10/05/2021 – Les Orres

Interreg Alpine Space
EUROPEAN UNION
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Smart Altitude

ALPINE WINTER TOURISM TERRITORIES
FOR A LOW-CARBON,
HIGH-IMPACT AND RESILIENT FUTURE

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This project is co-financed by the European Regional Development Fund through the Interreg Alpine Space program
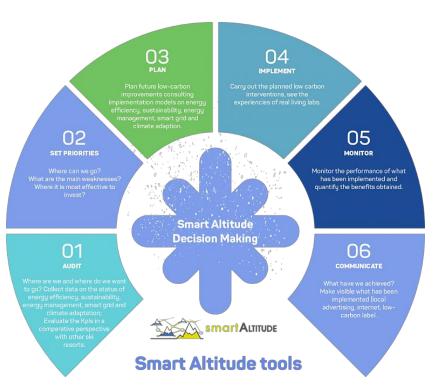
Smart Altitude Replication Process

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Smart Altitude Replication

03 **PLAN** — Plan future low-carbon improvements consulting implementation models on energy efficiency, sustainability, energy management, smart grid and climate adaption.

04 **IMPLEMENT** — Carry out the planned low carbon interventions, see the experiences of real living labs.

02 **SET PRIORITIES** — Where can we go? What are the main weaknesses? Where it is most effective to invest?

05 **MONITOR** — Monitor the performance of what has been implemented and quantify the benefits obtained.

01 **AUDIT** — Where are we and where do we want to go? Collect data on the status of energy efficiency, sustainability, energy management, smart grid and climate adaptation; Evaluate the Kpls in a comparative perspective with other ski resorts.

06 **COMMUNICATE** — What have we achieved? Make visible what has been implemented (local advertising, internet, low-carbon label.

Smart Altitude Decision Making

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Smart Altitude tools

The mission of Smart Altitude is "to demonstrate the **efficiency of a decision support tool that integrates all challenges into a step-by-step approach to energy transition**. The project clearly innovates by deploying a comprehensive approach of low-carbon policy implementation based on impact maximization accounting for technical, economic and governance factors. It is based on common performance indicators, monitoring systems and Energy Management Systems (EMS) in mountain territories, so as to build a **shared situational awareness and take impactful decisions**".
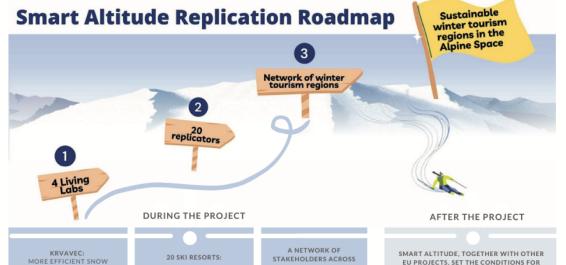
To achieve these objectives, Smart Altitude developed a **toolkit offering an integrated approach to the energy transition of mountain resorts and territories, tested it across 4 project Living Labs, engaged other 20 ski resorts to replicate this approach** outside the partnership and finally delivers a set of recommendations for policy improvement at different levels.

Smart Altitude Roadmap

Smart Altitude Replicators

Legend

Alpine Space
Involved areas
France
1. Arâches (Carroz/Flaine)
2. Avoriaz (in process)
3. Chatel
4. Isola 200
5. Les Belleveille (San Martin, Les Menuires, Val Thorens)
6. Oz-Vaujany
7. Risoul
8. Val Cenis
9. Val d'Isère
10. Villarembert

Italy
11. Aprica - Corteno
12. Bardonecchia ski
13. Folgaria - Marilleva
14. Monte Bondone
15. Paganella
16. Pejo
17. Pinzolo
18. Ponte di Legno - Tonale
19. Sestriere SPA
20. Valle Bianca

Living Labs resorts Smart Altitude
1. Les Orres (F)
2. Madonna di Campiglio (IT)
3. Krvavec (SI)
4. Verbier (CH)

Replication conditions and limits

Current framework

➢ High diversity in the management methods of ski resorts;
➢ High diversity in governance structure (family owned, consortia);
➢ High diversity in the regional and national support system for tourism;
➢ High geophysical and topological diversity.

Drivers to be taken into account

➢ Economic and financial (ROI, Technology Readiness Level);
➢ Social (local economy dependent on tourism);
➢ Communication,
➢ Infrastructural;
➢ Organisational aspects.

The Smart Altitude project has based its actions **on the diversity of its actors**. The work on the development of tools and the validation within the Living Labs aims at **providing a toolbox from which everyone can draw on good technical and economic practices according to their own situation**, while adopting a common implementation approach (process).

Replication beyond the project

Smart Altitude has prepared the ground for continuation and sustainability of replication after its end. This is mainly ensured by:

➢ **The establishment of a Network of winter tourism regions and stakeholders:** the project has created a network of regions and stakeholders dedicated to the development of resilient Alpine winter tourism territories, which includes all relevant SHs of winter tourism regions.

➢ **The development of policy recommendations at all levels:** the products of the last part of the project will be several recommendation papers addressing all levels of governance from the local up to the EUSALP level.

➢ **Dissemination activities:** all deliverables and outputs of the project are published on the project website and will be widely disseminated by the partners through the last project event planned in April 2021.

➢ **The set-up of a dedicated platform for replicators:** besides the project website and the Toolkit website, Smart Altitude is setting up a dedicated platform for project replicators, which will be maintained after the project by the Lead Partner to continue supporting replicators in their effort towards low-carbon ski resorts.

Recommendations for Replication

Policy Makers

❖ Fast-track the adoption of energy efficiency and self-sufficiency solutions in mountain resorts;
❖ Establish regional and trans-regional working groups involving ski resorts and key stakeholders (local community);
❖ Promote the adoption of long-term climate-adaptation plan;
❖ Promote the adoption of specific measures in S3 strategies.

Ski resorts operators

❖ Implement the Smart Altitude toolkit in the operations;
❖ Invest in qualified personnel able to assess the long-term goals and implement an adaptation plan;
❖ Involve different stakeholders in the elaboration of a future roadmap.

Local Stakeholders

❖ Promote the establishment of a local/regional working table on winter tourism;
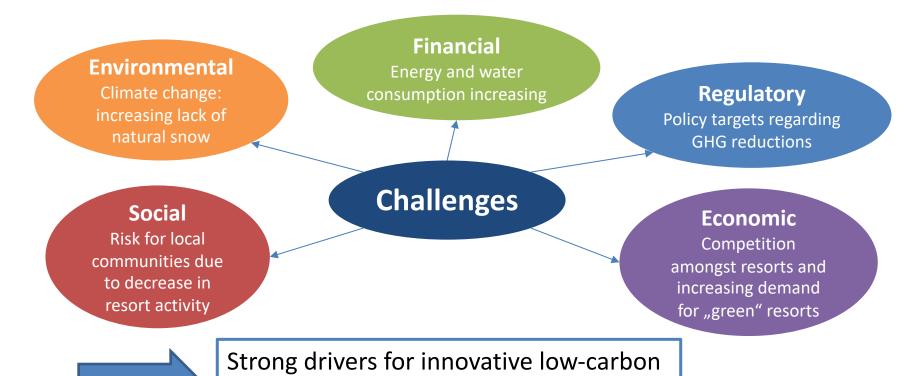❖ Promote and facilitate the adoption of low-carbon measures in your local community and in your region.

Barriers and opportunities for low-carbon innovation in winter tourism areas

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Challenges to low-carbon innovation

Benefits of low-carbon innovation

- ✓ Reduction of operational costs due to energy savings

- ✓ Improved visitor experience through implementation of advanced communication means on low-carbon measures

- ✓ Improved image and attractivity due to increased „greenness"

Barriers to low-carbon innovation

Barriers to low-carbon innovation	Solutions for overcoming barriers
Sometimes low awareness of resorts operators about impacts of climate change on their business model	Joint actions by mountain organizations, networking and exchange of knowledge between resort operators (e.g. Smart Altitude Network)
Regulatory context sometimes not favorable for the implementation of communal self-consumption, peer-to-peer energy trading and local energy communities	Smart Altitude policy recommendations + monitoring of evolving regulatory context
Infrastructure for green mobility and public transportation facilities are often dependent on regional and national decisions	Thinking green mobility connecting big agglomerations, mountain valleys and resorts at all levels
Lack of budget, time and qualified personnel for identifying and implementing (sometimes complex) eco-solutions	- Funding instruments at EU, national and regional level - Collaborative projects with academic institutions, regional businesses, regional development agencies, innovation management support, etc.

Thanks for the attention!

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