

WP T4 Replication and Knowledge Transfer

Activity A.T 4.1 Recommendations for low carbon winter tourism regions

EUSALP Recommendations and contribution reports

D.T4.1.3.2 – Alpine strategies for AG1

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Report 1: To develop a research and innovation ecosystem in the Alps for low carbon touristic mountain resorts

1. Executive summary / Brief

Given the present and future challenges related to the impacts of climate change that the tourism sector operating in the Alpine Region will have to deal with, a stronger collaboration and effort on R&I actions is needed. In this framework, RIS3 strategies could fast-track and aid the adoption of long-term resilience and adaptation plans specifically tailored for the winter tourism sector, through the development of new technologies able to reduce the CO₂ emissions of the tourism sector. The adoption of these technologies, as demonstrated through the Smart Altitude project's experience, need to be accompanied by the establishment of local/regional and trans-regional working tables among different stakeholders in order to promote the development of long-term strategies.

2. Introduction

Tourism in the Alpine Region is currently challenged by different elements, of which environmental and climate change are the most pressing ones. The overall volume of tourism in the Alps cannot be accounted for due to discrepancies in the statistical data collected at the national level, however it is possible to state that the regions located in the alps are among the most intensively visited areas in the European Union¹. At present, especially the winter tourism sector is subject to an increasing pressure to adapt to the new climatic conditions. As the Interreg ClimAlpTour Project highlighted in its last report, since the 1980s, the average winter temperature (December–February) in the Alps has increased by 1 °C and inter-year variability has also become more pronounced, with winters with minimal snow falls, such as in 2006- 2007, alternating with winters with high snowfall, such as in 2008-2009². The impacts of climate change on the winter season are far from linear but important changes are already.

Research and Innovation Strategies for Smart Specialisation (RIS3), implemented as part of the cohesion policy by the European Commission have been a useful tool to develop a close connection between the Academic world, Public Authorities dealing with governance issues and the Business Sector. Indeed, these strategies implement a place-based policy thinking based on a bottom-up approach and a strong involvement of key strategic actors in the implementation of specialisation

¹ European Environment Agency. (2016). The Alpine Region – Transport, Climate Change and Tourism. Available at: <https://www.eea.europa.eu/themes/regions/the-alpine-region/transport-climate-change-tourism/transport-climate-change-tourism/topics>

² ClimAlpTour. (2011). *Climate Change and its Impact on Tourism in the Alpine Space. Final project report of the Alpine Space Interreg project ClimAlpTour.*

strategies³. The overall aim of RIS3 strategies is to prioritise investments and public resources on strategic sectors in order to foster a stronger place-based development model.

3. Definition and State of the art

“Smart Specialisation is a place-based approach characterised by the identification of strategic areas for intervention based both on the analysis of the strengths and potential of the economy and on an Entrepreneurial Discovery Process (EDP) with wide stakeholder involvement. It is outward-looking and embraces a broad view of innovation including but certainly not limited to technology-driven approaches, supported by effective monitoring mechanisms.

A S3 should prioritise domains, areas and economic activities where regions or countries have a competitive advantage or have the potential to generate knowledge-driven growth and to bring about the economic transformation needed to tackle the major and most urgent challenges for the society and the natural and built environment. The number and nature of these priorities will vary from region to region.” (JRC – Smart Specialisation Platform)

In the previous programming period (2014-20) only a small amount of AR regions defined tourism as their priority for S3 Strategies. Specifically, when selecting the “economic domain” on the Eye@RIS3 platform of the JRC⁴ only 10 regions (namely: Autonomous Province Alto-Adige/Südtirol, Autonomous Province Trentino, Autonomous Region Val d’Aosta, Autonomous Region Friuli-Venezia-Giulia, Bavaria, Region Provence-Alpes-Côte-D’Azur, Region Rhône-Alpes, Slovenia, Tyrol, Salzburg) defined tourism as their specialisation priority (Figure 1).

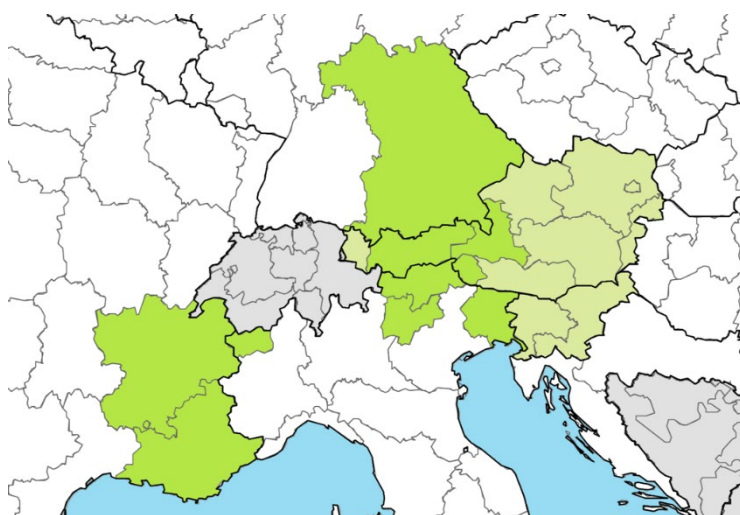


Figure 1 Regions which defined tourism as one of the S3 priorities in the 2014-20 programming period

The situation is not different when selecting the policy objectives of the S3 regional strategies in the Alpine Region: only 3 regions (namely: Slovenia, Autonomous Province Alto-Adige/Südtirol and Region Rhône-Alpes) have defined “nature and biodiversity – ecotourism” as one of their priorities.

This could be the result of the multisectoral character of the sector (i.e. tourism is usually not defined as a sector for statistical purposes), which hinders the ability to assess its relatedness level and its overall impact

³ Biagi, B., Brandano, M. G., & Ortega-Argiles, R. (2020). Smart specialisation and tourism: understanding the priority choices in EU regions. *Socio-Economic Planning Sciences*, 100883.

⁴ Available at: <https://s3platform.jrc.ec.europa.eu/>

at NUTS3 territorial scale, as well as the lack of coherent analytical data regarding tourism in the Alpine Region which constitutes an important obstacle for the assessment of governance models. This given, Smart Specialisation Strategies could potentially aid transforming and shaping towards a more sustainable use of natural resources within the tourism sector in the AR by fast-tracking of innovative solutions able to decarbonise specific sectors and touristic destinations.

4. Potential and challenges

Given the current increasing challenges faced by the winter tourism sector and the need to adapt

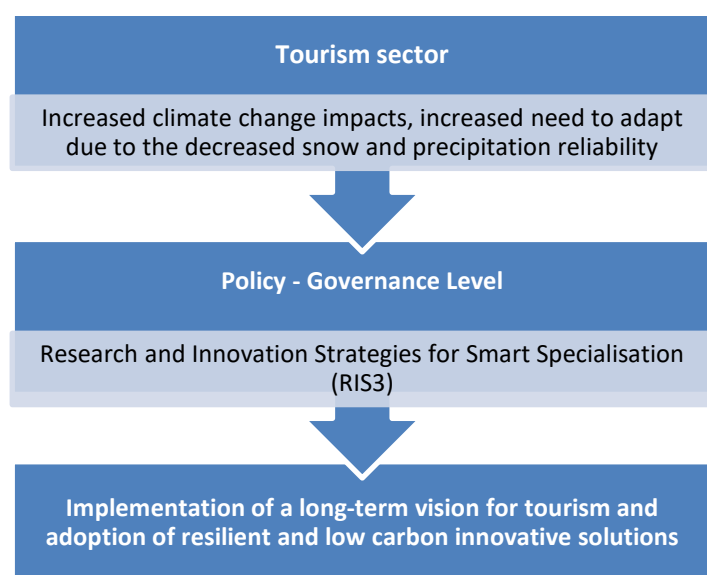


Figure 2 Potential contribution of the governance level for the implementation of long-term adaptation plans in the AR.

to the new conditions as well as to implement long-term development plans, a large number of AR regions might be interested in investing on R&I actions related to the touristic sector (Figure 2). This investment and prioritisation will most likely have to be accompanied by specific policies able to: (i) manage the influx of tourists by increasing the readiness levels of both the current touristic locations as well as the potential ones; (ii) fast-track the adoption of low carbon innovative solutions by ski resort as well as by touristic location; (iii) fast-track the adoption of a long-term resilience and adaptation plans by municipalities, provinces and regions.

5. Specific Objectives served by Smart Altitude

- Working on pilot projects with industry participation in smart specialisation areas to demonstrate the possibilities of scaling up innovations for the co-creation of joint value chains.
- Strengthening the capacity of research institutions, networks and infrastructures to act in an Alpine dimension.
- Taking into consideration the existing international research / innovation coordination activities of EUSALP.

6. Recommendations

Given the urgency to plan and define new strategies for winter tourism in the Alpine Region, the following recommendations underline the potential and role of cross-regional R&I actions. Specifically, the Smart Altitude project recommends to:

- Enhance multi-level cooperation on tourism with the EUSALP AG1, AG2 and AG9.
- Promote the interaction across the different stakeholders of tourism sector in the Alpine region through the establishment of a local/regional working table.
- Promote the identification of the tourism sector as a Smart Specialisation priority for the next

programming period: in particular, Smart grids are well identified in the new programming period by supporting the role of transnational R&I networks to strengthen smart energy. That is the reason why Smart Altitude aims at developing a specific chapter on S3 in Alpine regions to promote operational excellence in winter tourism destinations through concrete examples of best practices. The European context of a new programming period 2021-2027 of the FESI and also the European Green Deal, is clearly in favour of the development of an important chapter of S3 on Energy transition.

- Fast-track R&I transregional actions specific for the winter tourism sector mainly in 3 areas:
 - Reduction of energy consumption for equipment, installations, and building: technological breakthrough in energy consumption (e.g., LIDAR/snow grooming, H2 groomers, ...)
 - Renewable energy: production (advance in photovoltaic technologies like bifacial, thin materials and micro-hydroelectricity) and storage (advance in H2 technologies and Li-ion batteries).
 - System integration: advance in smart grid technologies taking into account high seasonality energy consumption and production, adaptation of smart city digital solutions to mountain territories (digital networks, IOT, digital integration and services).
- Develop a coherent long-term vision able to increase the resilience of alpine region communities to climate change.