

What is
TranStat?



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ROADMAP TRANSITIONS TO SUSTAINABLE SKI TOURISM IN THE ALPS OF TOMORROW

**1. How can I
build a
Living Lab?**



**2. How can I
identify the
key issues
in my area?**



**3. How can I
draw up a
shared
assessment of
my territory?**



**4. How can we
build a shared
vision of the
territory's
sustainable
future?**



**5. How do we
move from
theory to
pragmatic
implementation**



Extra materials

ROADMAP TRANSITIONS TO SUSTAINABLE SKI TOURISM IN THE ALPS OF TOMORROW

What is TranStat?

The TranStat project aims to support **co-constructed transition processes in mountain resorts (MR)**.

TranStat will endeavour to implement a **participative and inclusive approach**, involving not only elected representatives and players in the **tourism industry**, but also all **economic players** and **local residents**. The aim is to develop co-constructed transition scenarios and propose solutions to the challenges identified in the RMs.



Video: What is TranStat?



Living labs with key characteristics



ROADMAP TRANSITIONS TO SUSTAINABLE SKI TOURISM IN THE ALPS OF TOMORROW

How can I
build a Living
Lab?

A Living Lab is a **real-life space** where local actors—residents, businesses, and policymakers—collaborate to test and co-develop innovative solutions. Rooted in the **community**, it connects ideas with practice, enabling sustainable change. It's essential for addressing complex challenges through shared knowledge and action.



Video: How is a living lab created?



Cookbook - Co creating Sustainable Futures



**Requirements, benefits and suggestions
on how to create a Core Group**



**Interview Guide for Social Network
Analysis in the framework of TranStat**



ROADMAP TRANSITIONS TO SUSTAINABLE SKI TOURISM IN THE ALPS OF TOMORROW

How can I
identify the
key issues in
my area?

Understanding the key issues in a specific area requires exploring the **driving forces** that shape its development over time. These include **climate and environmental change**, **economic dynamics**, **social trends**, and **governance**. By analyzing how these forces interact locally, we can reveal the underlying challenges and potentials that influence the region's path toward sustainability.



Video: What are the driving forces?



Cookbook - Mountain Resorts of Tomorrow



Visual summary of drivers of change



ROADMAP TRANSITIONS TO SUSTAINABLE SKI TOURISM IN THE ALPS OF TOMORROW

How can I
draw up a
shared
assessment of
my territory?

A shared assessment of a territory is built by integrating **local knowledge, data, and experiences** from multiple actors. Using tools like the **diagnostic grid**, this collaborative process helps to structure information across ecological, social, and economic dimensions, enabling communities to identify **key challenges** and potentials collectively.



Video: How does the territorial diagnosis work?



Cookbook - From identifying Stakeholders to Forming Working Groups



Mountain Resort territorial analysis



ROADMAP TRANSITIONS TO SUSTAINABLE SKI TOURISM IN THE ALPS OF TOMORROW

How can we
build a shared
vision of the
territory's
sustainable
future?

Building a shared vision of a territory's sustainable future means engaging diverse local actors in **imagining desirable long-term outcomes**. Through **participatory workshops**, **dialogue**, and **scenario building**, communities can explore possible futures, align on common goals, and define values and priorities. This collective process fosters ownership, trust, and concrete pathways toward resilient and inclusive development.



Video: How can we build a shared vision of the territory's sustainable future?



Cookbook - Scenarios and Desirable Futures



Building a Shared Vision of the Territory's Sustainable Future



ROADMAP TRANSITIONS TO SUSTAINABLE SKI TOURISM IN THE ALPS OF TOMORROW

How do we move
from theory to
pragmatic
implementation?

Moving from theory to pragmatic implementation requires translating shared visions into concrete actions. **Transition typologies** help identify where a territory stands—whether it's adapting, diversifying, or at risk of decline. By recognizing its pathway, a region can define **realistic steps**, assign **responsibilities**, and mobilize **resources**. This strategic framing guides decisions and makes sustainable change actionable and context-specific.



Video: What are transition typologies?



Cookbook - Transition Pathways



Transition Typologies Infographic



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EXTRA MATERIALS



ROADMAP TRANSITIONS TO SUSTAINABLE SKI TOURISM IN THE ALPS OF TOMORROW

TABLE 1 Living labs with key characteristics (sources: population and tourist bed places ccomptes 2023, 2024; Istat 2024, 2025; BFS 2024; Statistik Austria 2025; SiStat 2025; pistes: Smart Altitude n.d.)

Living Labs	Municipalities	Population [count (year)]	Tourist Beds [count (year)]	Elevation of Ski Area [m]	Ski piste [km]
Saint-Pierre-de-Chartreuse (FRA)	Saint-Pierre-de-Chartreuse	939 (2021)	1,640 (2020)	900-1,800	34
Megève (FRA)	Megève	2,961 (2021)	38,000 (2023)	1,150-2,350	116
Maniva ski (ITA)	Bagolino	3,781 (2024)	65 (2023)	1,650-2,100	18
	Collio	1,994 (2024)	247 (2023)		
Valmalenco (ITA)	Chiesa in Valmalenco	2,281 (2024)	795 (2023)	1,000-2,336	14
	Lanzada	1,238 (2024)	185 (2023)		11
	Caspoggio	1,335 (2024)	277 (2023)		0
Vals (SUI)	Vals	949 (2023)	503 (2024)	1,300-2,950	22
Großes Walsertal (AUT)	Blons	363 (2024)	45 (2023)		0
	Fontanella	468 (2024)	1,010 (2023)	1,500-1,950	7
	Raggal	908 (2024)	592 (2023)	950-1,250	5
	Sonntag	636 (2024)	443 (2023)	900-1,750	8
	St. Gerold	380 (2024)	53 (2023)		0
	Thüringerberg	738 (2024)	50 (2023)		0
St. Corona am Wechsel (AUT)	St. Corona am Wechsel	383 (2024)	187 (2023)	840-920	1.5
Kranjska Gora (SLO)	Kranjska Gora	5,247 (2024)	9,825 (2024)	800-1,500	35
Rogla (SLO)	Zreče	6,653 (2024)	2,369 (2024)	1,100-1,500	11

0



ROADMAP TRANSITIONS TO SUSTAINABLE SKI TOURISM IN THE ALPS OF TOMORROW

Table 2: List of requirements for the engagement in the core groups from the stakeholders' perspective

Requirements	Description of requirements
Clearly define and communicate objectives and vision!	Stakeholders require a well-defined vision and objectives for the sustainable tourism development project to align their efforts and investments. Provide clear guidelines.
Ensure continuous and transparent information flow!	Stakeholders should be aware of the opportunities and limitations concerning their engagement in the LL. All stakeholders should be on the same page. Don't hide any information - transparency is key!
Create a collaborative framework!	Stakeholders expect a structured framework that promotes open communication, cooperation, and collaboration between various stakeholders within the LL.
Be inclusive!	Inclusivity is crucial. Stakeholders, including local communities, businesses, government agencies, and NGOs, should have equal opportunities for engagement and influence. All stakeholders are beneficial to the process and should be considered as experts in their fields. Their perspectives, opinion and ideas have to be taken seriously.
Establish a framework for data sharing that takes into account data protection issues!	Clear guidelines on data collection, sharing, and privacy are essential, ensuring that stakeholders' data is protected while contributing to the LL's objectives.
Promote education and awareness!	Stakeholders may seek educational programs to raise awareness about sustainable tourism and promote responsible visitor behaviour.
Ensure measurable outcomes!	A framework for measuring and reporting on the impact of sustainable tourism efforts, including economic, environmental, and social indicators. Stakeholder expect a noticeable change, even a small one, at the end of the project.



ROADMAP TRANSITIONS TO SUSTAINABLE SKI TOURISM IN THE ALPS OF TOMORROW

Table 3: List of benefits deriving from the engagement in the core groups from the stakeholders' perspective

Benefits	Description of benefits
Collaborative decision-making	Stakeholders have a direct say in the decision-making process, allowing their input to shape the sustainable tourism development plans.
Increased influence	Stakeholders gain greater influence over the direction of the project, which can help align development with their interests and needs.
Knowledge sharing	Opportunities for stakeholders to share and gain scientific knowledge and advice about sustainable tourism practices, best practices from comparable regions, and innovative solutions.
Networking and partnerships	Engagement in core groups facilitates networking and the formation of valuable partnerships with other stakeholders, including businesses, local communities and tourist as well as government agencies.
Enhanced local economy	Sustainable tourism development can lead to increased economic opportunities for local businesses, job creation, and a boost to the local economy.
Environmental conservation	Sustainable practices can help preserve natural environments and wildlife, contributing to the long-term health of the region.
Diversified tourism products	Stakeholder engagement can lead to the development of diverse and attractive tourism products and experiences, catering to a broader range of tourists. Activities in the LL can be advertisement for the destination.
Community Empowerment	Local communities can benefit from capacity building, education, and empowerment, enabling them to actively participate in and benefit from tourism development.
Increased quality of life	An enhanced local community, environmental conversation and community empowerment result in the increasing of the quality of life for everybody.

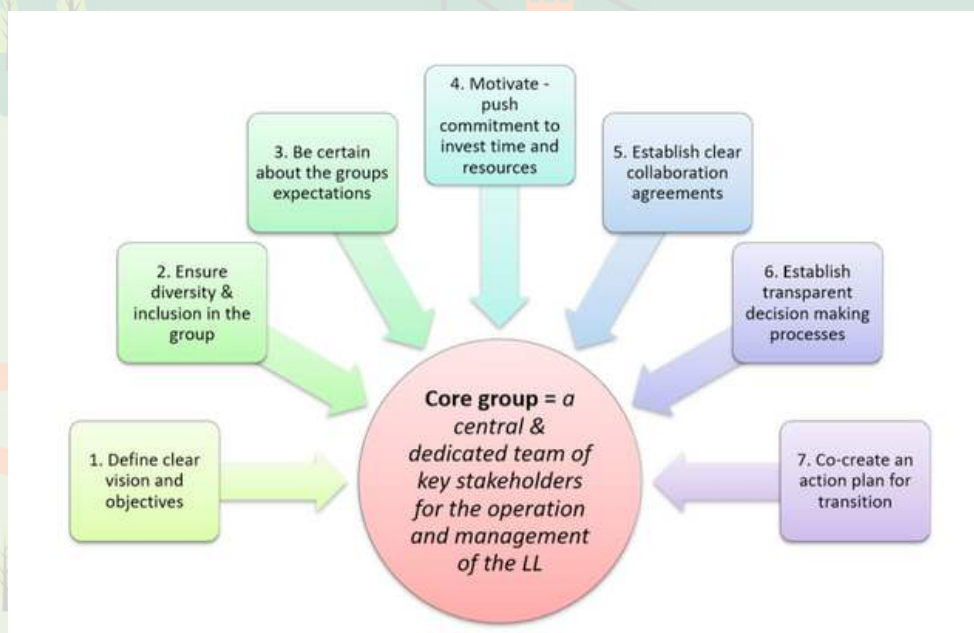
1



ROADMAP TRANSITIONS TO SUSTAINABLE SKI TOURISM IN THE ALPS OF TOMORROW

How to set up a core group

To initiate a transition toward more sustainable tourism in mountain areas, it is essential to establish a core group of stakeholders who share a common vision. Figure x outlines the **key steps for creating inclusive stakeholder groups** within Living Labs (LLs), where innovative solutions are developed and tested in real-world settings.



- Most important prerequisite for the installation of the core groups is to establish a **clear vision and well-defined objectives**. Involve stakeholders from the early by organizing workshops, meetings, or focus groups. Encourage open dialogue, listen to their ideas, and address any concerns or doubts they may have.
- To **ensure diversity and inclusion** in the group we can tie in with the results of the SNA. The composition of the core group should reflect the diverse interests and expertise needed for the LL's success. The members should represent a range of perspectives and experiences.
- To be certain about the **groups expectations** and to motivate the members for the continuous investment of time and resources is essential to keep participation of the stakeholders in the core groups activities high.
- **Clear collaboration agreements** provide a structured framework for the core group's activities, fostering efficient and effective collaboration.
- **Decision making processes should be comprehensible** and supported by the team members. Different opinions should be considered.
- All these steps finally lead to the **Co-creation of an action plan** for transition for the actual implementation of tailor-made transition measures that meet the particular requirement of the LL.

1



ROADMAP TRANSITIONS TO SUSTAINABLE SKI TOURISM IN THE ALPS OF TOMORROW

Interview Guide for Social Network Analysis in the framework of TranStat

Introductory text Mountain resorts and tourism destinations in the Alps are facing **common challenges**. The impacts of climate change resulting in the reduction of natural snow cover, changing tourism practices and population dynamics require strategies for the diversification of touristic offers and regional development.

In response to these challenges, the European project *TranStat – Transitions to Sustainable Ski Tourism in the Alps of Tomorrow* aims to implement new sustainable touristic, economic, social and environmental development models. Mountain resorts from Austria, France, Switzerland, Slovenia and Italy participate in *TranStat*, work together in a participatory approach and benefit from a transnational partnership.

In this context, it is important to unite knowledge and experience by creating a comprehensive network of actors in *Living Lab x*. Together, we can better address the challenges, elaborate scenarios and solutions.

This survey aims to identify current networks and future important actors for a transition towards more sustainable forms of tourism in *Living Lab x*. We invite you to participate in the survey. It will take **about 20 minutes** of your time.

Please be as specific as possible in answering the questions.

Thank you very much for your contribution! Please keep the following definitions in mind when answering to the survey:

Sustainable tourism: is defined as tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities.

Actor(or stakeholder): is an agency, organization, group, or individual that has an interest (direct or indirect) in the planning process, project, or its programs or that affects or is positively or negatively affected by their execution and results.

1



Data protection declaration

- ☐ To open the survey, please accept our data protection declaration.

Participation in the survey is voluntary. By participating, you agree to the collection of data and the stated use of the data from the survey. Your information will be treated as strictly confidential and will only be used for the purposes of the the research project TranStat.

TranStat project partner alpS GmbH processes your data exclusively in accordance with the legal provisions, in particular the Austrian Data Protection Act (DSG) and the EU General Data Protection Regulation (GDPR).

Your information will be evaluated as part of the development of the European Alpine Space project TranStat. Only the assigned project partners have access to personal data.

You have the right to object to the processing of your data at any time. To make use of this right, please write a message to info@alps-gmbh.com.

Catalogue of questions

1. What key challenges do you already notice and foresee in your mountain resort or area in the context of climate change?
2. What is your perception or vision of a sustainable transition in your mountain resort or area?
3. Are you already involved in some kind of actions that focus on the mitigation of these challenges? [yes/no]
 - 3.1. If yes, please describe the actions that you are involved in.
4. Identification of actors

Think about possibilities and approaches for the future of tourism in your region/ tourism resort. With which actor(s) have you been in contact in recent times within the framework of your mountain resort or area in this context? [*please name up to 20 actors*]

Additional information: **Please consider the following key questions when answering the survey questions:**

- Who have you recently worked with in the context of transition towards more sustainable forms of tourism?
- Who has influence, expertise or resources that the region uses or could use to enhance transition towards more sustainable forms of tourism?

4.1. *Please name at least one actor in the previous question to continue with the survey.*

actor 1: _____

actor 2: _____

actor 3: _____

actor x _____



4.2. Please assign the actor(s) to a spatial level and to a sector. Please choose the category that best describes the actor(s).

To which sector would you assign the actor(s)?

actor 1

- ☐ Elected representative on a local/ regional/ national level (e.g. mayor or other politicians)
- ☐ Experts/ employees in relevant sectors on municipal, regional and national level (e.g. administration staff in the municipality)
- ☐ Sectoral agencies (e.g. local or regional development agency, environmental agency, energy agency, employment agency)

actor 2

- ☐ Infrastructure and (public) service providers (e.g. public transport, utility company, railway)
- ☐ Public organizations and NGOs (e.g. international organisation, foundation, charity, voluntary association, club)

actor 3

- ☐ Higher education and research organisations (e.g. university faculty, college, research institution)
- ☐ Education/ training centres and schools (e.g. primary, secondary, pre-school, vocational training)
- ☐ Enterprises (except SME)
- ☐ SME (e.g. micro, small and medium enterprises, start-ups)

To which spatial level would you assign the actor(s)?

- ☐ Local
- ☐ Regional
- ☐ National
- ☐ International (alpine space)
- ☐ International (beyond alpine space)
- ☐ Unclear/ other

1



- actor x**
- ☐ Business support organisations (e.g. chamber of commerce, chamber of trade and crafts, business incubator or innovation centre, business cluster, trade union)
 - ☐ Representatives of residents/ general public (e.g. representatives of local communities or civic interest groups, associations of second home owners)

5. Characterization of actors

5.1. How would you describe the frequency of cooperation and the direction of information flow with the actor(s)?

frequency of cooperation

- actor 1**
- ☐ Rarely
 - ☐ Several times a year
- actor 2**
- ☐ Once a month
 - ☐ Once a week
- actor 3**
- ☐ Several times a week

actor x

direction of information flow

- ☐ I mostly receive information
- ☐ I mostly give information
- ☐ I receive and give information to the same extent

5.2. In which thematic field(s) do you cooperate with the actor(s) mentioned? *(please name the two most important)*

Thematic fields of cooperation

- actor 1**
- Touristic offers and marketing
- actor 2**
- ☐ Strategic planning
- actor 3**
- Infrastructural measures
 - Investment/ financing
 - Education/ awareness raising
- actor x**
- Nature conservation
 - Involvement of the public
 - Operations
 - Unclear/ other



5.3. Are there other thematic fields (not listed in the question above) in which you cooperate with the actor(s) mentioned? *[open]*

5.4. How relevant do you consider the actor(s) to achieve a transition towards more sustainable forms of tourism?

Not relevant

- ☐ Less relevant
- ☐ Rather relevant
- ☐ Relevant

5.5. How would you describe the role of the actor(s) for transition towards more sustainable forms of tourism for your region/tourism resort? *[open]*

5.6. What do you think? How do(es) the actor(s) rate **the necessity of measures/ actions/ initiatives** for transition towards more sustainable forms of tourism for your region/tourism resort?

very low

low

rather low

- ☐ rather high
- ☐ high
- ☐ very high

5.7. What do you think? How do you rate **the actors' interest** in the development of **measures/ actions/ initiatives** for transition towards more sustainable forms of tourism for your region/tourism resort?

very low

low

rather low

- ☐ rather high
- ☐ high
- ☐ very high

6. Nomination of new actors

6.1. In your opinion, which new actors will be relevant in the future regarding climate change and transition processes towards more sustainable forms of touristic offers in your area/ tourism resort?

1



7. Information' about interviewee - Please provide us with information about you or your institution

7.1. How do you rate **the necessity of the development of measures/ actions/ initiatives**

for transition towards more sustainable forms of tourism for your area/tourism resort?

very low

low

rather low

☐ rather high

☐ high

☐ very high

7.2. How do you rate **your institution's or your (if not representing an institution in the present survey) interest and power (possibilities) for the development of measures/ actions/ initiatives** for transition towards more sustainable forms of tourism for your area/tourism resort?

very low

low

rather low

☐ rather high

☐ high

☐ very high

7.3. How do you describe **your institution's or your (if not representing an institution in the present survey) motivation and aims** in the context of transition towards more sustainable forms of tourism? [open]

7.4. Please enter your name and address or that of your organisation for a better spatial location of the network.

Name of Institution: _____

Your name: _____

Department within institution: _____

Address: _____

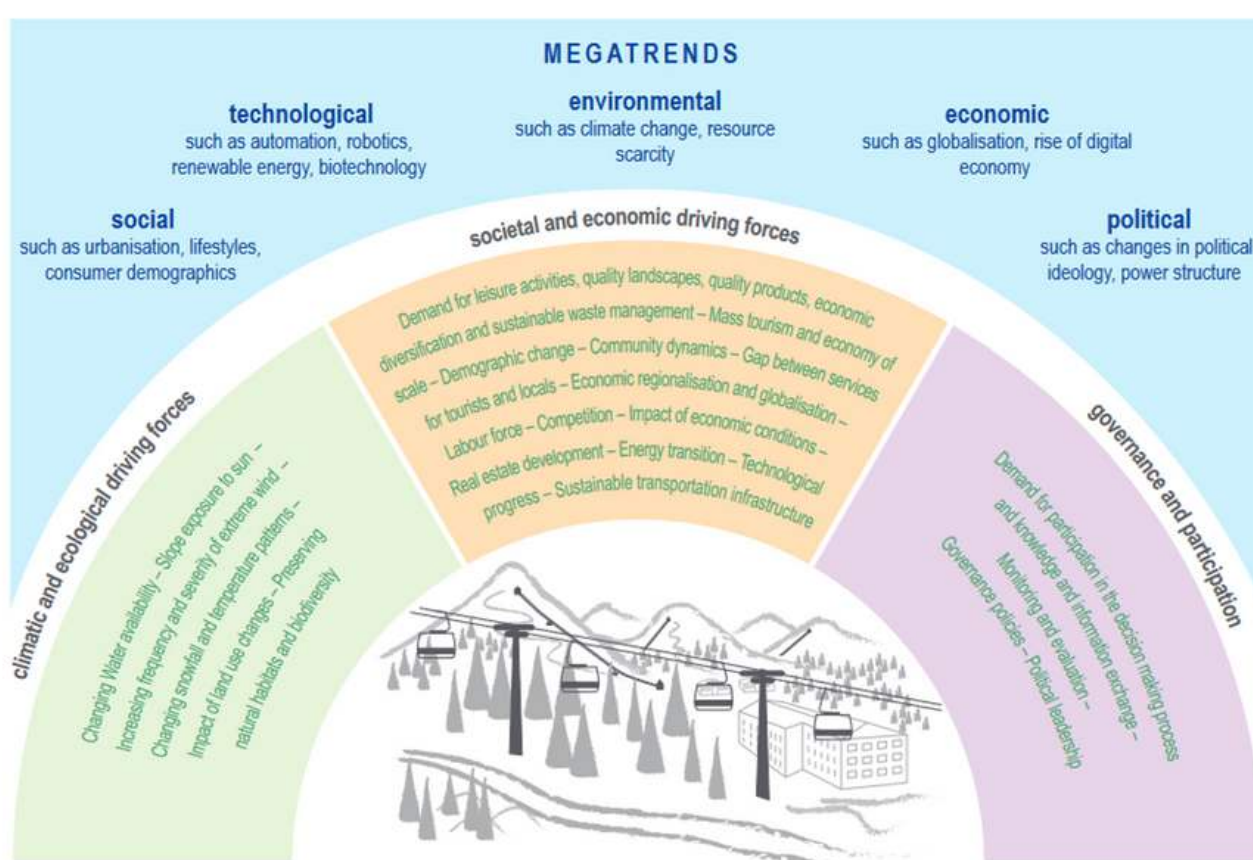
E-mail-address: _____

Telephone number: _____



ROADMAP TRANSITIONS TO SUSTAINABLE SKI TOURISM IN THE ALPS OF TOMORROW

Image 1: Visual summary of the report on drivers of change



Definitions (after Saritas and Smith 2011: <https://www.sciencedirect.com/science/article/pii/S0016328710002715>)

DRIVING FORCES are factors that bring about changes in society, the economy, technology and the environment and are often obvious, pertinent and felt by stakeholders. Driving forces directly affect different stakeholders and may also be influenced and changed by certain stakeholders.

MEGATRENDS are long-term transformative changes in society that have a broad and lasting impact on many aspects of life. These trends are usually driven by a combination of social, economic, technological, environmental and political factors. Stakeholder groups alone often do not have the power to change the direction or intensity of a trend or megatrend.



ROADMAP TRANSITIONS TO SUSTAINABLE SKI TOURISM IN THE ALPS OF TOMORROW

Mountain Resort territorial analysis Methodologic approach

Any reflection on the transition of ski resorts and Mountain Resorts (Mrs) is based on an essential first step, that is, through a **territorial diagnostic**, the understanding of the current state and the forces at work in the area.

This territorial diagnostic has several characteristics:

- It must be **systemic**, involving the economic, social, environmental and governance dimensions
- It must be **multi-scale**, from the ski area to the administrative territory on which the ski resort depends, the starting point is the ski area and resort analysis, to trace the development trajectory of the resort itself and its influence on the region
- It must enable a **long-time analysis**, as long as possible (in past years)
- Results of the diagnostic must be **shared with all the stakeholders**, so that they can be discussed with as many people as possible
- It enables us to make the link with the first factors of change identified in the area, and potentially add new, less visible factors of change.

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ROADMAP TRANSITIONS TO SUSTAINABLE SKI TOURISM IN THE ALPS OF TOMORROW

Building a Shared Vision of the Territory's Sustainable Future

A sustainable future for the territory cannot be designed by one actor alone — it requires a **shared vision** that aligns municipalities, businesses, communities, and citizens. Creating such a vision is a participatory and iterative process that blends evidence, imagination, and collaboration.

A strong shared vision:

- Aligns stakeholders around common values and priorities
- Strengthens ownership and commitment to long-term goals
- Provides a guiding star for decision-making under uncertainty
- Enables coordinated action across sectors and organizations

Key principles for success:

- Inclusivity – engage diverse voices, including underrepresented groups
- Evidence-informed – ground discussions in robust data and insights
- Creativity – allow space for bold ideas beyond current limitations
- Action orientation – link the vision directly to transition pathways

From Uncertainty to Direction: Exploratory and Normative Futures

Creating this shared vision requires understanding both what might happen and what we want to happen. These two complementary approaches — exploratory futures and normative futures — form the foundation of a resilient and actionable roadmap.

Exploratory Futures: Navigating Uncertainty

The future is shaped by powerful change drivers — environmental shifts, technological advancements, demographic changes, and political or economic dynamics. These forces interact in complex ways, making the future inherently uncertain and unpredictable.

Exploratory futures address this by creating plausible scenarios — narratives of what could happen, not predictions. Exploring multiple futures allows stakeholders to:

- Broaden perspectives and challenge assumptions
- Identify risks and opportunities that might otherwise be overlooked
- Develop adaptive strategies that remain robust under different conditions
- Foster dialogue and alignment across sectors



ROADMAP TRANSITIONS TO SUSTAINABLE SKI TOURISM IN THE ALPS OF TOMORROW

Normative Futures: Defining What We Want

While exploratory futures illuminate the range of what might happen, normative futures focus on what we want to happen — our preferred future.

This process starts by examining the needs, values, and expectations of stakeholders across the territory. By aligning these perspectives, we can co-create a shared vision of a desirable and sustainable future.

From there, backcasting helps chart a path toward that vision:

- Start with the desired future — a vivid picture of what success looks like
- Work backwards to identify the milestones, policies, and actions needed
- Build an actionable roadmap to guide today's decisions and investments

Normative futures make planning aspirational yet practical — providing not only a compelling vision but also a clear pathway to get there.

The Power of Combining Both Approaches

Bringing exploratory and normative futures together gives the territory:

- Resilience — adaptive strategies that can withstand multiple possible futures
- Direction — a shared, aspirational pathway that reflects collective values

This integrated approach ensures that decisions made today are both realistic and visionary, enabling stakeholders to navigate uncertainty while actively shaping the desired future.



ROADMAP TRANSITIONS TO SUSTAINABLE SKI TOURISM IN THE ALPS OF TOMORROW

Recommended Process and Tools

This combined approach is operationalized in a four-step participatory process, supported by structured workshops and facilitation tools:

Phase	Goal	Suggested Tools	Key Outputs
1. Identifying Change Drivers	Build a shared understanding of key trends and dynamics shaping the territory.	Horizon Scanning, <u>STEEP Analysis</u> , <u>Driving Forces Workshop</u>	Map of drivers and signals shaping the territory
2. Co-creating Exploratory Scenarios	Explore multiple plausible futures to build a shared language around uncertainty and opportunity.	<u>Futures Wheels</u> , <u>Scenario Workshop</u> , <u>Artefact from the future</u> , Design Fiction	2-4 exploratory scenario narratives
3. Defining a Normative, Desirable Future	Agree on what a “sustainable and successful future” looks like for the territory.	<u>Visioning Workshop</u> , <u>Headlines from the Future</u>	Shared vision statement and images of the desired future
4. Exploring Transition Actions	Translate the shared vision and scenario insights into actionable steps for the near and long term.	<u>3 Horizons Workshop</u> , <u>Backcasting</u>	Prioritized actions, timelines, and responsible actors



ROADMAP TRANSITIONS TO SUSTAINABLE SKI TOURISM IN THE ALPS OF TOMORROW

Design Fiction Workshop: Exploring Climate Futures

This workshop uses design fiction to help participants creatively explore the implications of climate change scenarios and imagine tangible, lived experiences of possible futures. By building narratives and artifacts from those futures, participants develop deeper insights into risks, opportunities, and pathways for action.

Objectives

- Engage participants emotionally and intellectually with plausible climate futures
- Encourage creative thinking beyond conventional strategies
- Translate complex scenarios into relatable, human-centered stories
- Surface actionable ideas for present-day planning and innovation

Suggested Structure (3–4 hours)

1. Briefing (20–30 min)
 - Introduce the climate scenario (e.g., 2040 regional outlook: rising temperatures, shifting tourism patterns, regulatory changes, new infrastructure).
 - Highlight key drivers and uncertainties.
2. Immersion (20 min)
 - Role-play or use sensory triggers (images, soundscapes, data snippets) to help participants “step into” the future.
 - Optional: Assign roles (e.g., mayor, entrepreneur, NGO leader, citizen) to diversify perspectives.
3. Fiction Building (60–90 min)
 - In groups, participants create a story that brings the future to life, choosing one or more formats:

-News article or blog post from 2040

-Diary entry or personal letter from someone living in that future

-Theatre sketch or short play

-Podcast episode or mock TV interview

Physical artifact (ticket, product packaging, policy memo) that supports the story

Encourage inclusion of human narratives — what people are doing, feeling, and struggling with in that world.

Presentations (30–45 min)

- Groups perform or present their fiction to others.
- Capture reactions: What surprised them? What challenges or opportunities became visible?

Debrief & Insights (30 min)

- Reflect on what the stories revealed about:
- Critical uncertainties or vulnerabilities
- Opportunities for innovation and collaboration
- Actions that can be started now to shape a better future
- Translate insights into next steps or strategic questions.

Expected Outcomes

- A collection of relatable stories and artifacts depicting climate-impacted futures
- Shared language and imagery for complex concepts
- Insights that inform transition pathways, policy priorities, or innovation roadmaps
- Stronger collective ownership of foresight insights among participants

Resource: "Design Fiction: A Field Guide to Ethnographic Experiential Futures"



ROADMAP TRANSITIONS TO SUSTAINABLE SKI TOURISM IN THE ALPS OF TOMORROW

Multi-scale approach and multi-sectorial approach combining quantitative and qualitative data

To be holistic, data analysis must be carried out at different scales and on different socio-economic, environmental and societal sectors.

- **Ski area scale** = Spatial arrangement of ski lifts and ski slopes
 - **Ski resort scale** = Spatial complex comprising the ski area, tourist accommodation and associated facilities (shops, restaurants, etc.).
 - **Mountain resort scale** = Mountain Resorts are part of a specific territory that can encompass municipalities, inter-municipalities, sometimes shared by several regions, even different states
- Data collection and analysis combining quantitative/qualitative data sources:
 - Statistics
 - Survey, questionnaires, reports...
 - Individual interviews
-
- Ski area operators
 - Companies stakeholders
 - Ski sector professionals
 - Technical features
- Tourist operators (services, agencies...)
 - Tourism governance and stakeholders
 - Visitors motivations and perceptions
 - Touristic facilities
- Territorial strategies and governance
 - Inhabitants motivations and perceptions
 - Visitors motivations and perceptions
 - Livelihood conditions
 - Socio-economic trends

4



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ROADMAP TRANSITIONS TO SUSTAINABLE SKI TOURISM IN THE ALPS OF TOMORROW

Multi-scale analysis - Quantitative Data collection

This phase of data collection processes all the quantitative variables used to describe the socio-economic and environmental state and dynamics of a Mountain Resort, in order to provide an exhaustive overview of its main trends, its **Strengths, Weaknesses, Opportunities and Threats**.

Ski area scale Data collection and analysis

How to describe your ski AREA? Consider the following main topics and guiding questions		Data and information that can be considered depending on the availability of local, regional or national databases and services
technical (descriptors) features at the ski area scale		
What are the geographic features of the ski area?	Use the ski resort skimap, you can underline the geographic organization	entries, parkings, distances from main highways and cities, is there a national, international scale?
What are the technical features of the ski area?	How many ski lifts and cables car the ski area offers? How many km of ski slopes and which type of ski slopes?	N° and types of ski cables, n° and typology of ski slopes, lenght and total surface
	What are characteristics of the ski and chairlifts?	Average age, min and max altitude, exposition
Who does manage the ski area?	Is it a public or private manager ?	A municipality or a company or both... and which type of company
	With what type of formal agreement?	For example, the number of years of service or concessions
How profitable is the ski area? What are the costs, operating days, turnover and financial reporting?	How many days the ski lifts area open in winter? What are the most important period (Christmas holidays, week-ends, ...).	N° of skipass sold and sales trends over time
	Are skipass prices in line with other comparable resorts?	Find out the prices of other similar resorts
	Is the skipass linked to other indoor or outdoor activities (i.e. swimming pool, skidoo, cinema...) out of the ski area perimeter?	Find out the exhaustive offers
Do you know which skier comes to ski in this area?	Which is the type of clientele ?	stay/excursionists, family, young people, beginners or adavanced skiers ...
	What are the main criteria for attractivity ? What are the reasons why people come to ski in your resort?	insights from tourist offices survey..
Are there snowguns in the ski area?	What is the convered ski slopes surface (km2 and %)?	N° of skiguns, locations and periods of the season in which they work
What impact (technical, economic and cultural) does snow production have?	Are there natural lakes or bassins to desserve snowguns systems?	Capacity in volumes (m3)
	Are there any conflicts over the use of these water reserves?	Typology of uses and involved stakeholders
	Position your ski area in relation to others in the same category (little, medium, big) as yours for example, what is the % of snomaking in other ski areas? How many skiing days the others have?	Show the level of dependency on artificial snow

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ROADMAP TRANSITIONS TO SUSTAINABLE SKI TOURISM IN THE ALPS OF TOMORROW

Multi-scale analysis - Quantitative Data collection

Ski resort scale Data collection and analysis

How to describe your ski resort? Consider the following main topics and guiding questions		Data and information that can be considered depending on the availability of local, regional or national databases and services
tourism (descriptors) features at the ski resort scale		
What is the guest capacity? Sufficient beds/places? Quality or in need of renovation?	What is the number of beds (by typology if relevant) and their evolution? What is the number of overnight stays in a winter season? And in all year around? What is the evolution since the past (x) years?	local and regional data (tourist agencies)
	What are the quality scores allocated to the touristic accommodation in your resort (i.e. : stars scale from 1 to 5)?	local and regional data (tourist agencies)
	What is the number of weeks of occupation per bed ?	
	What is the rate of market beds with respect to the total n° of beds?	local and regional data (tourist agencies)
What impact do second homes have on the resort's housing evolution?	Are there more sh or more ph in your resort? Use statistic data to asses this %	local and regional data (tourist agencies)
	What is the evolution of this during the last (x) years?	local and regional data (tourist agencies)
	What is the price at the m2 for houses and apartments? Is there an evolution price increase or decrease and is there any difference in price compared with similar resorts?? Who are the owners? (which kind of socio-economic profile)	local and regional data (tourist agencies)
	What are the choice factors related to the ski resort?	local and regional data (tourist agencies) on: quality, diversity of accommodations and other services, frequentation, type of clientele, atmosphere, distance from the main residence (tourist, excursionists) or an urban area (locals), landscape ...
What is the resort's economic pulse?	Are the non-ski activities on offer for winter and summer profitable?	local and regional data (tourist agencies)
	Summer visitor numbers approaching or even surpassing those of winter? And in the shoulder seasons?	local and regional data (tourist agencies)
	What are the most active economic sectors beyond tourism?	labour market regional data
What is the structure of tourism governance	who manages tourism at the ski resort in terms of strategies, priorities and the services offered? What competences are expected to be assigned? What types of stakeholders are involved, e.g. associations, the private sector, the public sector?	

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ROADMAP TRANSITIONS TO SUSTAINABLE SKI TOURISM IN THE ALPS OF TOMORROW

Multi-scale analysis - Quantitative Data collection

Mountain Resort scale Data collection and analysis

How to describe your mountain resort? Consider the following main topics and guiding questions		Data and information that can be considered depending on the availability of local, regional or national databases and services
tourism (descriptors) features at the scale of the Mountain Resort		
What is the touristic offer during winter season and summer season	Which activities are available? and which kind of location (campings, hotels, B&B, apartments)? And how is the summer/winter ratio changing?	local data (tourist agencies)
	What is the attendance during the summer ? on the shoulder seasons ?	local data (tourist agencies)
	Can you measure visitors satisfaction?	Find out insights from survey (local tourist agencies)
	What is the place of the touristic in the territorial dynamics : number of touristic jobs regarding the others jobs?	Index of touristification : number of employments in the touristic sectors of the municipality/total number of employments in a municipality x 100 (Tourism jobs: this includes jobs directly linked to accommodation, catering, travel agencies, leisure activities, museums, tourist offices, etc.)
	How many associations are involved in the tourist activity ? Which typology, to do what?	Find out the list of the associations in your municipality
	Which type of labor market does feature the resort? What is the influence of the ski resorts on it?	difficult to measure

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ROADMAP TRANSITIONS TO SUSTAINABLE SKI TOURISM IN THE ALPS OF TOMORROW

How to describe your mountain resort? Consider the following main topics and guiding questions		Data and information that can be considered depending on the availability of local, regional or national databases and services*
socio-economic (descriptors) features at the scale of the Mountain Resort		
What is the demographic trend in my area?	What is the population composition and trend over the last (n) decades?	national database
What is the right balance between older and younger people in my area?	How many people aged 65 and over for every 100 under 20? Is my territory ageing or regenerating?	national database
	How many primary, secondary and high schools are there in the local area?	national database
In which sectors are local jobs specialised?	What is the distribution of business sectors: agriculture, forest, pastoralism, craftsmanship, shops, tourism?	national or regional database
How many jobs are currently on offer in the region, and how has this quantity changed over time?	What are the socio-professional categories in the territory?	national or regional database
	What proportion of laborers live and work in different communes?	national or regional database
	How are employment opportunities distributed?	national or regional database
	How is structured the network of public transportation? Is there an access to public transports? is there a proximity to train station? What is the average of time travel-work?	national or regional database
Has the rate of occupancy of lodgings for occasional use increased or decreased?	What is the ratio of main homes, second homes and vacant homes? Has this ratio been evolving?	national or regional database
What proportion of my territory is taken up by urbanized areas?	The artificialization of land is the metrics that allows to quantify the loss of available surfaces for agricultural use from land use change.	national or regional database
What are the environmental risks?	Floods, debris flows, landslides, forest fires, ...	regional database
What are the political levels and organizations?	What is the citizen participation in governance? What is the municipality's financial situation?	local data
*GEOMountain ESV https://geomountains.org/implementation-plan-get-involved/surveys/esv-mountains		

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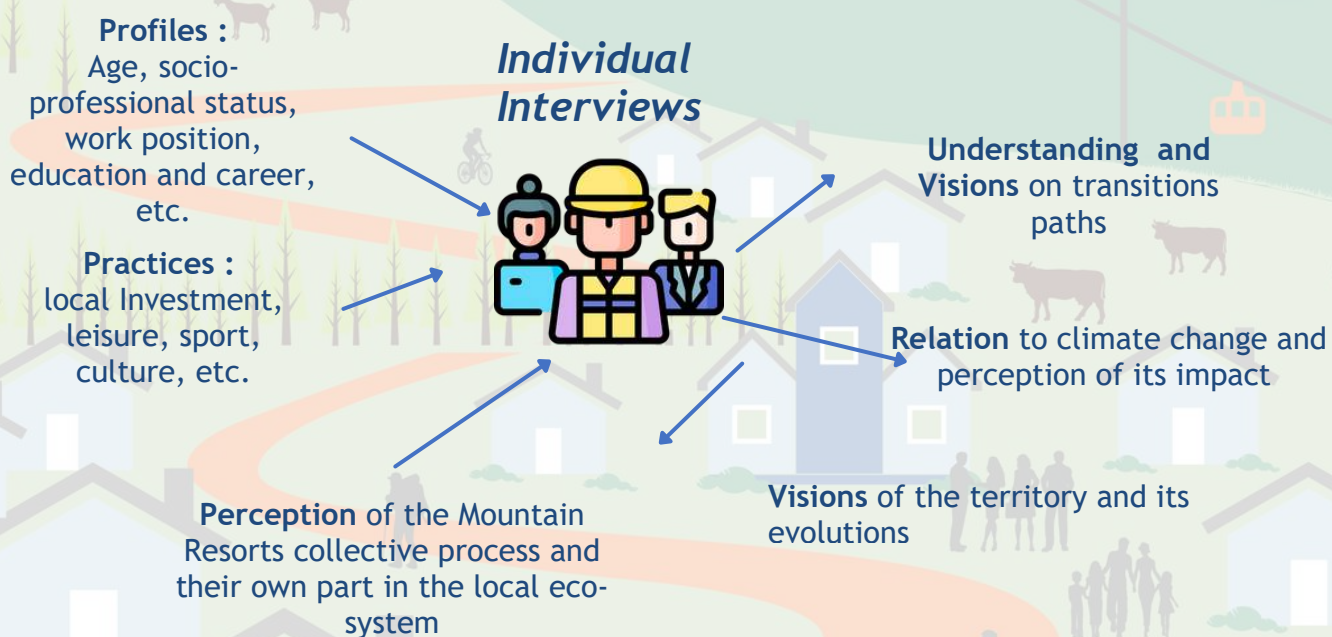
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ROADMAP TRANSITIONS TO SUSTAINABLE SKI TOURISM IN THE ALPS OF TOMORROW

Multi-scale analysis - Qualitative Data collection

Qualitative data collection is in the form of **semi-structured interviews** conducted with **local stakeholders** (politicians and technicians, ski area, ski school and tourist office directors, association presidents) and with **visitors**. Questions can focus on the challenges and drivers of change, values, visions and relationships to the current and future territory, as well as to the transition.

Stakeholders



ROADMAP TRANSITIONS TO SUSTAINABLE SKI TOURISM IN THE ALPS OF TOMORROW

Multi-scale analysis - Qualitative Data collection

Examples of other possible focuses :

- **Inhabitants** : better understand the diversity of people living in the territories and their relation to changes underway.

Inhabitants

Interviews - online survey

Profile :
Age, diploma,
socioprofessional
status, residential
path, etc.

Practices :
Work, leisure,
consumption, local
investment, etc.

**Relation to climate change
and perception of its
impact**

**Motivations to
live in the
location**

Attachments :
To the mountains,
the territory, village,
ski resort

**Visions of the territory
and its evolution**

To go further :
<https://www.alpine-space.eu/project-news/saint-pierre-de-chartreuse-inhabitants-and-their-territorys-transition-survey-results/>

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ROADMAP TRANSITIONS TO SUSTAINABLE SKI TOURISM IN THE ALPS OF TOMORROW

Multi-scale analysis - Qualitative Data collection

Examples of other possible focuses :

- **Visitors** (tourists, day trippers, second-home residents) : better understand them, going beyond marketing studies by integrating their practices, beliefs, representations and future visions in the analysis.

Visitors

Interviews

Profile :

Age, place of residence,
socio-professional status,
etc.

Relation to climate change and perception of its impact :

Perception of the effects,
current way of dealing with
the issue, behaviours,
future vision of the
mountain resort, etc.

Relation to the mountain resort :

Motivations to come, image,
sense of belonging, level of
satisfaction, typical day, usual
practices, etc.

Relation to the mountain resort as envisaged in the future vision :

Overall attitude over the future
vision, concerns generated,
involvement intentions, etc.

To go further : <https://www.alpine-space.eu/project-news/individuals-at-the-heart-of-transition-processes-in-mountain-resort-news-from-the-field/> and <https://www.alpine-space.eu/project-news/in-megeve-a-survey-to-better-understand-second-home-residents/>

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ROADMAP TRANSITIONS TO SUSTAINABLE SKI TOURISM IN THE ALPS OF TOMORROW

Example of LL's SWOT and of insights from TranStat LLs cross-analysis

Answering the *analysis questions* will facilitate our drawing up a diagnosis -swot- of the area and outline the main challenges and levers for action.

The final SWOT is based on a comprehensive analysis of quantitative and qualitative data, including surveys of stakeholders, local residents and tourists, as well as public documents (studies, reports, etc.) that can help enrich our knowledge of the context.



Strenghts

- Strong existing governance structures through Biosphere park, Regio management, e5, KEM, KLARI!
- Strong commitment to sustainable development
- Strong identification of the population with the region
- Strong connection with the landscape and the communities
- Attractive natural habitat, low pollution from exhaust fumes, noise and light
- Diverse educational offerings on natural resources
- Well-developed technical and social infrastructure
- Well-practiced handling of natural hazards and challenges
- High social capital and voluntary commitment
- Strong participative structures

Weaknesses

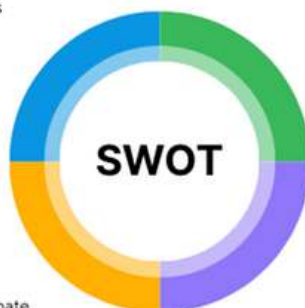


- Ski tourism strongly affected by climate change
- Steep topography and constant natural hazards
- Low financial strength in municipalities
- High infrastructure and maintenance costs (e.g. for artificial snowmaking)
- Low job supply, high proportion of commuters
- High dependence on individual mobility due to the scattered settlement character
- High volume of traffic
- Ageing population



Opportunities

- Leveraging established governance frameworks to coordinate sustainable development efforts for tourism
- Developing a holistic tourism concept for four seasons and positioning as a leading destination for environmentally conscious travellers
- Promotion of comprehensive educational programmes on sustainability and wildlife conservation to attract nature lovers and educational groups
- Strengthening trade and commerce, attracting SMEs and supporting economic initiative to achieve population growth
- Engaging stakeholders in inclusive decision-making processes to ensure transparency, inclusivity, and shared ownership
- Utilisation of vacant buildings for affordable housing and sustainable tourism businesses



Threats



- Disruption of tourism activities due to increasing climate impacts (shift of snow line, decrease in snow safety, elevated risks of forest fires during periods of drought)
- Risk of natural disasters (e.g. landslides, avalanches) poses significant threat to infrastructure and public safety, potentially deterring tourists and investors
- Limited financial resources may hinder the ability of municipalities to invest in necessary infrastructure improvements
- Lack of employment opportunities may lead to a drain of skilled workers and young talent seeking opportunities elsewhere, resulting in a declining workforce
- High volume of individual traffic could significantly degrade the environment and quality of life for residents and visitors
- Declining younger population may strain social services and limit economic growth opportunities

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Example of SWOT from a TranStat Living Lab

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Example of LL's SWOT and of insights from TranStat LLs cross-analysis

Answering the *analysis questions* will facilitate our drawing up a diagnosis -swot- of the area and outline the main challenges and levers for action.

Threats and Weaknesses	Chances and Strategies
Labour market issues, drain of skilled workers and recruitment difficulties (<i>Rogla, Valmalenco, Großes Walsertal</i>)	Supporting economic initiatives and engaging stakeholders in decision-making processes (<i>Großes Walsertal</i>); promoting tradition and local products (<i>Maniva</i>)
Climate change and its impact on snow cover (<i>Maniva</i>) and the need for solutions to reduce dependence (<i>St Pierre de Chartreuse</i>).	Year-round tourism and reduction of seasonality in the destinations (<i>Valmalenco, Kranjska Gora and Rogla</i>)
Issue of high land prices leading to spatial exclusion (<i>Vals</i>)	Utilization of vacant buildings for affordable housing (<i>Großes Walsertal</i>), more effective use of second homes (<i>Megève</i>)
Overtourism, aspiration for more sustainable mobility (<i>Rogla, Kranjska Gora</i>)	Holistic tourism concept for four seasons and environmentally conscious travelers (<i>Großes Walsertal</i>)
Limited financial resources hinders municipalities' capacity to invest in infrastructure (<i>Großes Walsertal</i>)	Territorial approach (long-term, holistic perspective on the interactions of people and their environment together with stakeholders) (<i>Valmalenco, Saint-Pierre-de-Chartreuse</i>)

Example of main insights'synthesis from cross-analysis in the nine TranStat Living Labs

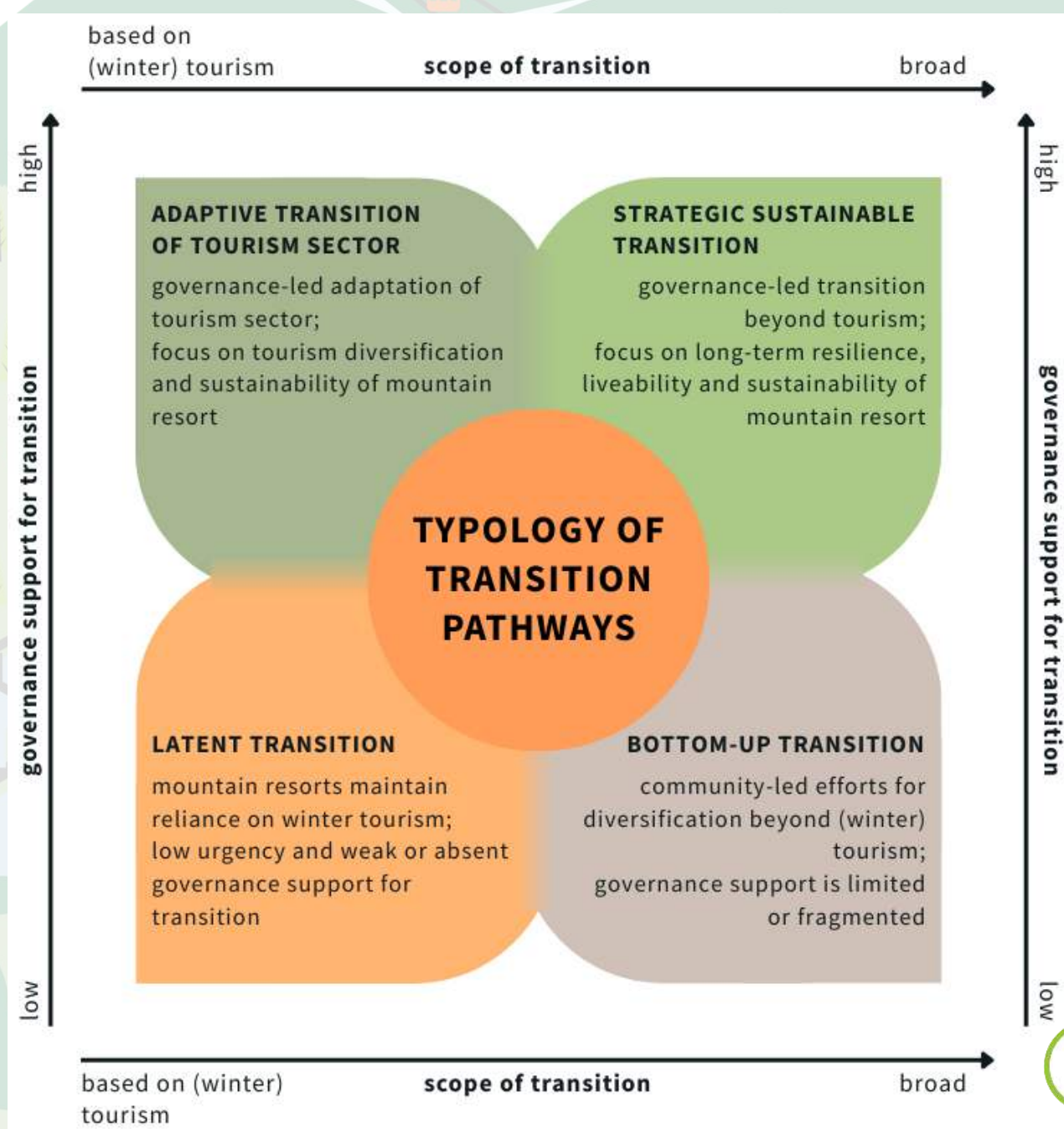
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ROADMAP TRANSITIONS TO SUSTAINABLE SKI TOURISM IN THE ALPS OF TOMORROW

Image 2: Transition Typologies



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