape the group. Given that most participants are unfamiliar with each other, invest effort in facilitating introductions and establishing relationships to build a team.

Begin each meeting with a brief recap of progress made in the previous meeting.

MEETING 1**PRELIMINARY MEETING WITH ACTORS**

This initial gathering serves as an introductory and motivational session. The experience of actors during this first meeting is crucial for generating interest and anchoring their commitment to the group and process. Focus on creating a welcoming atmosphere with a celebratory environment.

Consider inviting key figures from the municipality or local government, as well as individuals relevant to the sustainability transition or who have participated in other transition processes to share their experiences.

To express gratitude for voluntary work and foster relationships among participants, consider kicking off the process with a special event, such as a dinner or lunch.

The meeting consists of three parts:

1.1. Inspirational Talk(s)

Share experiences or show support from personalities or local government for the initiative.

1.2 Presentation and Team Building

- General objectives of the group and the process
- Members of the TR and the organizations they represent


Validate and complete the goals and composition of the TR with group members. Use tools like post-its or online platforms like Miro to facilitate this process.

1.3 Group Visioning

Work on the identity of the group and the process through individual and collective reflection on questions such as:

- What are the objectives of each participant regarding the TR?
- What motivates us to participate in the TR?
- What can participants contribute?
- What do they expect the group/TR to provide them with?
- What are their expectations regarding the work of the TR?
- How can it be linked to city policies or other governance spaces?

This reflection helps align the process with individual actor expectations and position the TR as an entity with its own identity within city policies.

 SEE TOOL 5. Presentation - p.54

STEP 2**COMMUNICATION**

After defining the group, context, and system, this phase focuses on formalizing the group's identity. This includes basic aspects like the group's name and more complex ones like its communication strategy. Establishing an attractive aesthetic that unifies a joint narrative can facilitate the dissemination of actions and motivate collaborating organizations.

Consider engaging a professional team or communication and design consultancy to help shape and implement the group's needs.

MEETING 2**COMMUNICATION****2.1 Presentation**

Deliver an inspiring presentation, talk, or workshop based on needs identified in the previous phase. Consider including communication experts.

2.2 Reflexivity

Reflect on the group, its strategy, and role in society. Define the group's name and mass communication strategy by addressing:

- Who are we?
- Who is our target audience?
- How should we communicate? Through what means?
- Do we need an outsourced communication plan?
- How can we achieve citizen participation?
- How should we communicate our participation as entities?
- What graphic identity are we seeking?

 SEE TOOL 6. Communication - p. 55

STEP 3**CONTEXT**

This session aims to leverage stakeholders' knowledge of the system context as a baseline for building the strategy. It's crucial given the diversity of people involved in the TR and their varied perspectives on the system. Strengthening this knowledge helps all actors engage and empowers those with less explicit knowledge, bringing in new insights that are not commonly considered, such as those from minority groups or more tacit or practical knowledge. Emphasize to participants the importance of different perspectives, as this adds richness, variety, and fairness to the narrative, contributing to a more systematic approach.

MEETING 3**WHAT CONTEXT ARE WE WORKING IN?****3.1 Validation of the Statutes**

The SG drafts these statutes after the initial meeting, defining:

1. Who we are.
2. Group objectives and roadmap objectives (ambition, mission/vision).
3. Group functions (topics to address, level of reflection, project definition/ implementation, monitoring, accountability, etc.).
4. Group structure (secretariat, SG/coordinator, spokespersons, external advisors).
5. Timeline with meeting dates.

Stakeholders validate and complete this data.

3.2 System Analysis

The SG presents the knowledge built through system analysis and stakeholder mapping. Stakeholders can (and should) complete this knowledge in a participatory manner.

This creates a common ground for understanding and collaboration, allowing all participants to contribute equitably and enrich each other. It promotes effective communication and informed decision-making in a horizontal, collaborative environment.

 SEE TOOL 7. System diagnosis - p.56

STEP 4**VISIONING**

Developing a future vision in a TR is not just a conceptual exercise, but a fundamental tool for guiding, inspiring, and shaping an effective and sustainable collective process. It provides a clear purpose, guides decision-making, motivates participants, maintains long-term focus, facilitates external communication, stimulates innovation, and fosters commitment from multiple stakeholders. This vision acts as both a guiding light and a magnet, attracting and uniting people in pursuit of a more sustainable and desirable future. The TR's holistic vision enables working with future scenarios and evaluating their implications and consequences.

MEETING 4 VISIONING**4.1 Presentation**

Deliver an inspiring presentation, talk, or workshop based on needs identified in the previous phase. Consider including experts on the system context.


4.2 Future Vision

Invite the group to collectively imagine and describe a desired future for the area within a certain timeframe. Ask:

How do we envision the city or system in 2030? And in 2050?

The facilitator team should strongly encourage participants to think about an ideal scenario in terms of sustainability, quality of life, equity, policies, and relationship with the environment.

Consider using tools like flip charts or virtual whiteboards (e.g., Miro) to record and share the future vision among participants.

 SEE TOOL 8. Future Vision - p.57

STEP 5

SEARCH FOR STRATEGIC GUIDELINES

After system analysis and building a collective vision of existing needs and desired future, identify necessary actions, policies, and strategies to achieve this future, considering existing obstacles and barriers. Start with the long-term vision or goal and work backward to determine necessary actions and policies. This strategic, participatory approach to planning facilitates defining steps to achieve the desired future more effectively.

MEETING 5 SEARCH FOR STRATEGIC GUIDELINES

5.1 Presentation

Deliver an inspiring presentation, talk, or workshop based on needs identified in the previous phase.

5.2 What Barriers Exist to Achieving the Future Vision?

Examine the current system state and identify challenges or barriers preventing the achievement of the desired future vision. Consider at least four perspectives: social, political, economic, and technological. Group these challenges and barriers by themes to facilitate defining strategic lines.

5.3 Prioritization of Strategic Guidelines


Define several strategic lines based on the previous analysis. Create clusters and establish relationships among them, following a systemic perspective.

5.4 Identification of Actions and Measures

Generate concrete ideas and proposals for actions and measures to overcome challenges in each strategic line and move towards the vision. Important considerations include:

- Encouraging debate and collaboration among participants.
- Prioritizing the most relevant and strategic actions.
- Recording and categorizing actions by relevance and feasibility.

Address any questions or need for clarification through talks or short workshops by invited experts in subsequent meetings.

 SEE TOOL 9. Search for Strategic Guidelines p. 58

STEP 6**IDENTIFICATION OF DEMONSTRATIVE PROJECTS**

At this stage, it's crucial to commit to ideas that address identified needs and lead towards a more sustainable future. These ideas become transition experiments or demonstrative projects that show how and in what direction change can occur in the city.

The main objectives of these projects are to learn through practical application. They must be: realistic, focused on concrete activities, capable of short-term implementation with the possibility of being scaled up and extended over time. The TR should be responsible for developing the strategy for these demonstrative projects.

In this manual, we will work with demonstration projects, but there are other methodologies that can be used. One of them is the project portfolio. In the context of a city's transition to sustainability, the project portfolio refers to the collection and management of all projects related to sustainability and sustainable development that are being implemented or planned in the city. The Bureau can implement its own projects (as in this manual) or work with existing projects in a city to bring coherence and establish overall strategic plans.

MEETING 6 IDENTIFICATION OF DEMONSTRATIVE PROJECTS**6.1 Presentation**

Deliver an inspiring presentation, talk, or workshop based on needs identified in the previous phase. If no specific needs were identified, consider inviting someone who has been part of a TR elsewhere to share their experience.

6.2 Identification and Prioritization of Demonstrative Projects

Choosing demonstrative projects can be challenging. Facilitate dialogue and consensus among participants who may have different priorities or ideas. Follow these steps:

1. Conduct a brainstorming session for each strategic line, where participants contribute and explain ideas for projects addressing the challenges of the strategic lines.
2. Group or combine proposed projects under similar themes.
3. Prioritize projects based on available resources (human, financial, etc.) and feasibility. This prioritization should always arise from collective agreement.

Ensure that selected demonstrative projects are diverse and cover various areas. This moment is crucial for ensuring a fair and inclusive transition by including projects and approaches based on social values. Remember that the transition should encompass economic, political, social, and cultural change, not just technological aspects. Consider various geographical scales, from individual to city-wide levels.

6.3 Selection of Projects

Choose the demonstrative projects to be developed by the group. Select a manageable number of projects; for a group of about 25 people, 5 to 6 projects may be sufficient, depending on their magnitude and nature.

In subsequent sessions, form a committee around each project. Each committee will define project details collectively over three sessions.



STEP 7**COMMITTEES**

Committees are subgroups within the initial group that work specifically on each strategy or demonstrative project. Main group members volunteer to join committees based on their interests. They can join multiple committees, so ensure session times don't overlap.

Committees define the structure of each demonstrative project in as much detail as possible. Given available resources, the initial objective is to define the project rather than implement it. Each committee works on a project document over several meetings.

Choose a spokesperson to communicate with other committees and bring decisions and updates to the general TR. Other roles include the person responsible for drafting the document. Given the voluntary nature of the committee and TR work, SG members may be the only ones available to invest sufficient time and effort in this task.

As these projects are experiments, implement them on a small scale where effects can be measured. Monitoring and evaluation are crucial practices, as the objective is to learn from the experiment and foster an effective, lasting impact on the city's transition. Ideally, when a project proves fruitful (i.e., achieves desired results), it can be scaled up, deepened, or expanded.

- Scalability: Implement the project on a larger scale (e.g., expand from one neighborhood to multiple neighborhoods).
- Deepening: Learn as much as possible from the project within the same context, examining changes in culture, practices, and system structure beyond predetermined desired effects.
- Expansion: Replicate the project in a different context to compare results.

MEETING 7 DEFINITION OF DEMONSTRATIVE PROJECTS**7.1 Collective Validation**

The group should validate a document structure for the project proposed by the SG. Suggested document sections include: 1) Project description, 2) Justification and desired effects, 3) Previous related experiences in the city and lessons learned, 4) Short-medium-long-term goals, 5) Governance and coordination, 6) Roadmap with action axes and tasks, 7) Schedule (or timing or temporal roadmap), 8) Financing needs and sources

The document structure remains open for additional sections if the group deems it necessary.

7.2 Information Required for the Project

Committee members often lack all the required information. Visualize this lacking information by addressing two questions:

What do we want to know? How do we want to know it?

Create two columns, one for each question, and connect answers. The “how” may involve experts, similar initiatives, document reviews, citizen input, or inviting new people to the committee. The SG is responsible for ensuring this information reaches the TR.


 SEE TOOL 11. Project Information - p. 60

7.3 Previous Experiences

Brainstorm similar experiences in the city related to the project. This helps avoid duplicating efforts and ensures harmony with existing projects, promoting a more systemic approach. Some of these projects have been identified in meeting 2 (2.3).

7.4 New Actors

Brainstorm similar experiences in the city related to the project. This helps avoid duplicating efforts and ensures harmony with existing projects, promoting a more systemic approach. Some of these projects have been identified in meeting 2 (2.3).

 SEE TOOL 12. Stakeholders and actors to invite to the commission - p. 61

7.5 Spokespersonship

Select a project spokesperson responsible for connecting with other committees and facilitating communication. This person may convey project information to the TR in plenary sessions. The role should be communicative rather than labor-intensive.

MEETING 8 DEEPENING INTO DEMONSTRATIVE PROJECTS

8.1 Definition of Project Objectives

Define both quantitative and qualitative project objectives. While doubts may arise about achieving these objectives or the legitimacy to establish them, remember that these are preliminary and will be reviewed by technicians or specialists during project development to ensure viability.

Include subject experts in the committee to enhance document reliability and detail. If specific doubts arise, the SG can consult externally or invite relevant people to join a session for clarification.

8.2 Definition of Tasks and Their Temporality

Outline the project’s essential tasks to achieve goals and their corresponding timelines. This provides a comprehensive roadmap of actionable steps needed to accomplish project objectives within a set timeframe. These tasks may not be overly specific initially and, like the objectives, will undergo expert review before project implementation.

MEETING 9 PRACTICAL ELEMENTS TO IMPLEMENT THE PROJECT

9.1 Defining Practical Elements of the Project

Describe these elements in as much detail as possible. Important aspects for each task include:


- Management (how and by whom it is assigned, e.g., municipality, private sector)
- Financing (who will provide it - calls, initiatives, private financing)
- Resources and preparations needed (spaces, teams, materials, protocols, tools)
- Timing

Remember that experiments can also fail, and we must learn from failures as we do from successes; both are equally valuable for the transition. Focus on flexible approaches, place learning at the center, and value outcomes such as social learning. This approach transforms the working group into a learning platform that addresses problems transcending social and technological boundaries and traditional ways of thinking and doing.

9.2 Validation of Document Content

After meeting 8, the SG drafts the content of each Demonstrative Project document section. Stakeholders should validate and complete this information in this step.

Cabe destacar que los experimentos también pueden ser fallidos y que se debe aprender de estos de la misma forma que se aprende de los experimentos exitosos, siendo igualmente valiosos para la transición. Centrarse en enfoques flexibles, poniendo el aprendizaje en el centro y valorar otros resultados como el aprendizaje social contribuye a una experimentación más enriquecedora. De esta manera, el grupo de trabajo se convierte en una plataforma de aprendizaje para abordar un problema que trasciende las fronteras sociales y tecnológicas y las formas de hacer y de pensar más tradicionales.

 SEE TOOL 13. Demonstrative Project Guide - p. 62

MEETING 10 RETURN TO PLENARY: SHARING AND CARING

10.1 Sharing and Caring

The objective of this meeting is for individuals to share each project they've been working on during the three sessions with the entire group. This allows other groups to learn about work done in other committees. The project spokesperson or selected individuals from each group can present, generating discussion where other committees can comment and make suggestions.

STEP 8**ROADMAP CLOSURE**

From this point, committees return to work with the general TR group for the closure phase. This phase is important to co-define the closure or continuity of the TR, opening a conversation about its future and approach once the initial objective of designing a roadmap is fulfilled and demonstrative projects are defined.

Take advantage of this meeting to reflect on the process, both individually and collectively. Although reflection should be a cross-cutting element throughout the process, its importance warrants a specific session.

MEETING 11 REFLEXIVITY**11.1 Reflection on the Process and the Future of the Group**

Address questions such as:

How do we feel? How has the process been? What strengths do we find in the group and the process? What weaknesses? Is it necessary to maintain the group? How does the TR develop from now on? What functions cease to be central, and what new functions are added?

Conduct another visioning exercise (see meeting 1) focusing on both the TR's journey and its future. This can lead to reformulating the strategy and valuing everything accomplished.

Return the drafted documents to the group, either printed or in online format.

At the beginning, conclude the process with a special event, such as a meal or dinner, to express gratitude and recognize everyone's time and effort. These actions foster a sense of community, create informal meeting spaces, and provide an opportunity to speak casually about the process.

ROADMAPPING PHASE

THE ADEQUATE SELECTION OF PARTICIPANTS in a TR is critical for process effectiveness. Consider not only technical knowledge and experience, but also capacity and level of influence within represented organizations and environments. These change agents are crucial in mobilizing and coordinating other actors and amplifying the TR's work within their organizations, facilitating more systemic city change.

THE TR IS A VOLUNTARY SPACE for dialogue and collaboration among key city actors. Recognize that participants invest time, effort, and resources voluntarily. Seek incentives to reinforce and maintain engagement over time, avoiding extractive approaches. These may include training, networking, economic benefits, or influence in decision-making or public policies. The SG should ensure that TR participation is seen as an opportunity to collaborate in building a sustainable and just transition achieving significant results.

ACTIVE AND EQUITABLE PARTICIPATION of all actors is essential throughout the process. Foster spaces for reflection and dialogue where each actor can express interests, needs, and concerns. Consider barriers and inequalities in participation for certain social groups, such as those with fewer resources or voice in the process. This approach can achieve more inclusive and sustainable solutions benefiting the entire community.

ATTENTION TO POWER STRUCTURES AND RELATIONSHIPS among actors, including SG actors, is crucial for facilitation and process design. These unequal power relationships can affect participation, decision-making, resource distribution, and strategy outcomes. They may also influence the prioritization of certain topics (e.g., technological vs. social solutions). The SG must address these issues, reflect on their influence on the process, and generate actions to manage them.

RESISTANCE TO CHANGE is common in socio-technical systems, characterized by a tendency to perpetuate current functioning (system inertia). Consider this inertia when designing and executing transition strategies, working collectively to identify them. Address the tendency to focus on technical aspects by dedicating sessions to defining concepts and pillars supporting these concepts, starting with basic aspects like urban or systemic sustainability or transition. This contributes to a holistic, integrated vision balancing economic, social, and environmental needs. Include social actors to promote consideration of the interests and perspectives of stakeholders, including local communities and less visible or marginalized groups. Include spaces for discussion and dialogue, and work on identifying barriers that may hinder participation of certain social groups.

4. FOLLOW-UP

Who is responsible for this phase?

The entire TR (the SG, stakeholders from the 5 helices, and all participants)

The tangible outcome of the entire process is a roadmap with a multi-year plan that brings the city closer to its collaborative and consensus-based objectives. This roadmap serves as both a reference and a record of the group's sustainability vision, the individuals and entities involved the city's diagnosis the city's future projections, and the detailed steps to achieve these projections, including demonstrative projects

The roadmap serves an informative and guiding purpose for those who will implement the transition, as well as a binding one, given the responsibility towards actors who have contributed their time and knowledge.

Given the diversity of participating actors and the document's informative approach, it is important to carry out dissemination activities and to use a comprehensible register, avoiding technical jargon while recommending the use of graphics and a friendly and attractive aesthetic. For the latter, having a professional external team (which can be the same as for the communication plan) can lead to optimal results.

It is important to recognize that the closure of the working group is not limited to completing the roadmap. Rather, it presents an opportunity to redefine the group and the objectives established throughout the process. Like the transition itself, these groups thrive on changing and adaptable objectives that are continuously redefined due to the nature of the long-term challenges they face. These groups are a valuable asset within a city, providing a space for collective learning, reflection, implementation, and monitoring of the transition. For these reasons, the group's continuity and future role should be subject to collective reflection and discussion.

This closing process can be flexible and consider various alternatives. The most appropriate scenario is one in which the focus can shift towards a leadership structure without the SG, with independence but with decision-making capacity within the municipality, establishing new leadership and a new collaborative structure.

It may be necessary to seek new financial resources to redirect the group's objectives, primarily for project development. While the SG is expected to provide support and resources, implementing transition projects may likely require significant private investment committed to this cause.

FOLLOW UP PHASE

ECONOMIC ASPECTS significantly influence the group's continuity and proper scaling of demonstrative projects. Don't underestimate their importance. Ensuring funding is a key challenge for the TR, primarily for the SG and secondarily for the participants, as project continuity is challenged upon completion. This suggests a need to work more on public-private partnerships and alliances. Universities and R&D centers can play a vital role, given their innovative and experimental nature, fostering transition processes within research project frameworks

THE CLOSURE of a project or working group is a critical moment requiring important decisions about its continuity or cessation. Approach closure (or continuity) flexibly, considering various alternatives for redefinition and reorientation based on future objectives and needs. This approach allows adaptation to changing dynamics and demands that may arise during the transition, ensuring effective utilization of invested resources and efforts. A governance space like this is a valuable city asset, so its continuity can be reformulated for other purposes once the roadmap is developed. Involve all participants in this collective reflection process, allowing reassessment of the group's performance and redefinition of its role in city decision-making and policies.

3. MONITORING & REFLEXIVITY



We have dedicated a complete section to reflexivity given its transversal importance in the process. The TR is centered on human participation, involving individuals with diverse experiences, opinions, knowledge, and priorities. This diversity can lead to dynamics that affect the trajectory of the sustainability transition, both positively and negatively.

In systems where a multi-actor group is being developed for the first time to guide city sustainability, the process can be challenging. Learning from both positive and negative aspects is necessary.

Therefore, it's particularly important to include reflexivity in all phases of the TR process, work on a culture of continuous learning throughout the process, reflect on and evaluate the process continuously, be attentive to both contextual needs and those of the actors and adapt the process as needed

Viewing transition processes as exploration and learning processes contributes to seeing the TR as a living, adaptable organism where rigid recipes make no sense.

Often, reflexivity tends to be forgotten or its importance diminished due to its abstract nature and the effort it requires. It is, therefore, important to establish mechanisms for monitoring, evaluation, and learning throughout the TR process and its activities. These mechanisms must be understandable and easy to apply for all participants, and ideally, they are built or chosen at the beginning of the TR process for continuous use. The group should accept and validate monitoring and evaluation mechanisms to increase the likelihood they'll be perceived as effective and establish a commitment to them.

Elements that can and should be monitored by the TR include that the system itself should be examined. Any changes that are occurring, whether small or large, can be important and should therefore be considered. It is also important to explicitly state the connections between the different elements of a process or system and how they impact each other. Second, the actors involved in the TR are also objects of monitoring, both in relation to relationships and the composition of the TR. Regarding the latter, factors to be evaluated may include balance and adequacy in composition and power relations. Third, the roadmap under construction must also be monitored and evaluated. For example, there is the possibility that over the course of a couple of months, the TR may perceive that the goals initially described in the roadmap are no longer as desirable or consider that they need to be modified. Paying attention to this facilitates ensuring that the roadmap is in line with the needs of both the actors and the system or the city. Finally, the demonstration projects must also be monitored and evaluated. This includes their results, products, and impacts, their progress, what barriers they are encountering, etc.

An example of an evaluation mechanism during the TR process could be to reserve particular sessions, or include spaces in the agenda of a session, to reflect on the process and activities carried out so far by the group. If possible, given the available time, each participant should have space to suggest, comment, or open a debate on specific issues affecting the group or the TR. However, for this to happen, horizontalness and active listening from the SG must be fostered, trying to be as critical as possible with the process since the aim is to evaluate it honestly seeking to learn from both successes and mistakes. If due to time or workload constraints it is not possible to introduce these spaces in each session, it is important to provide mechanisms to do so asynchronously or reserve specific sessions.

Establish learning questions at the beginning of the TR process. Participants can exchange ideas about what should be learned from the group and the city's transition process. Example questions could be: (1) what do we understand by the sustainability of a system; (2) what are the barriers that often occur in the transition to sustainability; (3) what are the system inertias; (4) which social actors are continually overlooked; (5) which topics or sectors do not receive enough attention; and (5) what are the power relations in the group, etc.

Of course, the results of using these mechanisms should be subject to reflection. Being aware of a problem is the first step to finding a solution.

Finally, academia is an important ally in reflexivity and monitoring. Stimulating academic interest can facilitate a deeper, more methodical reflective process that helps understand and increase the chances of achieving change. Enriching research through experimentation in various innovative forms of urban governance promotes new transformative approaches to address major societal problems and accelerate change from a more systemic perspective.

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VISUAL TOOLS

HOW DO WE DO IT?

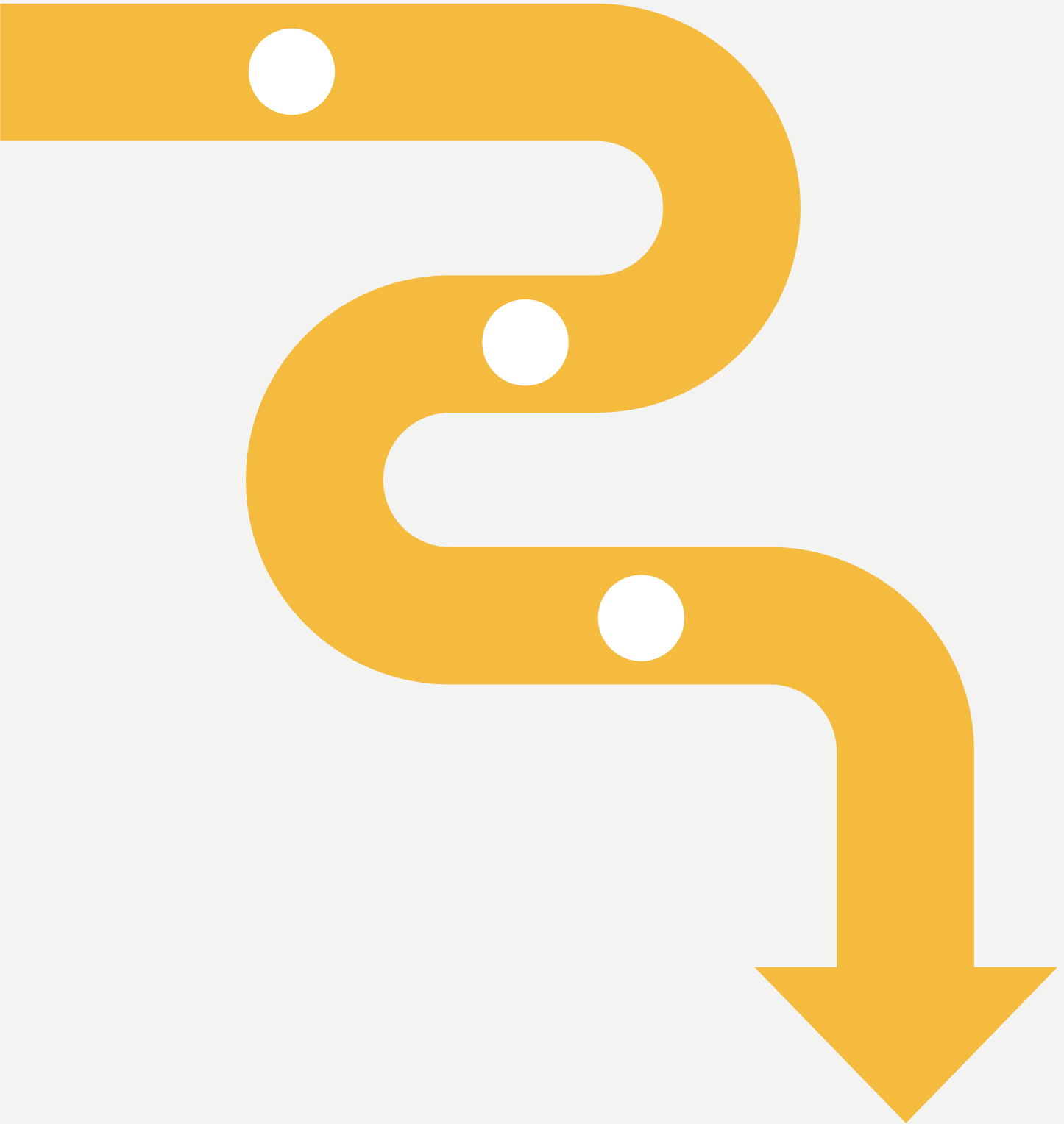
In the next and final part of the book, you will find a battery of visual thinking tools classified for each of the phases that are developed throughout the manual. These tools are techniques and methods that use graphical elements to structure, explore and communicate ideas more effectively. By visually representing concepts and their relationships, they enable teams to clarify their thinking, identify opportunities and structure their processes more efficiently.

The use of visual thinking tools in innovative processes serves to enhance team collaboration and cocreation. By visualizing ideas and processes, all participants can see the big picture, identify connections and gaps, and contribute in a more equitable and significant way. This not only facilitates a better collective understanding of problems and solutions, but also speeds up the decision-making process and the generation of new ideas. In addition, visual tools are very useful for aligning all team members around a shared vision and common goals.

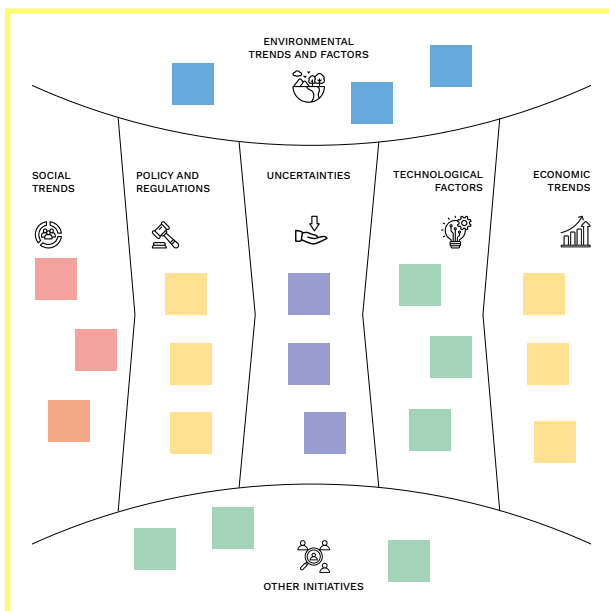
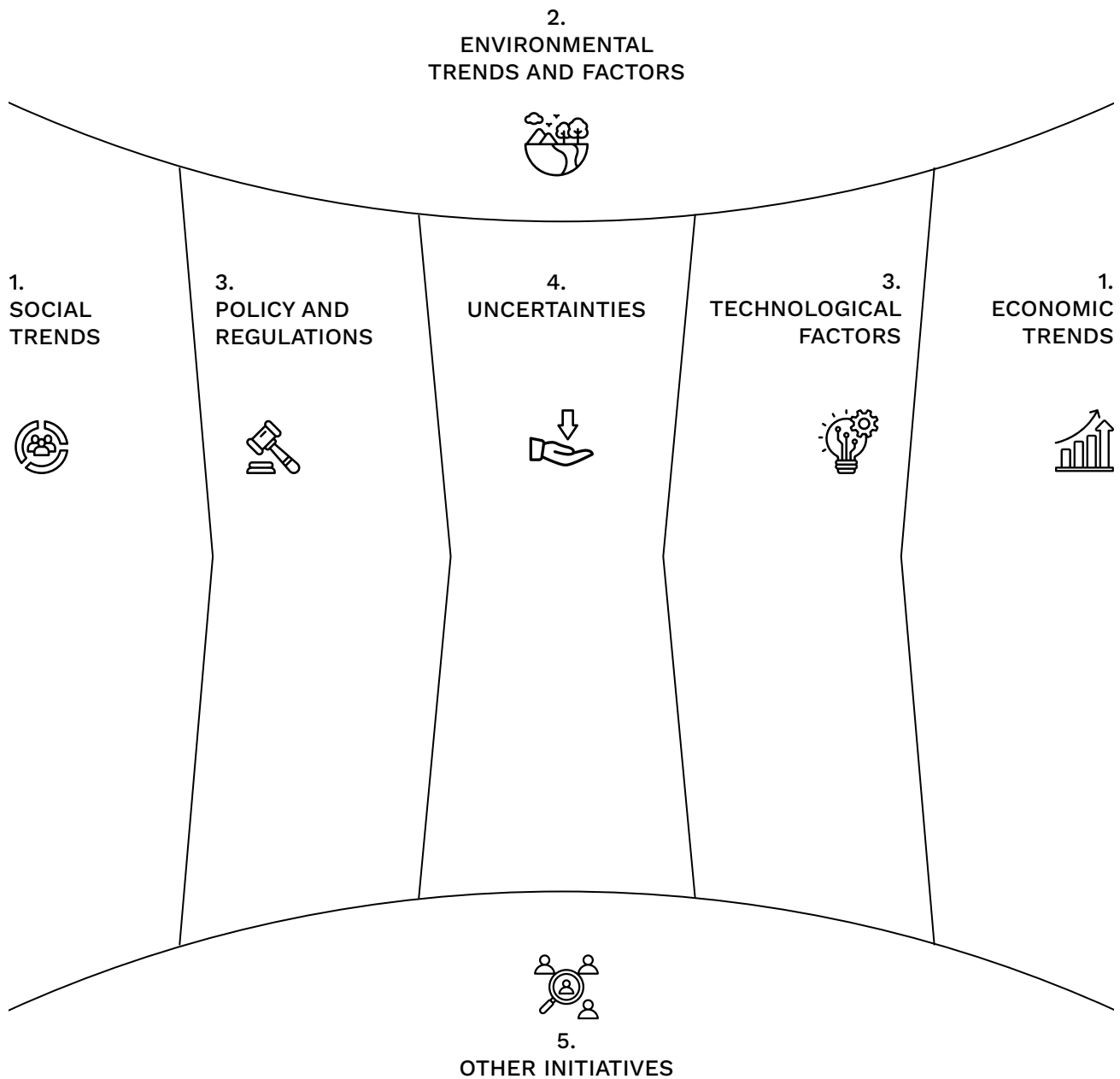
Depending on the meeting context, the objective or the meeting participants, you should choose or adapt the visual thinking tools that serve to achieve the information you want to capture. We encourage you to explore and apply these tools to enhance collaboration, creativity and efficiency. Embarking on the use of these techniques will contribute significantly to the achievement of your objectives and innovation within your work teams.

- **TOOL 1** System Analysis
- **TOOL 2** Actors Mapping
- **TOOL 3** Actor Assessment
- **TOOL 4** Working Plan
- **TOOL 5** Presentation
- **TOOL 6** Communication
- **TOOL 7** System diagnosis
- **TOOL 8** Future Vision
- **TOOL 9** Search for Strategic Guidelines
- **TOOL 10** Identification of demonstrative projects
- **TOOL 11** Project Information
- **TOOL 12** Actors and experts to invite to the commission
- **TOOL 13** Demonstrative Project Guide

4. CO-CREATION TOOLS



1. System Analysis

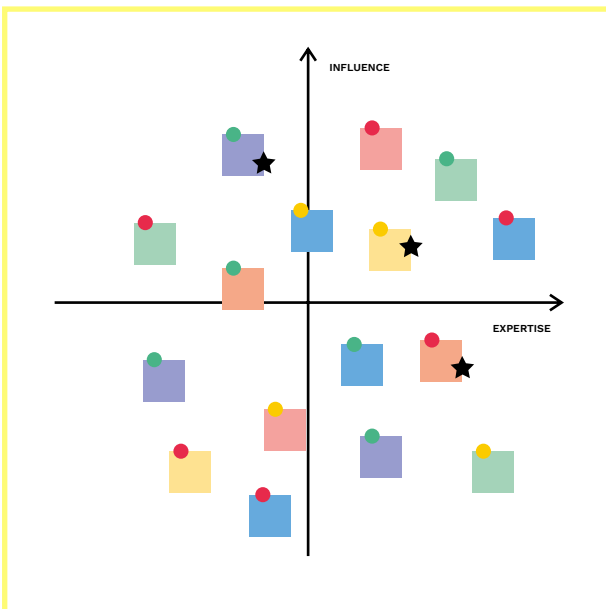
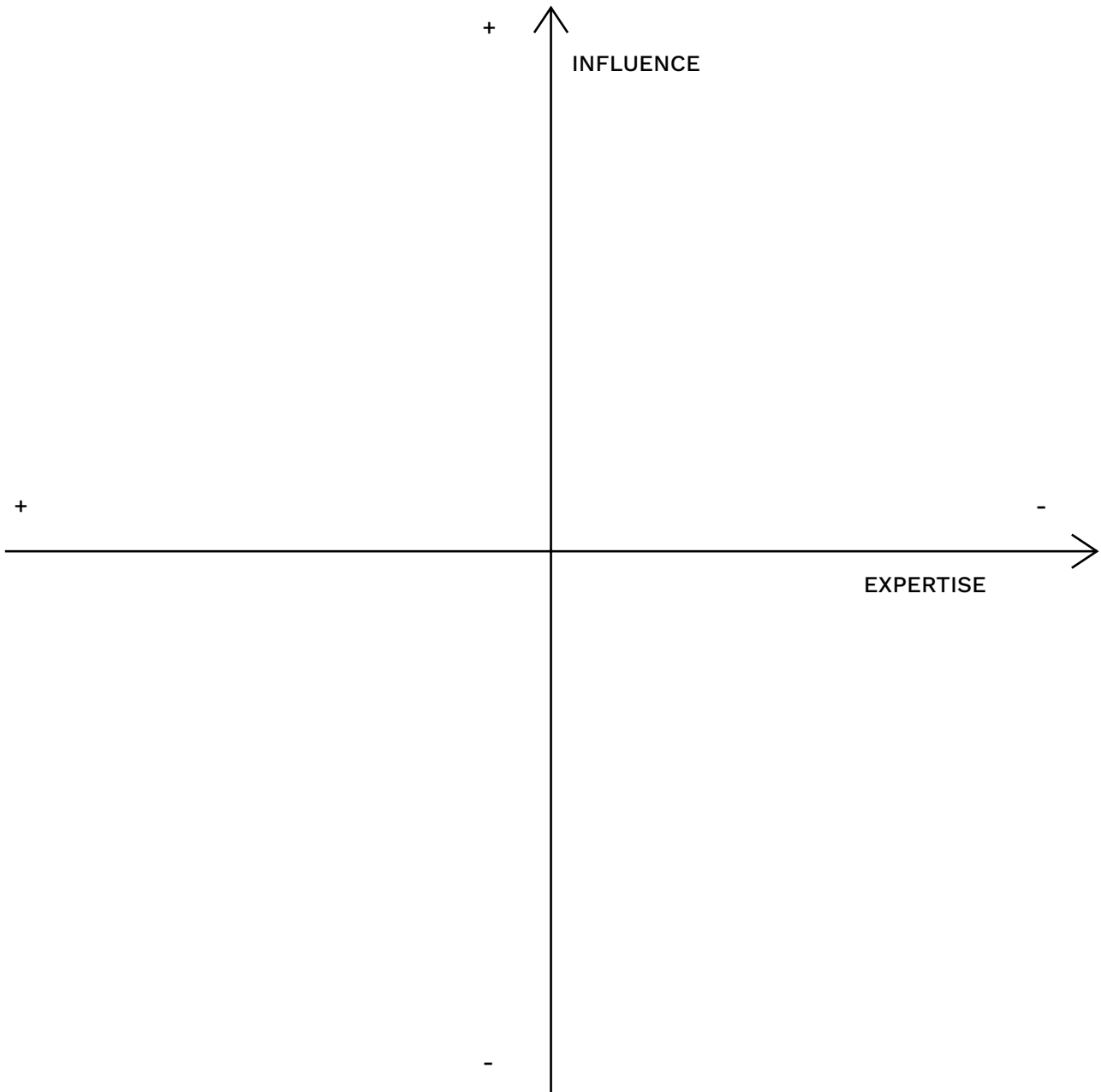


SEQUENCE OF STEPS

- Step 1:** What are the most relevant social and economic trends? (1)
- Step 2:** What environmental trends and factors should we take into account? (2)
- Step 3:** What policies and regulations and technological factors should we take into account? (3)
- Step 4:** Are there uncertainties that we should pay attention to? (4)
- Step 5:** Finally, what other national and international initiatives meet some of the needs we want to address? (5)

See p. 23

2. Actors Mapping



SEQUENCE OF STEPS

Step 1: Write each of the actors involved differentiating each helix with a color. Write only one stakeholder per post-it.

Step 2: Categorize those stakeholders according to their influence and expertise across the axes.

Step 3: Place a sticker on each stakeholder according to whether they are against change (red), in favor (green) or show indifference (yellow).

Step 4: Identify Frontrunners with a different sticker (star).

3. Actor Assessment

ID	ACTOR	SPHERE	INFLUENCE	DESIRE FOR CHANGE	INTEREST	KNOWLEDGE	TOTAL
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							

ID	ACTOR	SPHERE	INFLUENCE	DESIRE	INTEREST	KNOWLEDGE
1	[Actor]	S. Public	5	2	4	1
2	[Actor]	S. Private	3	4	5	5
3	[Actor]	S. Private	4	3	1	3
4	[Actor]	Academia	2	1	3	2
5	[Actor]	Citizen	4	5	2	1
6	[Actor]	Media	2	3	3	4
7	[Actor]	Academia	1	5	3	1
8	[Actor]	Media	2	4	3	2
9	[Actor]	Academia	3	1	3	2
10	[Actor]	S. Public	2	2	3	1
11	[Actor]	S. Private	5	2	1	4
12	[Actor]	S. Private	3	1	5	3

SEQUENCE OF STEPS

Step 1: Select the most relevant actors.

Step 2: Indicate the sphere to which each of these actors belong.

Step 3: Evaluate the actors from 1 to 5 based on a series of characteristic variables. The use of the following variables is recommended:

- Influence in the system
- Need for change
- Interest in change
- Knowledge of the subject matter to be analyzed

Paso 4: Once evaluated, select the stakeholders with the highest total score to be part of the working group.

See p. 24

4. Working Plan

ID	TASK	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1													
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													

ID	TASK	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	1.1. [Task]												
2	1.2. [Task]												
3	1.3. [Task]												
4	2.1. [Task]			R1									
5	2.2. [Task]			R2	R3								
6	3.1. [Task]					R4							
7	3.2. [Task]					R5	R6						
8	3.3. [Task]							R7					
9	4.1. [Task]							R8					
10	4.2. [Task]							R9	R10	R11			
11	5.1. [Task]												
12	5.2. [Task]												

SEQUENCE OF STEPS

Step 1: Create a table indicating all the months in which the work plan will be undertaken.

Step 2: Make a list of the tasks to be performed and organize them by topic (left side).

Step 3: Shade the boxes of the months where each task will be performed.

Step 4: Remember to note the meetings defined in phase 3 ROADMAPING.

Tip: This is a guidance document that can be continuously modified.

See p. 28

5. Presentation

NAME _____

MY ROLE IN THE SYSTEM _____

WHAT CAN I BRING TO THE TABLE? _____

ABOUT ME _____

1.

3.

2.

4.

NAME _____

MY ROLE IN THE SYSTEM _____



WHAT CAN I BRING TO THE TABLE? _____



ABOUT ME _____

1.



3.



2.



4.



SEQUENCE OF STEPS

Step 1: Write your name.

Step 2: What is your role in the system? What is your position? What organization do you represent?

Step 3: Describe what your contribution to the working group could be.

Step 4: Write down four aspects that identify you and can help the other participants to get to know you better.

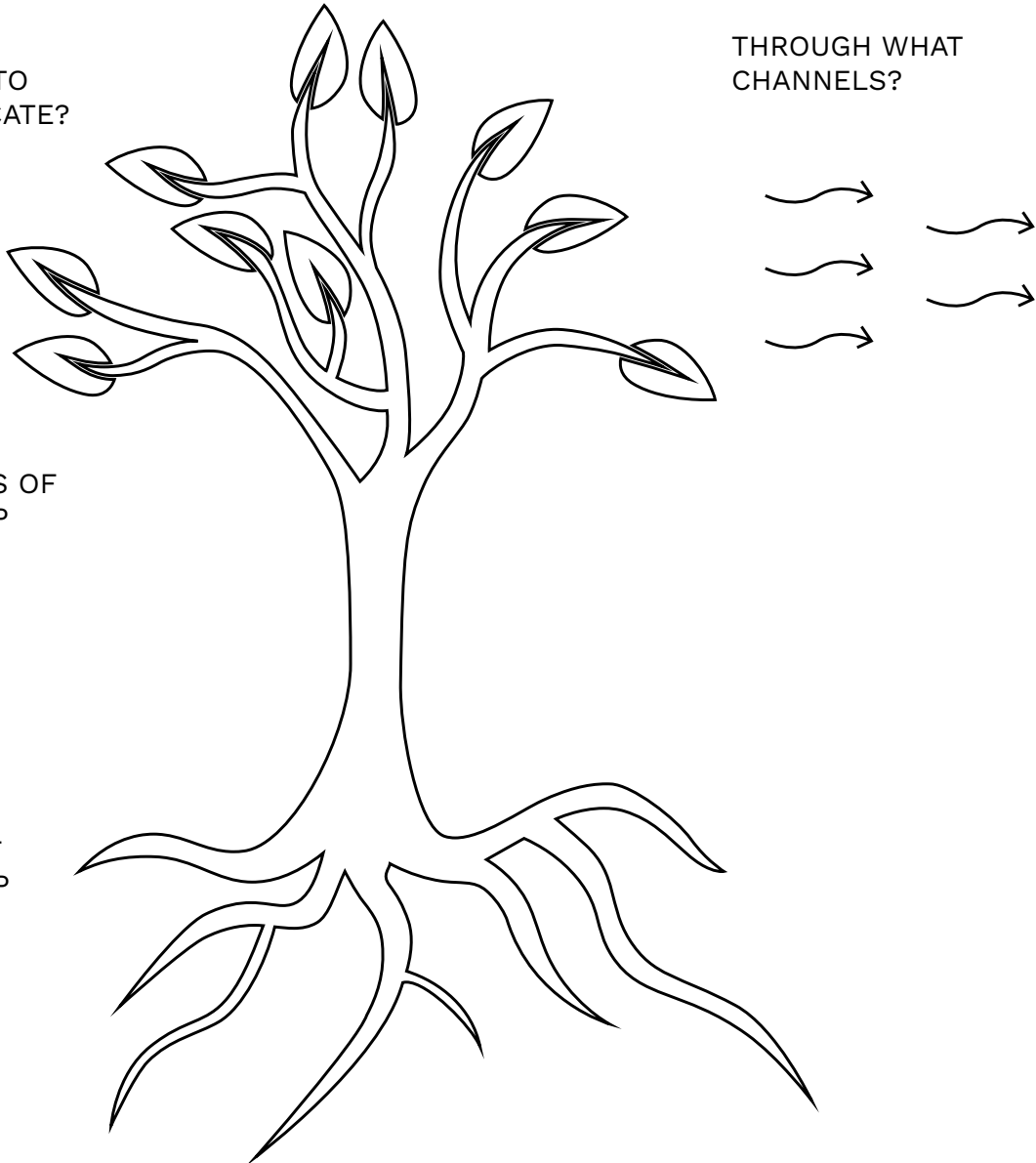
6. Communication

WHAT DO WE WANT TO COMMUNICATE? TO WHOM?

THROUGH WHAT CHANNELS?

FUNCTIONS OF THE GROUP

VALUES OF THE GROUP



SEQUENCE OF STEPS

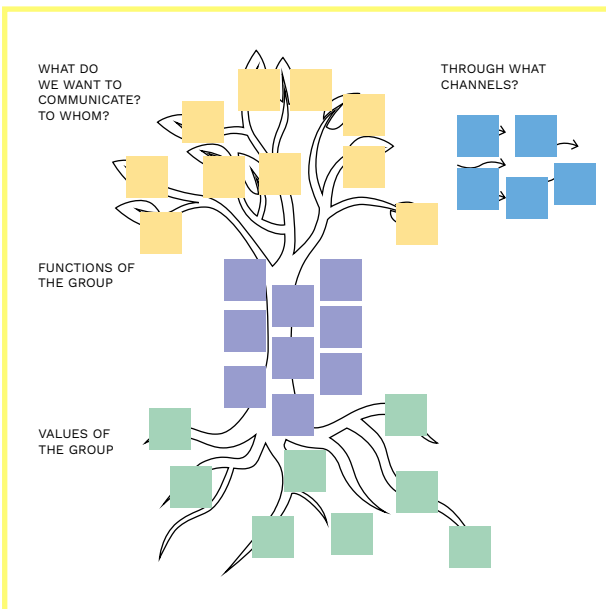
This tool uses an analogy with the life of a tree to represent the team's communication:

Step 1: What values should represent the working group? (Roots)

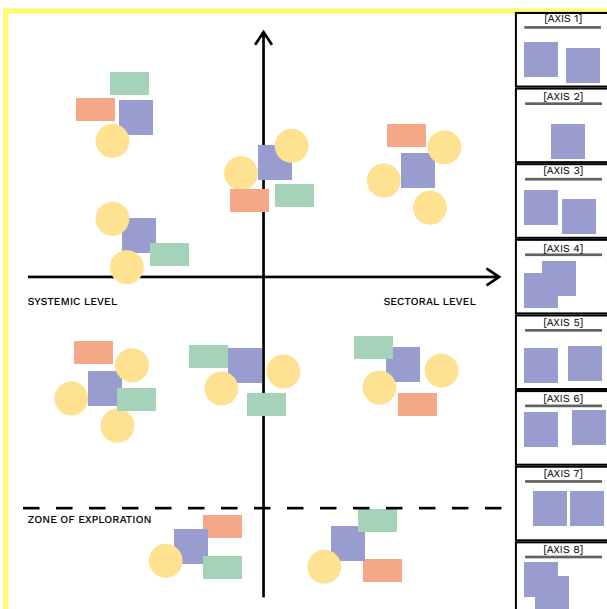
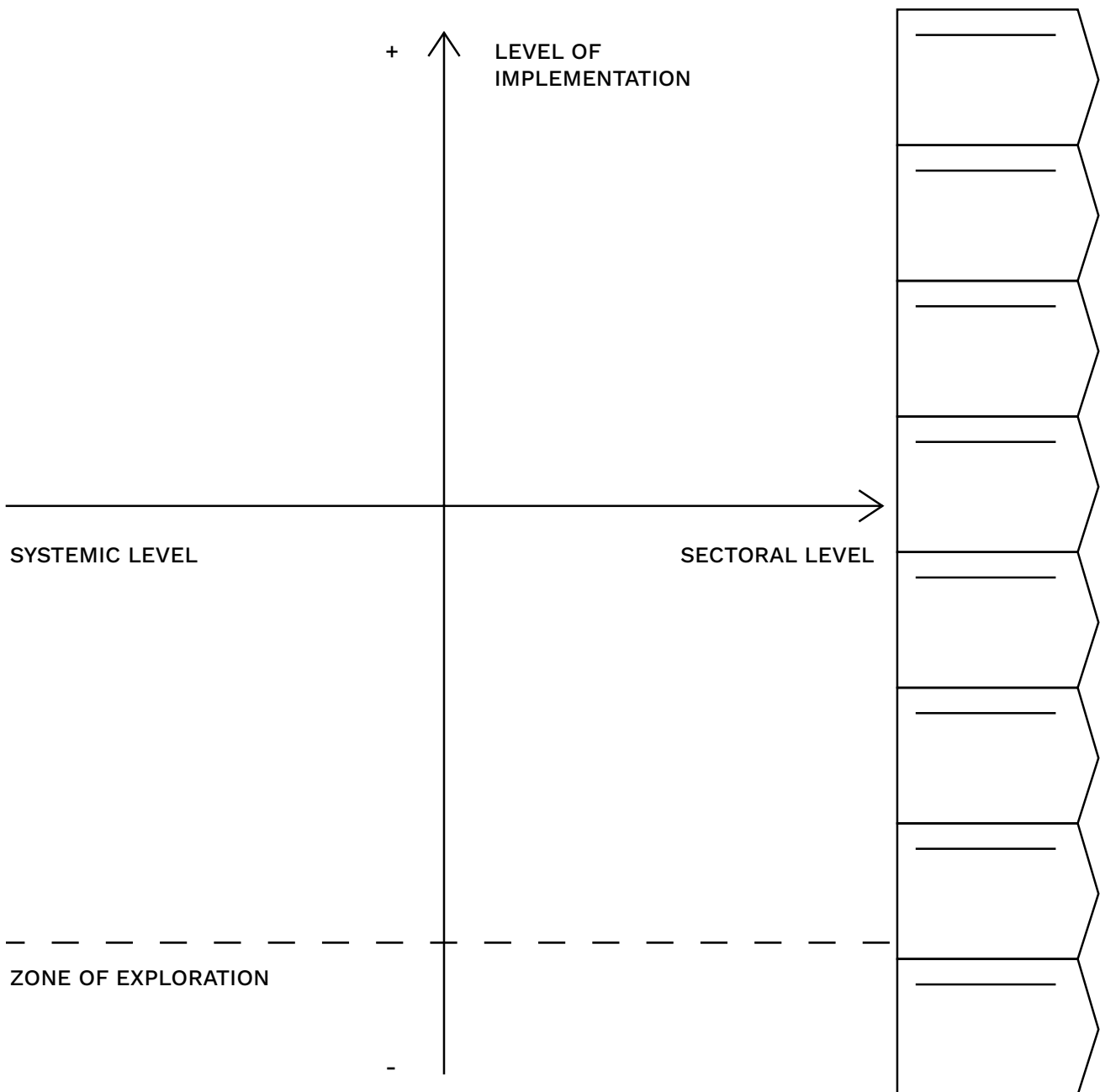
Step 2: What are the main functions of the working group? (Trunk)

Step 3: What does the working group want to communicate? To whom do you want to communicate it? (Leaves)

Step 4: Through which channels do you want to communicate the developed contents? (Wind)



7. System diagnosis



SEQUENCE OF STEPS

Step 1: Place projects (purple post-its) according to the degree of implementation and level (systemic/sectoral).

Step 2: Place actors from the five helixes and place them next to the projects in which they are involved (yellow circles).

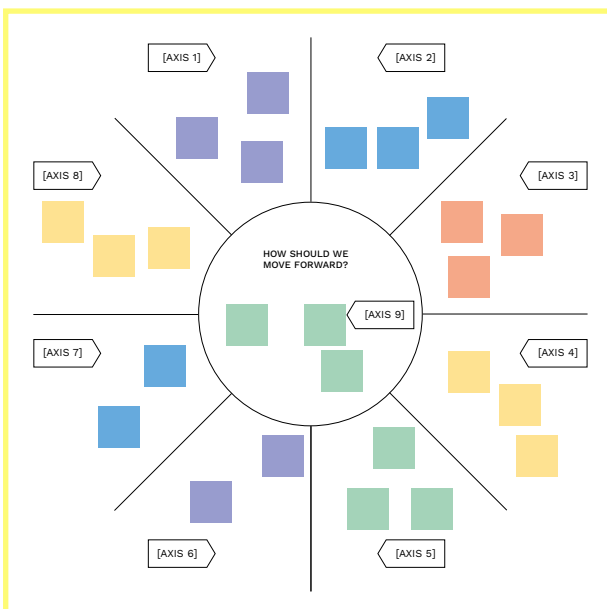
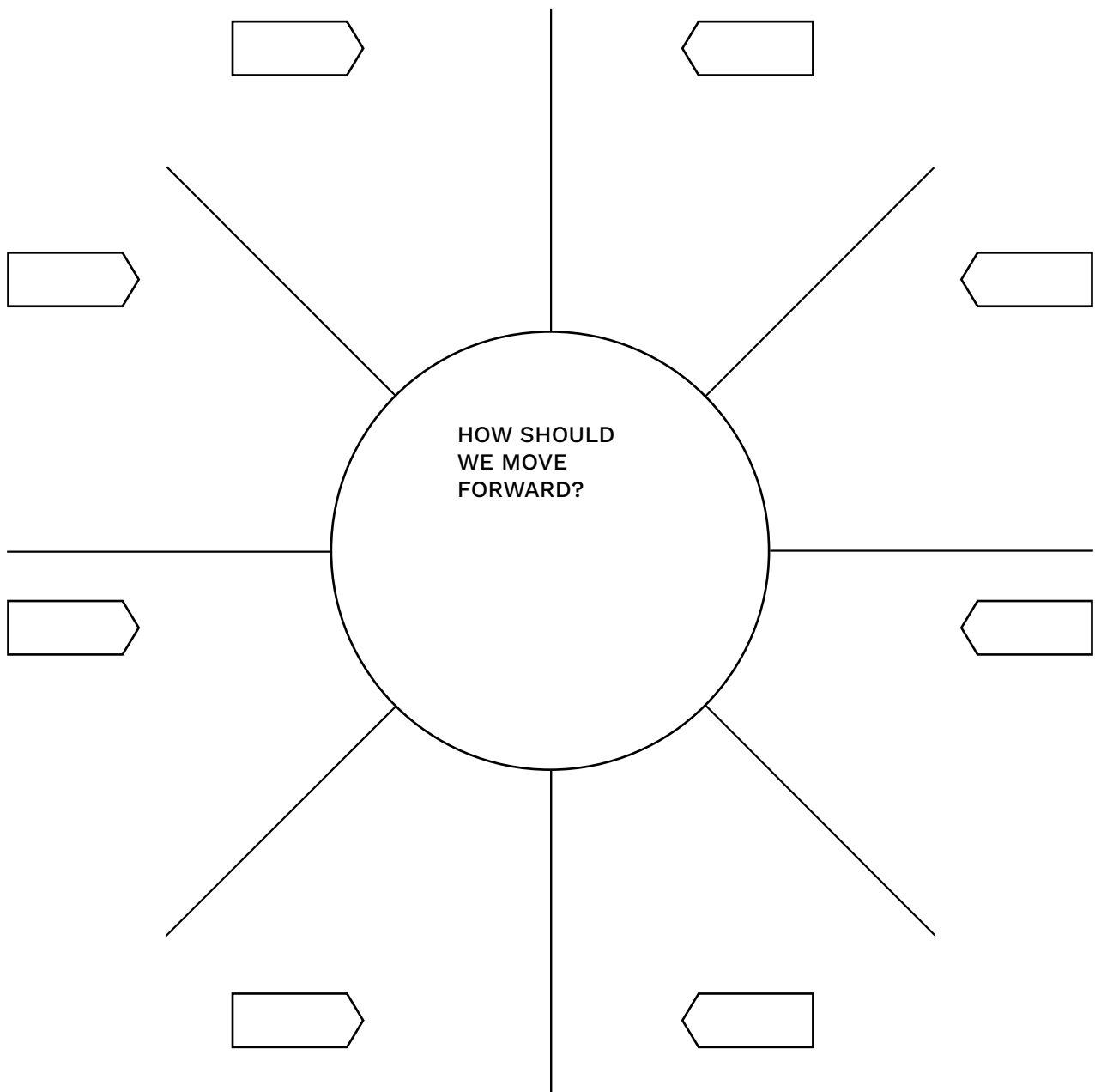
Step 3: Write down possible barriers we may face (red) and opportunities that may arise (green) in relation to the previously written projects, placing them around the projects.

Step 4: Fill in the exploration zone with other potential projects that may be of interest.

Step 5: Select the most outstanding projects and group them by themes (axes) on the right side.

↶ See p. 34

8. Future Vision



SEQUENCE OF STEPS

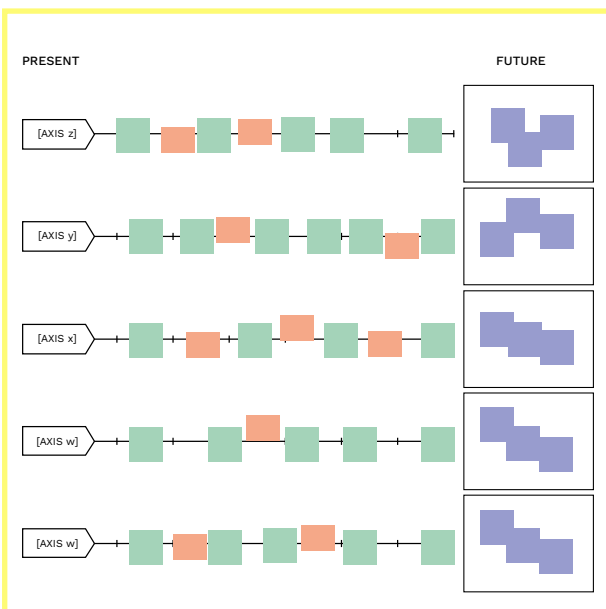
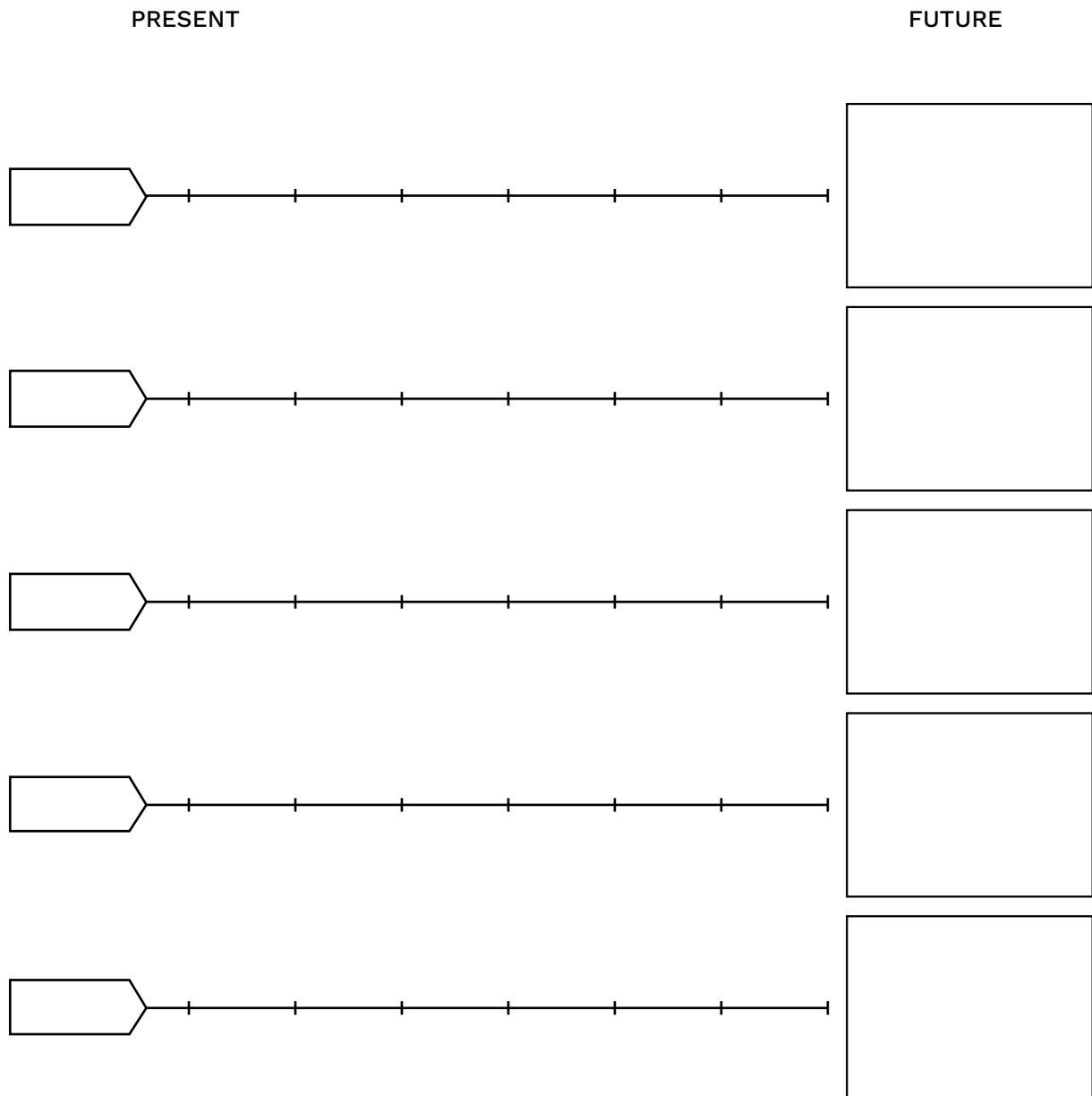
Step 1: Think of a date in the future (example: 20 years from now).

Step 2: Place the dates in the axes (thematic lines) detected in the diagnosis of the system.

Step 3: Brainstorm how you imagine each of the detected themes will look in the future.

Step 4: Do you detect any important area to analyze not detected in the context? Place the ideas in the center with a new thematic axis.

9. Search for Strategic Guidelines



SEQUENCE OF STEPS

Step 1: Write in the left side a maximum 5 axes or thematic areas that you consider most important.

(high impact in the long term, impact in the short term...)

Step 2: Place future plans for the axis in the squares on the right side (Purple squares).

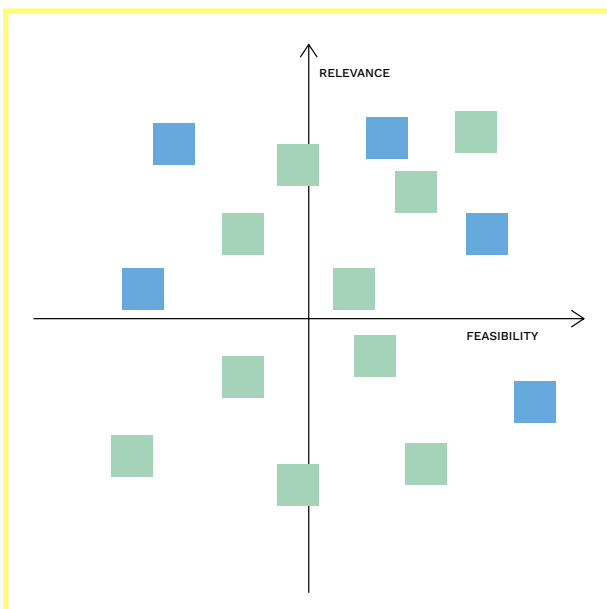
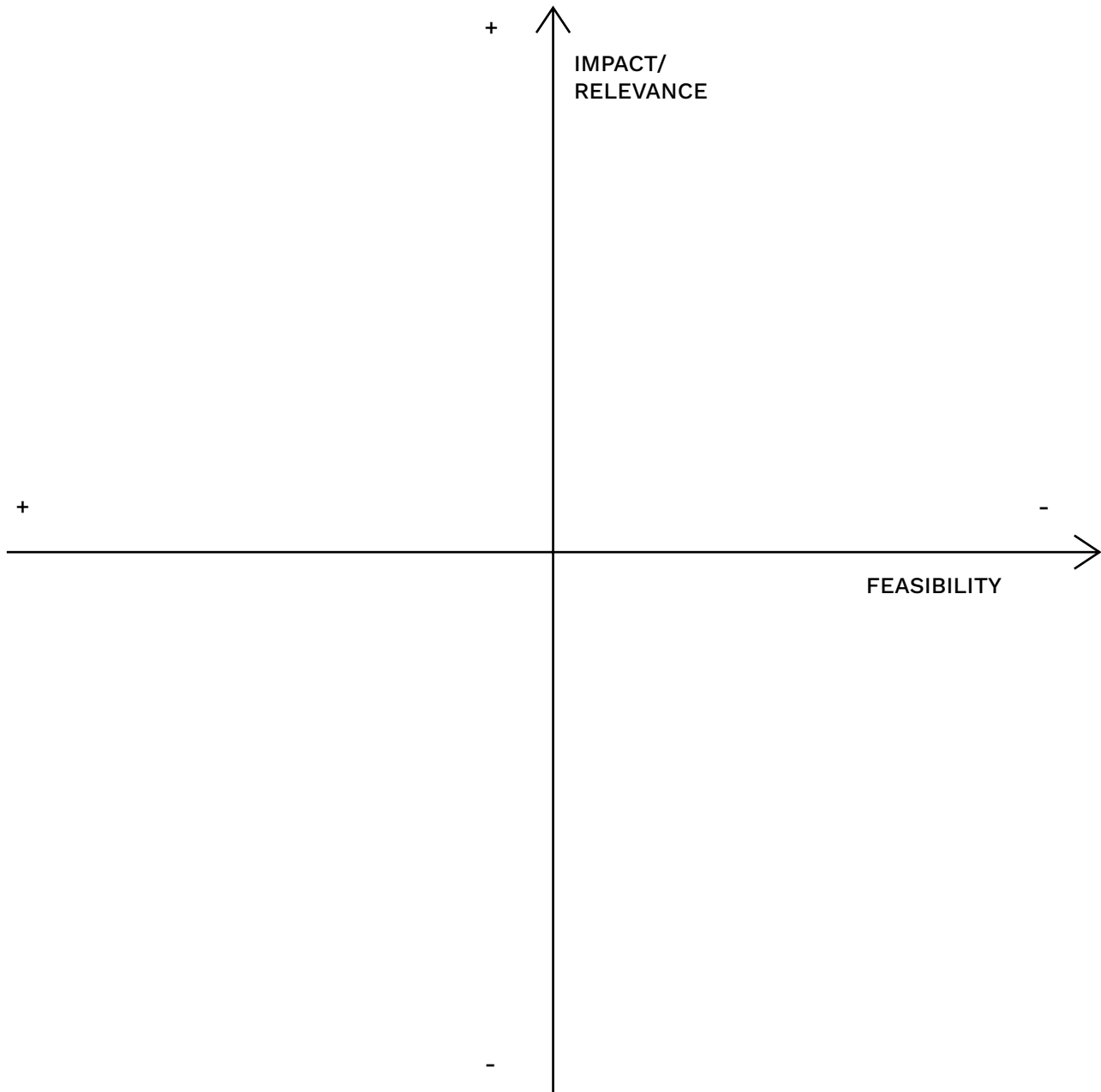
Step 3: Define a series of actions that should be carried out to reach the projected future. (Green squares)

Step 4: What barriers might we encounter along the way? (Red rectangles)

Step 5: Repeat the process with each of the axes.

↶ See p. 35

10. Identification of demonstrative projects



SEQUENCE OF STEPS

Step 1: Write down the actions (demonstration projects) detected in the development of strategic axes.

Step 2: Spend some time brainstorming new demonstration projects to be implemented (blue squares).

Step 3: Analyze each demonstration project and place it on the axes according to its level of impact/relevance and feasibility of implementation.

Step 4: Select a number of demonstration projects that can be addressed by the team (example 5 projects for a team of 25 people).

At this stage, it is important to encourage dialogue among participants and to set aside prejudices.

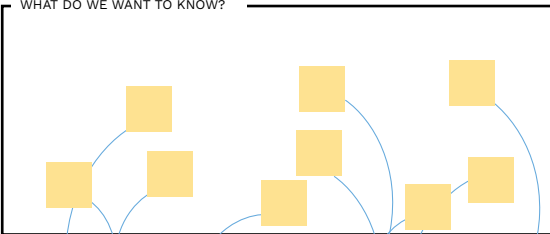
↶ See p. 36

11. Project Information

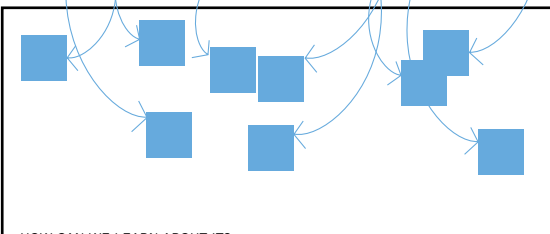
WHAT DO WE WANT TO KNOW?

HOW CAN WE LEARN ABOUT IT?

WHAT DO WE WANT TO KNOW?



HOW CAN WE LEARN ABOUT IT?



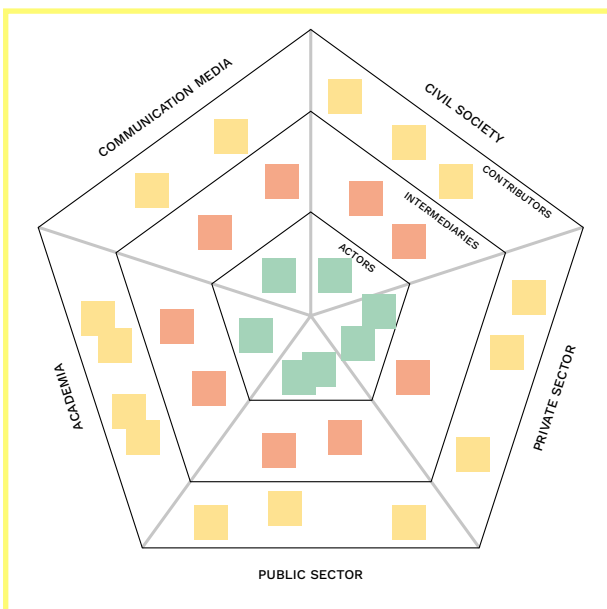
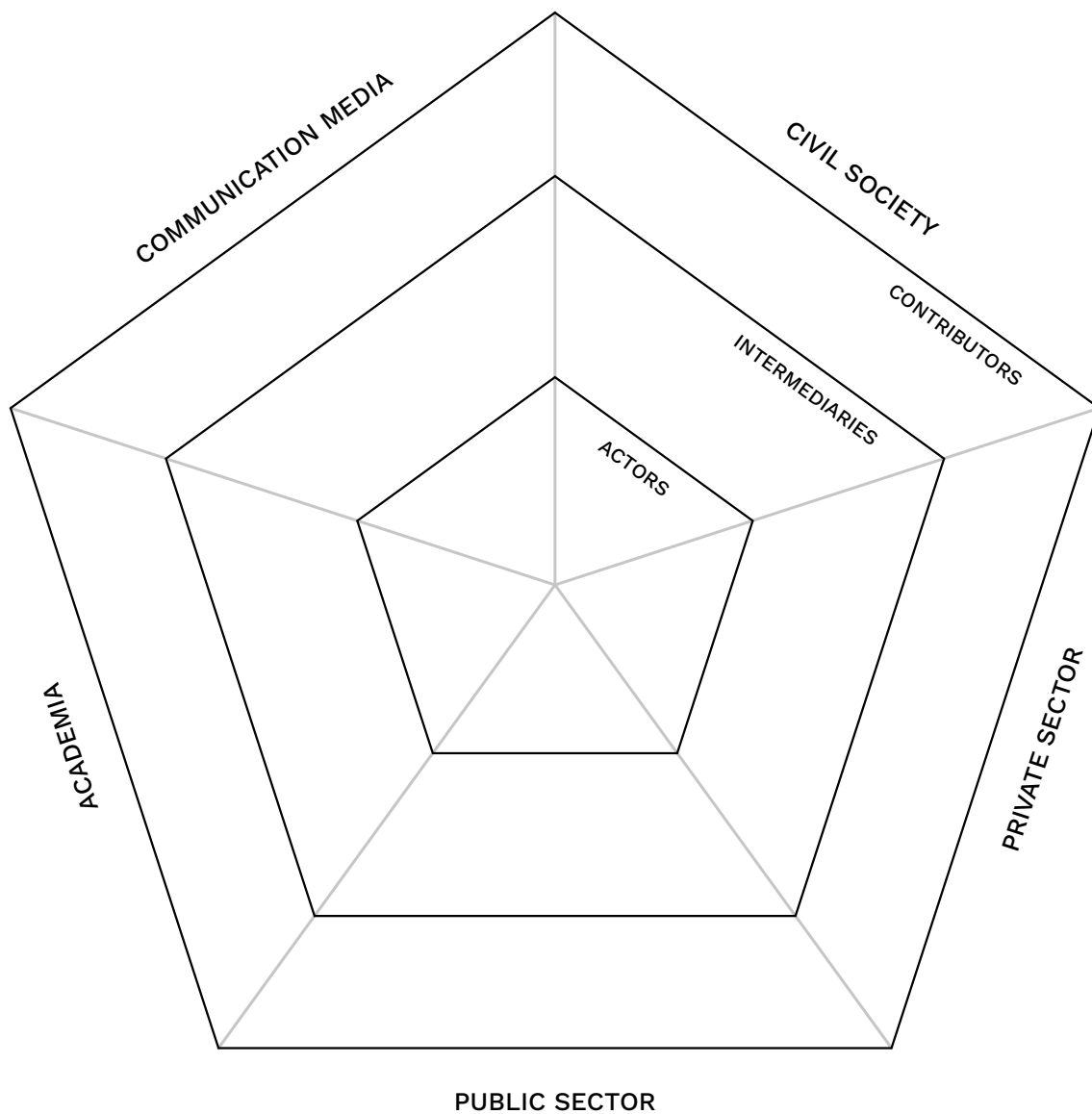
SEQUENCE OF STEPS

Since the committee probably does not have all the necessary information, it is crucial to identify existing gaps.

Step 1: Detail all the knowledge areas that the group needs to address and does not currently know how to address.

Step 2: Connect specific tasks with actions by determining the stakeholders who will be consulted to obtain the required information.

12. Actors and experts to invite to the commission



SEQUENCE OF STEPS

Step 1: Place the different actors from the table inside the pentagon, divided into the 5 helices of innovation.

Step 2: Perform the same process with the intermediaries, i.e. people or entities that can connect us with new actors.

Step 3: Finally, map the key suppliers of information that the group needs to know. Remember to divide these actors among the different helices.

13. Demonstrative Project Guide

NAME _____

1. DESCRIPTION OF PROJECT

2. JUSTIFICATION OF PROJECT

3. LESSONS FROM PREVIOUS EXPERIENCES

4. OBJECTIVES

Short term:

Medium term:

Long term:

5. GOVERNANCE AND COORDINATION

6. ROADMAP WITH THE MAIN ACTIONS AND TASKS

7. CALENDAR (OF THE TIMING OF THE ROADMAP)



NAME _____

1. DESCRIPTION OF PROJECT

2. JUSTIFICATION OF PROJECT

3. LESSONS FROM PREVIOUS EXPERIENCES

4. OBJECTIVES

Short term:

Medium term:

Long term:

5. GOVERNANCE AND COORDINATION

6. HOJA DE RUTA CON LOS EJES DE ACTUACIÓN Y TAREAS

7. CALENDAR (OF THE TIMING OF THE ROADMAP)

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV
1.1. [task]											
2.1. [task]											
2.2. [task]											
3.1. [task]											

SEQUENCE OF STEPS

Step 1: Describe and justify the project (1 and 2)

Step 2: Explain experiences prior to the project and lessons learned. (3)

Step 3: What are the short, medium, and long term objectives of the team? (4)

Step 4: Describe the governance and coordination. (5)

Step 5: Roadmap to be carried out with the axes of action and tasks to be performed throughout the process. (6)

Step 6: Describe a schedule with the phases described in the roadmap (7) (see 4. Work Plan p.53)

This document will gather the ideas of the group and will be drafted by the driving group.

See p. 38

If you've read through this entire guide and are applying or considering applying it, please let us know. The authors of this document are committed to sustainability, systemic change, just transitions, and practical work in cities and are available to answer questions or address inquiries that might help facilitate your practice or improve ours.

[LINK TO INQUIRY FORM](#)

