

## WP T3 Smart Altitude Toolkit

### Activity A.T3.3 Stakeholder engagement plan for attractive low carbon territories

#### D.T3.3.1 Report on territorial stakeholder engagement

<b>Project acronym:</b>	<b>Smart Altitude</b>
<b>Project name:</b>	Alpine winter tourism territories demonstrating an integrated framework for a low-carbon, high-impact and resilient future
<b>Programme priority:</b>	Priority 2 - Low Carbon Alpine Space
<b>Programme specific objective:</b>	SO2.1 - Establish transnationally integrated low carbon policy instruments

Document: Public			
<b>Responsible partner:</b>			
<b>Involved partners:</b>			
Version	Status	Date	Author
<b>0.0</b>	Draft – proposal and input request to partners	05-09-2019	UMIL
<b>1.0</b>	First Draft report	26-06-2020	UMIL
<b>2.0</b>	Final report	30-07-2020	UMIL, FBK, Les Orres, EDF
<b>Notes:</b>			

---

## List of content

List of content**2**

Executive Summary**3**

1. Introduction**4**

2. Smart Altitude Stakeholder analysis**4**

3. Recommendations for stakeholder engagement in winter tourism regions**7**

4. Grid analysis of enabling policies supporting the shift towards attractive low carbon winter tourism areas**11**

4.1 Existing Policies**11**

4.1.1 EUSALP and the Alpine Convention**11**

4.1.2 Climate Adaptation**13**

4.1.3 Climate Mitigation**15**

4.1.4 The Covenant of Mayors and the Sustainable Energy and Climate Action Plans (SECAPs)**18**

4.2 Gap Analysis**19**

5. R&I needs and potential for joint Alpine Smart Specialization Strategies alignment**20**

6. Territorial attractiveness: Benchmarking low carbon tourism labels and working group towards a Smart Altitude label**25**

Annex 1 - Stakeholder Analysis Matrix – Smart Altitude Project partners**29**

Annex 2. Grid analysis of existing policies**1**

Annex 3. Gap analysis of existing policies**6**

Annex 4. Ecolabels & certifications in the tourism sector**9**

---

## Executive Summary

This report focuses on the findings from Smart Altitude partners on the process of designing mitigation and adaptation goals to strengthen the attractiveness of winter tourism territories. It starts with the results of a Stakeholder analysis performed by all partners detecting the main stakeholders involved in the project Living Lab planning, implementation and monitoring processes, as well as the ones that should be further engaged, and provides recommendations for Stakeholder engagement to other winter tourism areas. The Stakeholder analysis is followed by a grid analysis of existing policies supporting transition towards low carbon territories and a Gap analysis at multiple levels of governance, resulting as the product of qualitative questionnaires and online information research, which will serve as a basis for the development of effective and sustainable low-carbon and climate resilient policy recommendations in WP T4 to national, regional, and local authorities. It finally closes with insights into R&I needs and potential for joint Alpine Smart Specialisation Strategies alignment and considerations on tourism labels. The results of this report will feed into WIKI Alps and the EUSALP PoK.

## 1. Introduction

This report consists of deliverable D.T.3.3.1 Report on Territorial stakeholder engagement, product of activity A.T.3.3 Stakeholder engagement plan for attractive low-carbon territories. The Smart Altitude project aims at planning, optimising and implementing high impact low-carbon and resilient policies in Alpine winter tourism regions. These are directed to support local authorities and ski resort operators in developing renewable and efficient energy systems. energy management systems and smart grid solutions. The aim of this report is to dive into the development of coherent and inclusive climate policies, by providing recommendations on stakeholder engagement, analysing existing policy gaps along operational/economic/governance axes and by exploring R&I needs and potential for joint Alpine S3 alignment and tools to increase territorial attractiveness. It completes the work of WPT3 on the Smart Altitude Toolkit and set the basis for developing policy recommendations and a replication roadmap in WPT4.

## 2. Smart Altitude Stakeholder analysis

This chapter present the results of a Stakeholder (SH) analysis conducted by Smart Altitude project partners. Partners from each country were asked to follow the traditional steps of the methodology, in order to identify and prioritise the key stakeholders to be engaged in Smart Altitude, in order to 1) collect and build a network of contacts to be used for communication and engagement, particularly useful for WPT4, which will see the engagement of replicating sites, and 2) formulate recommendations for SH engagement that can be used by similar projects or initiatives and also by Smart Altitude replicating sites.

Key steps of the analysis are summarised as follows:

1. **Identifying Stakeholders:** partners were asked to brainstorm within their team on the key SHs to be engaged in the project and more generally in similar projects and to fill in a stakeholder matrix, where SHs are characterised by their influence and interest.
2. **Prioritizing Stakeholders:** Based on the stakeholder matrix collected by each partner, identified SHs were positioned in one of four categories based on their interest and influence on the project (Figure 1). This graphical representation helps prioritising subjects and identify a strategy to engage them (based on their varying levels of importance).
3. **Understanding Stakeholders:** as a final step, partners were asked to analyse the list of SHs to get a better understanding of their interest in the project, what information they will want, who influences their opinion, and any other details that may inform each country's communications plan. Questions to be asked at this stage are for example: *What motivates your stakeholders? What resources do you need from them? How will you deal with opposition from critical stakeholders? What is the best method of*

*communication for different stakeholders? How will you keep them involved throughout the project?*

The full aggregated Stakeholder Analysis matrix, aggregating matrixes provided by all partners, is reported in Annex 1. Each Smart Altitude partner holds their own SH matrix with SH contacts and will be using it to keep their stakeholders engaged and informed along the project and beyond, according to the identified priority and related engagement strategy.

Figure 1 shows the aggregated results of the SH analysis and prioritisation.

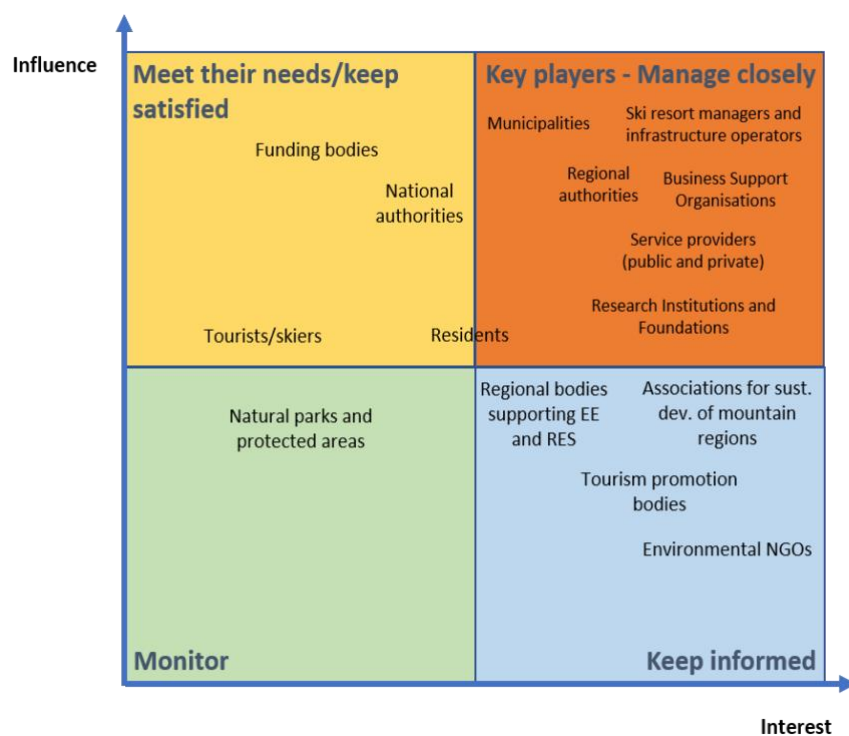


Figure 1: Stakeholder analysis and prioritisation for Smart Altitude project

As the figure shows, the **key players** identified by Smart Altitude partners are the Ski resort managers and ski infrastructure operators, who are in fact the key users of Smart Altitude tools and key delivery subjects of the project Living Labs. Municipalities are also key actors, as usually engagement of ski areas is facilitated by Mayors or political representatives, who facilitate stakeholder dialogues, guide and support the transition. These subjects must be **managed closely**, and in order to engage them successfully is fundamental to understand their priorities, which may be mostly economically or politically driven, and to find the most effective way to communicate the multi-dimensional benefits that this transition can deliver in terms of economic, social and environmental sustainability for the ski area and the surrounding territory. Regional authorities are also important, because of their influence on policy, legislation, incentives and local development strategies. Besides these key subjects there a number of organisations that may have a crucial role in project development, depending on project

priorities: these include Business Support Organisations, whether in the field of tourism development, business development, energy and smart grid project development and support, and Service Providers, including public and private, such as specialised SMEs or big energy companies and utilities. Research institutions may also provide the needed technical and scientific advice, and collaborations between them, local and private actors should be sought. These Stakeholders received high attention since the beginning of Smart Altitude, and where they are not involved as partners or observers, they are the target of continuous dialogue and cooperation, especially through the project Living Labs and in replicator sites. Finally, we have included residents of the ski areas at the border between key players and SHs to keep satisfied, because of their potential opposition to particular energy projects, especially if they do not understand the benefits and positive feedback loops on the local economy and job opportunities, and because their support could create synergies across sectors, especially in relation to a coherent tourism marketing of the ski area.

Subjects identified by partners with a **lower interest in the project but high influence**, are funding bodies, national authorities and tourists. Funding bodies, public or private, are key to support projects like Smart Altitude. In this case, the EU funding was essential to deliver the project activities, in other cases, such as for replicator sites, the leverage of funding from both the public and private sectors may be crucial; in relation to this the implementation models delivered in WPT3 will be an important guide for building up business cases which are both technically and financially viable. National authorities through National Strategies, Plans, Regulations and Tax measures have of course a high influence on the low carbon transition in winter tourism areas, thus recommendations delivered by the project in WPT4 will be particularly important in order to influence these in favour of supporting a climate resilient development. Lastly, tourists must be considered as the final users of the ski areas and infrastructures, driving the demand for winter tourism in each location. **Keeping them satisfied**, by understanding their rapidly evolving needs is crucial, as well as communicating effectively to them the benefits of the project, increasing attractiveness of the areas and thus ensuring the return of investment and economic sustainability in the long term.

Finally, there is a full range of subjects identified by partners with a **medium to high interest in the project and medium to low influence**, with various degree of intensity depending on countries, locations and specific activities conducted by each Living Lab. These subjects must be carefully mapped and considered as they can be important allies to the project, thanks to their networking capacities, potential for supporting and endorsing initiatives and also favourably influence public opinion on the project and disseminate project results. These must be **kept informed** during the whole project and include networks and associations at various levels, i.e. EU/national/regional, (Associations for sustainable development of mountain regions, Tourism

associations, networks supporting energy efficiency and renewable actions), Local or regional Tourism promotion bodies, Environmental NGO's, Natural parks and protected areas.

The stakeholder matrix in **Annex 1** present more specific information for each stakeholder group, specifically on what is important to the stakeholder, how could they contribute to the project, how could they negatively influence the project and the strategy that Smart Altitude partners is using to engage them.

### 3. Recommendations for stakeholder engagement in winter tourism regions

The recommendations here elaborated are based both on Smart Altitude project and lessons learnt, both on a literature and project reviews performed on this topic.

According to the *Stakeholder Engagement Manual – The practitioner's handbook on stakeholder engagement* elaborated by AccountAbility, the United Nations Environment Programme (UNEP), and Stakeholder Research Associates, these are the benefits of SH engagement<sup>1</sup>:

- Lead to more equitable and sustainable social development by giving those who have a right to be heard the opportunity to be considered in decision-making processes;
- Enable better management of risk and reputation;
- Allow for the pooling of resources (knowledge, people, money and technology) to solve problems and reach objectives that cannot be reached by single organisations;
- Enable understanding of the complex business environment, including market developments and identification of new strategic opportunities;
- Enable corporations to learn from stakeholders, resulting in product and process improvements;
- Inform, educate and influence stakeholders and the business environment to improve their decision-making and actions that impact on the company and on society;
- Build trust between organisations and their stakeholders.

According to this handbook, stakeholder engagement should include five key stages (Figure 2), which represent groups of necessary questions and processes in planning and managing stakeholder engagement, but which must not necessarily be seen as separated and consequential steps; the activities here suggested may be carried out at the same time, or it may

<sup>1</sup> AccountAbility, United Nations Environment Programme, Stakeholder Research Associates, 2005. From words to action: the stakeholder engagement manual. Available at: <http://www.unep.fr/shared/publications/pdf/webx0115xpa-sehandbooken.pdf>



be necessary to return to 'previous' steps in order to clarify or reconsider questions and adjust the process accordingly.



Figure 2: Five stage stakeholder engagement framework (source: AccountAbility, United Nations Environment Programme, Stakeholder Research Associates, 2005)

The suggested stages can be briefly summarised as:

1. **Think strategically:** the first stage entails the consideration of the project/the organisation strategic objectives, how these relate to which stakeholders and issues, leading to an initial prioritisation of stakeholders and issues for further analysis.
2. **Analyse and plan:** the second stage is the analysis of existing and new relationships the organisation/project seeks to maintain or establish with relevant stakeholders, available resources and organisational constraints. It may be carried out as the SH analysis performed by Smart Altitude partners in the previous chapter, using several techniques like SH analysis matrix and visual prioritisation; it leads to the decision on what kind of relationship to develop with these stakeholders and how to engage with them.
3. **Strengthen engagement capacities:** the third stage addresses questions of internal and external competencies and capacities to engage and deliver the necessary actions in order to ensure that all parties are able to join and contribute effectively.
4. **Design the process and engage:** in the fourth stage the engagement techniques, tools and approaches should be defined, building up an Engagement Strategy and Plan which should suit the needs of the specific situation and help to reach the project objectives.
5. **Act, review and report:** finally, in the fifth stage, engagement is delivered, reviewed, reported and adjusted along the project, ensuring continuous engagement and improvement of the engagement strategy.



In Smart Altitude Living Labs, the following subjects were the key stakeholders in leading and delivering actions, who are also represented by Smart Altitude Consortium: Ski resort manager and Ski infrastructure operator, Municipalities, Energy companies, Research institutes, and Business Support Organisations. However, a variety of subjects were engaged and supported our activities, as emerged in the previous chapter, with differences based on local context and priorities. Overall, based on Smart Altitude experience, effective communication is crucial for effective engagement and must be carefully plan since the beginning of each project.

Communication was delivered by partners through a variety of approaches, including regular meetings and online/phone communications for more relevant stakeholders, bilateral workshops and multi-stakeholder workshops and events; overall the communication strategy used was considered successful, with some difficulties in addressing the regional and national level stakeholders in some countries.

Finally, the engagement of citizens and residents of winter tourism areas emerge as a key recommendation. In Smart Altitude Living Labs, this was delivered with different degrees of involvement, based on local context and actions delivered by the Labs. For example, in Les Orres, where actions had a wide scope and included also the housing sector, residents' engagement was more intense and was delivered by sending regular municipal newsletters on the project and engaging directly tourism residencies' owners and operators to involve them in the tourism housing inclusion into the microgrid, participation of representatives of the resort community at the Forum international OCOVA – Smart Mountain aux Orres, as well as other categories of communities from the valley (e.g. students and teachers in energy systems and associated communication technologies from the Lycée of Embrun), besides the more general communication toward the general public, including tourists, on the resort website, radio media, TV media and journals, and the presentation of Les Orres living lab at the annual OCOVA event. In other Living Labs, where actions were more focused on energy efficiency measures for ski infrastructure (Krvavec) and Energy Management Systems for the sky resort operations (Madonna di Campiglio), residents involvement was less extensive and managed mainly through communications and engagement in local events presenting the project and communication materials of various way (i.e. dedicated press releases, videos, online information, brochures and posters, etc).

Building on project results and from a wider desk research, involving and building a dedicated communication channel with local communities should be considered and planned carefully, as this represents the first step towards citizens' participation and accountability. The recommendation to organisations implementing similar projects is to regularly inform the public about the project progress and results, especially highlighting clearly the benefits achieved and foreseen for the local communities and the region. This not only in order to increase awareness

---

and change behaviour, but also to generate support by local communities and stakeholders, promote a coherent marketing message by all economic operators of the ski area and surrounding territories, reduce potential oppositions and increase the potential for long term sustainability of project results. For the same reason, besides local events and targeted communication materials, a potential approach is to develop specific educational and awareness raising programmes for schools, families and children related to the project and its results, also engaging them in bi-lateral and follow up activities connected to the project.

Overall, promoting sustainable practices is a way to enhance natural, economic, and social capital, as well as to attract tourists and users, who are more and more aware and sensitive to these issues. Higher visibility to sustainable practices and achievements should be given addressing all stakeholders, in particular tourists, but also ski operators, businesses, local authorities, and communities, while spreading info materials to other ski resorts and networking in order to share knowledge, discuss results, ask for feedback and policy suggestions. This work will be done in the next months within the project WPT4, which will try to maximise further engagement of other winter tourism areas in the replication of Smart Altitude outputs, promoting and transferring project results and benefits achieved.

Promotion and communication to residents and tourists around sustainability and climate action should be enhanced as a way to raise awareness among all stakeholders regarding climate mitigation and adaptation. It is important to create synergies, collaboration between public and private organisations, citizens, and mountain associations, to increase networking opportunities and develop multi-level projects.

## **4. Grid analysis of enabling policies supporting the shift towards attractive low carbon winter tourism areas**

This chapter illustrates the results from a grid analysis of existing policies in relation to climate mitigation and adaptation implemented by countries in the Alpine Space geographical area at local, regional, and national levels, as well as Gaps and Barriers to the achievement of those policies, specifically in relation to winter tourism areas. This research was conducted by asking partners from each country to undertake a qualitative questionnaire created by University of Milan CrC Ge.S.Di.Mont. regarding available and missing operational, economic, and governance measures, combined with further inclusion of information from several available web-sources. The aim of this study is to understand the current situation of mitigation and adaptation policies in the analysed countries, as a basis for the development of recommendations in WPT4 for further improvement in the specific fields where policy gaps exist, and to offer strategies to create a consistent political system between local, regional, national, and international levels supporting Smart Altitude Living Labs, replicating sites and sustainable winter tourism regions in general.

The key steps of the analysis were:

- 1) Qualitative data collection from questionnaires and data integration through a web research. Collection of examples from the countries involved.
- 2) Data analysis, existing policies and gap analysis tables (Annex 1 and 2).
- 3) Formulation of synthesis of results.

### **4.1 Existing Policies**

#### **4.1.1 EUSALP and the Alpine Convention**

The EU Strategy for the Alpine Region (EUSALP), a joint initiative of Alpine states and regions to strengthen cooperation between them and to address common challenges in a more effective way, includes within its objectives the establishment of a multi-level governance framework and transnational policies to enhance climate mitigation and adaptation among the Region's countries.

This is attempted by increasing cooperation between nations, regions, and cities through partnerships and international agreements such as the Alpine Convention. Fundamental milestones of International support to climate mitigation and adaptation capacity building, formulated by the Alpine Convention, are the Action Plan on Climate Change in the Alps (2009)

to implement the previous Declaration on Climate Change (2006), as well as the Guidelines for climate change adaptation at the local level in the Alps (2014)<sup>2</sup>. More recently, the XV Alpine Conference resulted in the Declaration of Innsbruck (2019), which was signed by all the country parties of the Alpine Space to focus on the importance and urgency of climate action in the same Region by setting national, regional, and local objectives in multiple sectors, such as tourism, transport, and energy. The “Climate-neutral and Climate-resilient Alps 2050 publication” reports the results of the Declaration, together with the Alpine Climate Target System 2050 and the 7th Report on the “Natural Hazard Risk Governance” in the Alps<sup>3</sup>.

The Action Group 9 of the EUSALP aims at creating an “Alpine energy efficiency cluster” which could be substantially useful to enhance collaboration between Alpine Region countries to develop innovative technical initiatives in the energy efficiency sector, specifically to Alpine infrastructures<sup>4</sup>. Overall, the mitigation strategy is based on reducing GHG emissions by implementing cross-sectoral and cross-regional renewable and efficient energy measures in the macro-region. It is important here to highlight the “Towards Renewable Alps” report of the Alpine Convention (2017) which synthesises the Alpine Space countries’ strategies and achievements in the energy sector, in relation to the overall renewable and efficient energy vision and strategy of the Alpine Convention<sup>5</sup>. The adaptation strategy<sup>6</sup> aims to uniform the vulnerability assessment and disaster risk management policies between countries to improve their adaptation capacity, in order to increase the resilience of the macro-region to climate change and reduce its impacts to the overall economy, environment, and society. The adaptation strategy aims to uniform the vulnerability assessment and disaster risk management policies between countries to improve their adaptation capacity. Both the EUSALP management bodies and Interreg Alpine Space foster synergy between the EUSALP Action Groups and the Interreg Alpine Space funded projects. Among these, an example is the GoApply project, entirely focused on climate adaptation, seeking to strengthen multi-level governance for national climate adaptation policies, transferring them into regional and local strategies, as well as public and private actions<sup>7</sup>.

<sup>2</sup> Italian Ministry for the Environment. 2014. Guidelines for Climate Change Adaptation at the local level in the Alps. Available at:

[https://www.minambiente.it/sites/default/files/archivio\\_immagini/Lima/Guidelines%20for%20Climate%20Change%20Adaptation%20at%20the%20local%20level%20in%20the%20Alps\\_.pdf](https://www.minambiente.it/sites/default/files/archivio_immagini/Lima/Guidelines%20for%20Climate%20Change%20Adaptation%20at%20the%20local%20level%20in%20the%20Alps_.pdf)

<sup>3</sup> Alpine Convention. 2019. Climate-neutral and Climate-resilient Alps 2050. Available at: [https://www.alpconv.org/fileadmin/user\\_upload/Publications/Climate2050\\_EN.pdf](https://www.alpconv.org/fileadmin/user_upload/Publications/Climate2050_EN.pdf)

<sup>4</sup> EU Strategy for the Alpine Region (EUSALP): <http://alpine-region.eu/>

<sup>5</sup> Alpine Convention. 2017. Towards Renewable Alps: a progress report. Available at: [https://www.alpconv.org/fileadmin/user\\_upload/Publications/Towards\\_Renewable\\_Alps\\_2017.pdf](https://www.alpconv.org/fileadmin/user_upload/Publications/Towards_Renewable_Alps_2017.pdf)

<sup>6</sup> Alpine Convention. 2009. Action Plan on Climate Change in the Alps. Available at: [https://www.alpconv.org/fileadmin/user\\_upload/Organization/AC/X/ACX\\_B6\\_EN.pdf](https://www.alpconv.org/fileadmin/user_upload/Organization/AC/X/ACX_B6_EN.pdf)

<sup>7</sup> Italian Ministry for the Environment. 2014. Guidelines for Climate Change Adaptation at the local level in the Alps. Available at:

[https://www.minambiente.it/sites/default/files/archivio\\_immagini/Lima/Guidelines%20for%20Climate%20Change%20Adaptation%20at%20the%20local%20level%20in%20the%20Alps\\_.pdf](https://www.minambiente.it/sites/default/files/archivio_immagini/Lima/Guidelines%20for%20Climate%20Change%20Adaptation%20at%20the%20local%20level%20in%20the%20Alps_.pdf)

#### 4.1.2 Climate Adaptation

The EU Adaptation Strategy was adopted by the European Commission in 2013. This focuses on delivering an effective and coordinated approach in order to render the EU Member States more resilient to climate change, at all levels of governance. This is expected to be achieved by supporting EU States, Regions and cities in the adoption of adaptation strategies; by promoting adaptation actions in specific and more vulnerable fields such as agriculture and infrastructures; by enhancing communication and information about climate adaptation in the decision making context<sup>8</sup>.

From an operational perspective, National Climate Adaptation strategies targeted by 2030-2050 are identified in all the Alpine Space countries<sup>9 10 11 12 13</sup>. These cover analyses of current and future climatic conditions with related risks and vulnerabilities, as well as specific sectoral adaptation actions and financial instruments (Italy, Germany, France). In the case of Austria and Switzerland, these also have a particular focus on the risks and opportunities in the Alpine seasonal tourism sector<sup>14 15</sup>. Regional climate scenarios are increasingly used to analyse climate risks and vulnerabilities in the alpine regions, particularly for tourism and sport activities, consequently transferred into local climate projections and meteorological forecasting<sup>8</sup>. The presence of targets and action plans at a National scale is fundamental in order to achieve political consistency at regional and local levels. In fact, these policies are then converted into regional action plans for a more specific and effective implementation, in order to render these regions sustainable and resilient (Lombardy, Italy; Styria, Austria; Grisons, Switzerland<sup>16 17 18</sup>. At

<sup>8</sup> EU Adaptation Strategy. Available at: [https://ec.europa.eu/clima/policies/adaptation/what\\_en](https://ec.europa.eu/clima/policies/adaptation/what_en)

<sup>9</sup>The Austrian Strategy for Adaptation to Climate Change. Available at: <https://www4.unfccc.int/sites/NAPC/Documents%20NAP/The%20Austrian%20Strategy%20for%20Adaptation%20to%20Climate%20Change.pdf>

<sup>10</sup>Stratégie nationale d'adaptation au changement climatique, France. Available at: [https://www.ecologique-solidaire.gouv.fr/sites/default/files/ONERC\\_Rapport\\_2006\\_Strategie\\_Nationale\\_WEB.pdf](https://www.ecologique-solidaire.gouv.fr/sites/default/files/ONERC_Rapport_2006_Strategie_Nationale_WEB.pdf)

<sup>11</sup>German Strategy for Adaptation to Climate Change. Available at: [https://www.bmu.de/fileadmin/bmu-import/files/english/pdf/application/pdf/das\\_gesamt\\_en\\_bf.pdf](https://www.bmu.de/fileadmin/bmu-import/files/english/pdf/application/pdf/das_gesamt_en_bf.pdf)

<sup>12</sup>Strategia Nazionale di Adattamento ai Cambiamenti Climatici, Italy. Available at: [https://www.minambiente.it/sites/default/files/archivio/allegati/clima/documento\\_SNAC.pdf](https://www.minambiente.it/sites/default/files/archivio/allegati/clima/documento_SNAC.pdf)

<sup>13</sup>Adaptation preparedness scoreboard: Country fiche for Slovenia. Available at: [https://ec.europa.eu/clima/sites/clima/files/adaptation/what/docs/country\\_fiche\\_si\\_en.pdf](https://ec.europa.eu/clima/sites/clima/files/adaptation/what/docs/country_fiche_si_en.pdf)

<sup>14</sup>Politique de la Confédération pour les espaces ruraux et les régions de montagne, Switzerland. Available at: <https://www.are.admin.ch/are/it/home/spazi-rurali-e-regioni-di-montagna/strategia-e-pianificazione/politica-della-confederazione-per-le-aree-rurali-e-le-regioni-mo.html>

<sup>15</sup>Adaptation aux changements climatiques. Switzerland. Available at: <https://www.are.admin.ch/are/fr/home/espaces-ruraux-et-regions-de-montagne/strategie-et-planification/adaptation-aux-changements-climatiques.html>

<sup>16</sup>Italian Ministry for the Environment. 2017. Piano Nazionale di Adattamento ai Cambiamenti Climatici. Available at: [https://www.minambiente.it/sites/default/files/archivio\\_immagini/adattamenti\\_climatici/documento\\_pnacc\\_luglio\\_2017.pdf](https://www.minambiente.it/sites/default/files/archivio_immagini/adattamenti_climatici/documento_pnacc_luglio_2017.pdf)

<sup>17</sup>Interreg Alpine Space GoApply: Climate Adaptation Governance in the Alpine Space Transnational Synthesis Report (WP1). Available at: [https://www.alpine-space.eu/projects/goapply/results/goapply\\_d.t1.2.1\\_d.t1.3.1\\_wp1\\_transnational-synthesis-report\\_foen-wsl\\_feb-2019.pdf](https://www.alpine-space.eu/projects/goapply/results/goapply_d.t1.2.1_d.t1.3.1_wp1_transnational-synthesis-report_foen-wsl_feb-2019.pdf)

<sup>18</sup>Interreg Alpine Space GoApply: Mainstreaming of climate adaptation in the Alpine macro-region - Lesson-drawing from the comparison of selected cases from Austria, Germany, Italy and Switzerland Transnational Synthesis Report (WP2). Available at:

a local scale, the Italian Ministry of Environment, in collaboration with experts of the Alpine Convention, offered detailed and effective Guidelines for climate change adaptation at the local level, useful to all municipalities in the Alps (Alpine Convention, 2014, see 4.11). While in Switzerland numerous cities and municipalities have signed adaptation strategies, for example in the Valais canton where the 4th Living Lab Verbier is located<sup>19</sup>, the action plans are still limited among cities and municipalities of the Alpine mountain region, which could possibly be initiated by adhering to the Covenant of Mayors and presenting local sustainable energy and climate action plans (SECAPs) (see 4.14).

National financial support is given to climate research, impacts and vulnerabilities in Austria<sup>20</sup>, Germany<sup>21</sup>, and France<sup>22</sup> (GICC Programme), which is particularly necessary for climate adaptation policy implementation and knowledge transferring. Dedicated mechanisms to fund climate adaptation actions are being offered in France, such as tax exemptions, subsidies, tax credits, creation of specific funds, while the Slovenian Climate Fund committed to increase funds opportunities for local measures<sup>23</sup>. Specific regional funding opportunities are dedicated to mountain areas, landscape planning and skiing infrastructures in Italy and Austria (Trentino Sviluppo, Pozza di Fassa<sup>24</sup>, Altopiano del Tesino<sup>25</sup>, Italy; Lower Austria's Landscape Fund<sup>26</sup>).

A crucial strategy to enhance the governance and climate adaptation capacity consists of increasing public support to convert alpine mountain regions into multi-seasonal destinations. Therefore, governments, inhabitants, and tourists should be all involved from the demand side, collaborating with the supply side to support the creation of a more sustainable and resilient business sector to climate change. For example, a climate adaptation information platform was created in Switzerland to inform stakeholders on Federal and cantons projects, as well as

[https://www.alpine-space.eu/projects/goapply/results/results\\_revised/goapply\\_d.t2.2.1\\_wp2\\_transnational-synthesis-report\\_fla\\_final.pdf](https://www.alpine-space.eu/projects/goapply/results/results_revised/goapply_d.t2.2.1_wp2_transnational-synthesis-report_fla_final.pdf)

<sup>19</sup> Switzerland Cantons and Cities Adaptation. 2018. Available at: <https://www.bafu.admin.ch/bafu/en/home/topics/climate/info-specialists/anpassung-an-den-klimawandel/anpassung-an-den-klimawandel-in-den-kantonen.html>

<sup>20</sup> Austrian Ministry for the Environment. 2013. The Austrian Strategy for Adaptation to Climate Change. Available at: <https://www4.unfccc.int/sites/NAPC/Documents%20NAP/The%20Austrian%20Strategy%20for%20Adaptation%20to%20Climate%20Change.pdf>

<sup>21</sup> Federal Ministry for the Environment, Nature Conservation and Nuclear Safety. 2016. Climate Action Plan 2050. Available at: <https://www.bmu.de/en/publication/climate-action-plan-2050/>

<sup>22</sup> French Ministry of Ecology, sustainable development and energy. 2007. Available at: [https://www.ecologique-solidaire.gouv.fr/sites/default/files/ONERC\\_Rapport\\_2006\\_Strategie\\_Nationale\\_WEB.pdf](https://www.ecologique-solidaire.gouv.fr/sites/default/files/ONERC_Rapport_2006_Strategie_Nationale_WEB.pdf)

<sup>23</sup> European Commission. 2018. Adaptation preparedness scoreboard: Country fiche for Slovenia. Available at: [https://ec.europa.eu/clima/sites/clima/files/adaptation/what/docs/country\\_fiche\\_si\\_en.pdf](https://ec.europa.eu/clima/sites/clima/files/adaptation/what/docs/country_fiche_si_en.pdf)

<sup>24</sup> Trentino Sviluppo. 2019. Pozza di Fassa. Available at: <https://trentinosviluppo.it/it/ELE0013976/la-pista-aloch-a-pozza-di-fassa-diventa-laboratorio-di-innovazione-per-lo-sport>

<sup>25</sup> Trentino Sviluppo. Distretto del Tesino. Available at: <https://trentinosviluppo.it/it/ELE0014006/avviso-pubblico-progetti-dimpresa-nel-cuore-delle-alpi-il-distretto-del-tesino>

<sup>26</sup> The Austrian Strategy for Adaptation to Climate Change. Available at: <https://www4.unfccc.int/sites/NAPC/Documents%20NAP/The%20Austrian%20Strategy%20for%20Adaptation%20to%20Climate%20Change.pdf>

<https://www.alpine-space.eu/projects/smart-altitude/en/home>



implemented measures<sup>27</sup>; Slovenia is particularly dedicated to involve stakeholders in the adaptation policy making process through public events and consultations of associations, and is working to include them in the implementation and evaluation processes as well.

#### 4.1.3 Climate Mitigation

The European Union set an ambitious target to become the first climate-neutral continent by 2050, and it is already on track regarding the achievement of 2020 and 2030's objectives<sup>28 29</sup>. To pursue the aim of substantially reducing greenhouse gas emissions, investing in a sustainable and circular economy system, preserving the European environment and biodiversity, the main measures implemented are the European Green Deal with the proposal of European Climate Law and European Climate Pact initiatives<sup>30</sup>.

From an operational perspective, National Climate Mitigation strategies targeted by 2030 are translated into National Energy and Climate Plans (NECPs), submitted by all the EU Alpine Space countries here considered<sup>31</sup>. By 2050 instead, the long-term strategies are identified in all countries, except for Italy and Slovenia where they are still under approval<sup>32 33 34 35 36</sup>. These consist of Action plans to reduce energy consumption and consequent GHG emissions through energy efficiency measures, combined with the implementation of renewable energy systems. National targets and action plans are then converted to regional strategies for a more specific and effective implementation, in order to support the transition towards energy autonomous, carbon neutral regions (In the Alpine Space: Baden Wuerttemberg<sup>37</sup>, Germany; Piemonte<sup>38</sup>, Alto

<sup>27</sup> Federal Office for the Environment – FOEN. 2012. Adaptation to climate change in Switzerland. Available at: <https://www.bafu.admin.ch/bafu/de/home/themen/klima/fachinformationen/anpassung-an-den-klimawandel.html>

<sup>28</sup> EU climate action and the European Green Deal. Available at: [https://ec.europa.eu/clima/policies/eu-climate-action\\_en](https://ec.europa.eu/clima/policies/eu-climate-action_en)

<sup>29</sup> EU Climate strategies & targets. Available at: [https://ec.europa.eu/clima/policies/strategies\\_en](https://ec.europa.eu/clima/policies/strategies_en)

<sup>30</sup> A European Green Deal. Striving to be the first climate-neutral continent. Available at: [https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal\\_en](https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en)

<sup>31</sup> National energy and climate plans (NECPs). Available at: [https://ec.europa.eu/energy/topics/energy-strategy/national-energy-climate-plans\\_en](https://ec.europa.eu/energy/topics/energy-strategy/national-energy-climate-plans_en)

<sup>32</sup> Integrated National Energy and Climate Plan for Austria 2021-2030. Available at: [https://ec.europa.eu/energy/sites/ener/files/documents/at\\_final\\_necp\\_main\\_en.pdf](https://ec.europa.eu/energy/sites/ener/files/documents/at_final_necp_main_en.pdf)

<sup>33</sup> Climate Action Plan, Germany. Available at: <https://www.bmu.de/en/publication/climate-action-plan-2050/>

<sup>34</sup> LOI n° 2019-1147 du 8 novembre 2019 relative à l'énergie et au climat (1), France. Available at: <https://perma.cc/5XYM-8VDA>

<sup>35</sup> Climate Plan, France. Available at: <https://www.gouvernement.fr/en/climate-plan>

<sup>36</sup> National Long-term strategies. Available at: [https://ec.europa.eu/info/energy-climate-change-environment/overall-targets/long-term-strategies\\_en#strategies](https://ec.europa.eu/info/energy-climate-change-environment/overall-targets/long-term-strategies_en#strategies)

<sup>37</sup> Sustainable Global Climate Leadership. Baden-Württemberg. Available at: <https://www.bafu.admin.ch/bafu/de/home/themen/klima/fachinformationen/anpassung-an-den-klimawandel.html>

<sup>38</sup> Regione Piemonte. Disposizioni per la predisposizione e la realizzazione della Strategia Regionale sui Cambiamenti Climatici. Available at: [https://climapiemonte.files.wordpress.com/2018/01/20170703\\_pie\\_dgr-strategia-cambiamento-climatico-burp.pdf](https://climapiemonte.files.wordpress.com/2018/01/20170703_pie_dgr-strategia-cambiamento-climatico-burp.pdf)



Adige, Italy<sup>39</sup>; Operational Programme “Tyrol” financed by EU, Austria<sup>40</sup>; Valais Canton, Switzerland<sup>41</sup>). Switzerland also implemented a policy strategy specific for the sustainable development of rural and mountainous regions, by primarily strengthening territorial cooperation at the Federal level, in order to support their educational, socio-economic, environmental values, and to reduce the gap between urban and rural areas, particularly for the promotion of sustainable tourism in these territories<sup>42</sup>.

At the local level, specific programmes are implemented by and for cities and municipalities to promote those measures, together with voluntary initiatives in the energy sector for buildings and transport infrastructures (Cit  nergie, societ   a 2000W, Verbier, Switzerland<sup>43</sup>; Velenje, Slovenia; Les Orres and Les Gets councils, France; Kempten/Allgaeu, Oberstdorf and Tegernsee, Germany). Labels and certifications are also important instruments used to evaluate the quality of the environmental and energy performance (e5 programme, Austria<sup>45</sup> and as a good marketing tool to promote businesses, municipalities and destinations (FDDM, Valais excellence, Switzerland) (questionnaires); several labels exist in different sectors, including hospitality and business (e.g. KlimaHotels, BioHotels, Green Star, Green Globe, Earthcheck).

The local councils in the Italian Alpine regions are particularly at an advanced stage in the implementation of the Covenant of Mayors initiatives compared to the neighbour countries (see 4.14). In addition, French national and regional public organisations have been giving technical support to take action in Les Orres’ tourism sector and to further develop territorial policies (Atout France, Region Sud, RisingSud agency, Capenergies cluster, France); in Switzerland several good practices are reported among cantons in the Alpine Space in the tourism sector, such as Pionni  re, the alpine station in Saas Fee that limits the access to cars, and the commitment made by 25 municipalities in the Valais canton to sign a management plan for the Jungfrau-Aletsch Alps, among other initiatives<sup>46</sup>.

Regarding the economic axis, feed-in tariffs, subsidies, funds, and taxes are the main market-based instruments used at all levels of governance. Nationally, feed-in tariffs are provided to renewable energy producers to help investments, by ensuring price stability and long-term contracts for renewable energy production, accompanied by investment aids when their energy

<sup>39</sup> EURAC. 2018. Climate change and the consequences for South Tyrol. Available at: <http://www.eurac.edu/en/research/mountains/remsen/projects/Documents/Dossier%20Climate%20Report%20EN.pdf>

<sup>40</sup> Operational Programme “Tyrol”. Available at: [https://ec.europa.eu/regional\\_policy/en/atlas/programmes/2007-2013/austria/operational-programme-tyrol](https://ec.europa.eu/regional_policy/en/atlas/programmes/2007-2013/austria/operational-programme-tyrol)

<sup>41</sup> Agenda 2030 de d  veloppement durable Canton du Valais. Available at: <https://www.vs.ch/documents/529400/4421813/Strat%C3%A9gie+-+Agenda+2030/7361b578-c92b-45fb-991a-c448bec7edba>

<sup>42</sup> Swiss Confederation – Federal Office for territorial development. 2015. Swiss strategy for rural and mountain areas. Available at: <https://www.are.admin.ch/are/it/home/spazi-rurali-e-regioni-di-montagna/strategia-e-pianificazione/politica-della-confederazione-per-le-aree-rurali-e-le-regioni-mo.html>

<sup>43</sup> Environmentally-friendly skiing in Verbier. Available at: <https://www.seeverbier.com/environmental>

<sup>44</sup> Cit  nergie Switzerland. Available at : <https://www.local-energy.swiss/fr/programme/2000-watt-gesellschaft.html#/>

<sup>45</sup> E5-Salzburg. E5 Programme for Energy Efficient Communities. Available at: <https://e5-salzburg.at/service/english.php>

<sup>46</sup> Swiss Confederation – Federal Office for territorial development (ARE). Good practices. Available at: <https://www.are.admin.ch/are/it/home/sviluppo-sostenibile/pubblicazioni/buoni-esempi.html>

production increases, such as tenders for energy efficiency and remediation measures (Germany, Switzerland, France) (questionnaires). Regional funds were also identified by Les Orres Living Lab (Region Sud Provence Alpes Côte d’Azur, France), as well as to small-medium businesses to invest in sustainable energy measures (Baden Wuerttemberg, Germany). In order to increase the public expenditures in alpine infrastructures, specific taxes, in addition to the income tax, are applied in Germany, directed to improve sustainable mobility, as well as surcharges added to users bills in proportion to their power consumption (questionnaires).

Numerous funding and subsidy opportunities are offered by the European Union (Horizon 2020, LIFE, European Regional Development Fund, etc.), also specifically dedicated to Alpine projects, which are utilised by the analysed countries. In relation to electric mobility, public administrations are supported in the Alps through several National and European projects (Interreg Alpine Space e-MOTICON and e-SMART; Green Mobility Programmes in Italy, Sud Tyrol/France<sup>47</sup>; Alpine Smart Transport and Urbanism Strategies – ASTUS<sup>48</sup> at EU level). In addition, public funding initiatives are directed to support regions and states, such as the Positive Energy Territory in France: a national programme which delivers financial support to local public administrations to implement low-carbon and sustainable energy solutions<sup>49</sup>. Funds for investments provided by “Programme batiment”<sup>50</sup> and the New Regional Policy<sup>51</sup> are provided in Switzerland, directed to local Alpine mountain areas and municipalities, skiing infrastructures, and private companies, with the aim of investing in sustainable technologies, improving energy efficiency and establishing partnerships between cities.

Establishment of partnerships, stakeholder engagement, and promotion initiatives are the most frequent measures implemented to enhance the governance system across national, regional, and local institutions (Slovenia, Germany, Italy). Partnerships are built between mountain public administrations (see EUSALP, 4.11), together with non-governmental organisations, local Universities, research entities, start-ups, and foundations, to create networks with the aim of promoting processes and best practices of sustainable development in the Alps and raising awareness of their importance, but also to support the development of sustainable tourism and sustainable energy production. Other interesting initiatives concern public calls for inclusive, innovative, and entrepreneurial solutions in the Alpine mountain region and communities, to increase their local productivity and economic opportunities by developing successful projects and action plans (initiatives promoted by Trentino Sviluppo, “città alpina dell’anno” contest<sup>52</sup>,

<sup>47</sup> French Green Mobility strategy. Available at: <https://www.greenmobility-france.com/>

<sup>48</sup> ASTUS project. Transnational conclusions report and recommendations. Available at: <https://www.alpine-space.eu/projects/astus/en/home>,  
[https://www.alpine-space.eu/projects/astus/outputs/astus\\_transnational\\_conclusions\\_report\\_and\\_recommendations.pdf](https://www.alpine-space.eu/projects/astus/outputs/astus_transnational_conclusions_report_and_recommendations.pdf)

<sup>49</sup> PEACE Alps. Policy Recommendations. Available at: [https://www.alpine-space.eu/projects/peace\\_alps/project-results/d5.3.4\\_policy-recommendations-with-pic-180802.pdf](https://www.alpine-space.eu/projects/peace_alps/project-results/d5.3.4_policy-recommendations-with-pic-180802.pdf)

<sup>50</sup> Le Programme batiment, Switzerland. Available at: <https://www.leprogrammebatiments.ch/fr/>

<sup>51</sup> New Regional Policy, Switzerland. Available at: <https://regiosuisse.ch/it/nuova-politica-regionale-npr>

<sup>52</sup> Città Alpina dell’anno: <https://www.alpenstaedte.org/it/citta-alpine>

Italy; European Energy Award, Germany). As seen in the previous chapter, stakeholder engagement is fundamental in order to create synergies across sectors, kick off innovation, and raise awareness and information about the economic and social benefits deriving from sustainability initiatives in local winter tourism areas. For this reason the involvement of local communities and tourists is also very important; examples include awareness campaigns with youth generations, for example regarding sustainable consumption and waste reduction in the Alps (Les Orres<sup>53</sup>, France), but also websites supporting tourists to plan environmentally-friendly vacations (Verbier, Switzerland).

Further existing initiatives concern spreading information about climate risks, adaptation and mitigation opportunities, free consulting to small local communities about energy services. In this respect, GHG emissions calculators, energy management system instruments, and Alpine climate monitoring tools are increasingly available (GLORIA network, Austria; ENERCLOUD+, Italy)<sup>54</sup>.

#### **4.1.4 The Covenant of Mayors and the Sustainable Energy and Climate Action Plans (SECAPs)**

The Covenant of Mayors (CoM) is an available instrument for cities and local municipalities which commit to tackle climate change through mitigation and adaptation policies. By signing the covenant, public administrations commit themselves to develop a Sustainable Energy and Climate Action Plan (SECAP), targeted 2030, where a baseline emissions inventory and a vulnerability and risks assessment related to the specific plan need to be included as a baseline to identify mitigation and adaptation actions in their territory.

To date (2020), in the Province of Trento 29 covenants have been signed since 2010. In Italy these are 3291 overall, rendering it the first European country per number of municipalities adhering to the CoM. Germany has had 61 signatories since 2008, while 83 municipalities signed in France, 9 in Switzerland, and 29 in Slovenia. In Austria, 13 projects have been signed since 2008, most of them focused on climate mitigation action<sup>55</sup>.

In the Alpine Region, Italy presents several examples of SECAPs, such as the one signed by the Val di Non community, a district of 30 municipalities in the province of Trento, which aims at improving the local environmental policy strategy, also adhering to the EMAS European Regulation, by involving citizens, stakeholders in the policy implementation process, supporting sustainable production, waste and energy use reduction, collaborating with other administrations and organisations to promote environmentally sustainable tourism in the area<sup>56</sup>. Another example of SECAP in mountain areas was implemented in France in 2012 by the

<sup>53</sup> <http://www.mairie-lesorres.fr/environnement-0>

<sup>54</sup> PEACE Alps. Policy Recommendations. Available at: <http://www.mairie-lesorres.fr/environnement-0>

<sup>55</sup> Covenant of Mayors. Action Plans. Available at: <https://www.covenantofmayors.eu/plans-and-actions/action-plans.html>

<sup>56</sup> SECAP Val di Non. Available at: [https://mycovenant.eumayors.eu/storage/web/mc\\_covenant/documents/8/oHZEtPe9TEtn4CQY6dL0adQcYRAurZl.pdf](https://mycovenant.eumayors.eu/storage/web/mc_covenant/documents/8/oHZEtPe9TEtn4CQY6dL0adQcYRAurZl.pdf)

Chamonix Mont Blanc Valley Joint Local Authority, including climate mitigation and adaptation targets, focused on the transport and tourism sector in the Alpine mountain area<sup>57</sup>.

## 4.2 Gap Analysis

This Gap analysis aims at identifying and understanding key missing policies in the countries mentioned in order to build a framework that, combined with existing policies, could serve as inspiration and guideline to the implementation of new environmental, climate-related measures.

The fundamental gaps identified lie in the climate and energy action plans by 2050 which are yet to be implemented by presenting new specific policies regarding adaptation strategies and related regulations for regions to adapt to climate change (particularly in Austria and Germany)<sup>58</sup>. For example, the Italian national and regional action plans, except for Lombardy, do not consider the link between climate change and tourism sector vulnerabilities, especially in the Alpine mountain regions. The issues are increasingly difficult at local levels where concrete instruments still need to be developed and transferred into laws and specialised plans<sup>59</sup>. The Covenant of Mayors, which could be a useful planning instrument for the Living Labs, has not been signed by their respective local councils (see 4.14). Delays in meeting the short-term targets set by the national strategies and regional mitigation action plans necessarily lead to inefficient and undeveloped plans by local councils and communities to build sustainable mobility and infrastructure solutions. This could be also partially due to the absence of specific personnel and resources in public administrations, such as Sustainability and Climate officers, which could coordinate inter-sectoral measures and evaluate the progress of the projects. Overall, more coordination and multilevel governance is needed, so that locally addressed solutions can be integrated and supported by wider plans across Alpine mountain areas, regional and national scale.

Scarce investments in Research and Innovations are also identified at all levels by Project partners. In addition, Smart Altitude partners highlight an insufficient operational, technical, and capacity building support from national and regional organisations toward local authorities and ski resorts, particularly in the development of Energy Management Systems and in spreading sustainable practices in the energy, mobility, and tourism sectors.

<sup>57</sup> SECAP Mont Blanc Valley. Available at: [https://www.covenantofmayors.eu/about/covenant-community/signatories/action-plan.html?scity\\_id=12898](https://www.covenantofmayors.eu/about/covenant-community/signatories/action-plan.html?scity_id=12898)

<sup>58</sup> Go Apply project. Climate Adaptation Governance in the Alpine Space. Transnational Synthesis Report. Available at: [https://www.covenantofmayors.eu/about/covenant-community/signatories/action-plan.html?scity\\_id=12898](https://www.covenantofmayors.eu/about/covenant-community/signatories/action-plan.html?scity_id=12898)

<sup>59</sup> Go Apply project. Climate Adaptation Governance in the Alpine Space. Transnational Synthesis Report. Available at: [https://www.covenantofmayors.eu/about/covenant-community/signatories/action-plan.html?scity\\_id=12898](https://www.covenantofmayors.eu/about/covenant-community/signatories/action-plan.html?scity_id=12898)

Regarding the economic side of the policy strategies, the most common barriers identified by Smart Altitude partners consist of a lack of, or limited and unattractive, national, regional, and local funds specifically dedicated to climate mitigation and adaptation in mountain and tourism fields, as well as legal impediments for Switzerland and Liechtenstein to access European Regional Development Funds. Limited financial support is given by municipalities, regional and national authorities is directed to sustainable practices in ski resorts, through subsidies and tax exemptions for renewable energy, smart mobility and energy consumption reduction systems, and directed to tourism services that implement sustainable action, particularly in the energy sector. Tourists are not encouraged enough by subsidies to use public transport, book sustainable hotels, reduce waste and emissions during their vacations, combined with missing surcharges on transit on the Alpine mountain region by private vehicles which could substantially reduce the emissions caused by the transport sector. In addition, there are not adequate investments in the use of monitoring instruments and data analysis of energy consumption, climate change forecasting and projections for skiing areas, which would be helpful to enhance climate services. Further studies on energy efficiency and renewable energy could be supported more by financial incentives.

The development of an effective Governance system is hindered by inefficient stakeholder engagement at all levels in the provision of information regarding the implementation of the projects. Approaches to stakeholder involvement are still traditional and the promotion of sustainable practices in energy efficiency and use of renewables by the mountain resorts is still limited, particularly toward tourists. Mountain-oriented education is missing in the Alpine states<sup>60</sup>. Scarce cooperation with partners and stakeholders is also linked to a lack of detailed knowledge and experience of climate change risks and vulnerability by public administrations, leading to fragmented climate mitigation and adaptation strategies and action plans across national governments, regional, and public administrations. Regarding multi-level governance, there is still an overall failure to involve representatives of lower administrative levels in project development processes, as well as specialised agencies and organisations in the policy draft process, which could lead to enhanced effectiveness, know-how improvements, higher awareness at lower levels.

## **5. R&I needs and potential for joint Alpine Smart Specialization Strategies alignment**

<sup>60</sup> YOurALPS Political Strategies on Education for sustainable development and Mountain-oriented Education. Available at: [https://www.alpine-space.eu/projects/youralps/project-results/politicalstrategiesanalysisreport\\_geouibk\\_02.pdf](https://www.alpine-space.eu/projects/youralps/project-results/politicalstrategiesanalysisreport_geouibk_02.pdf)

---

*“Smart specialisation involves making choices, leading to priority setting and channelling resources towards investments with a potentially higher impact on the regional economy” (Foray et al. 2012)<sup>61</sup>.*

### **Research & Innovation Needs**

Mitigation and adaptation to climate change of mountain resorts and territories is based on energy self-sufficiency measures as defined and applied in the Smart Altitude project. However, there are many technological, economic, regulatory or societal barriers to their deployment or adoption. Identifying the nature of these obstacles will make it possible to define the remaining R&I needs to be covered in order to achieve an efficient and sustainable development of mountain territories with high winter tourism.

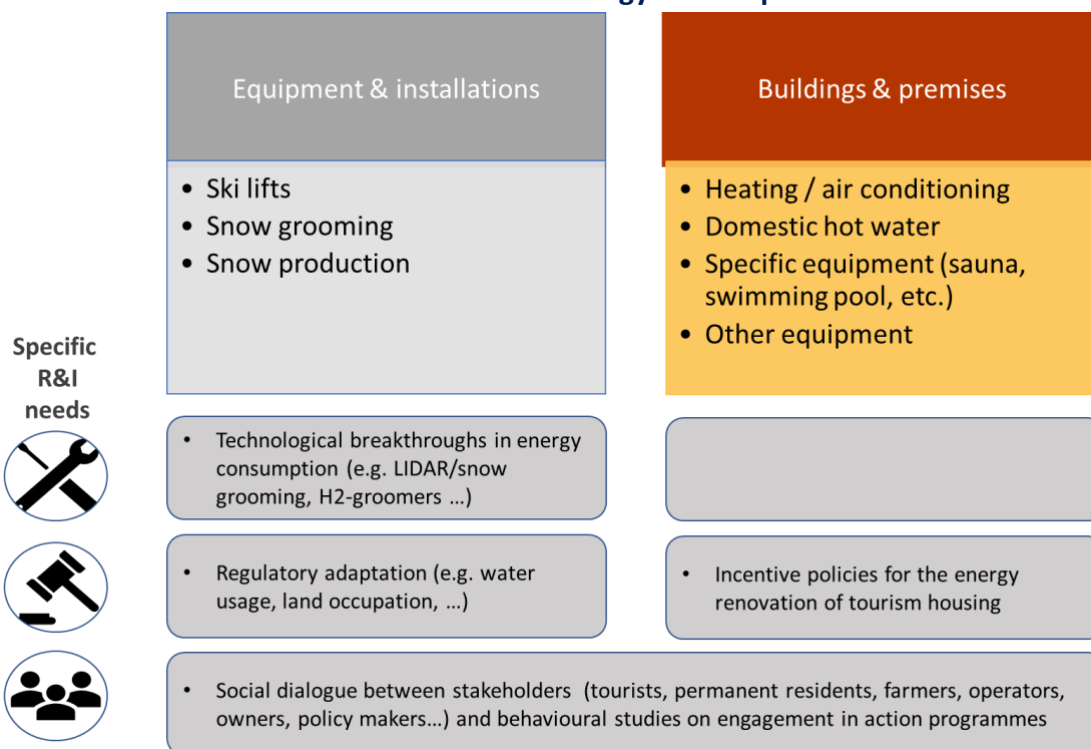
The Smart Altitude project has defined three major fields of action linked to climate mitigation and adaptation in winter tourism areas: (i) energy consumption optimization, (ii) renewable energy production and (iii) system integration and control. Each of these fields of activity includes subsets for which there are common barriers for all types of territories. On this matter, R&I programmes of the European Union (such as Horizon 2020, CEF – Connecting Europe Facility, to name a few) could aid overcoming these barriers, by promoting Research actions on these specific issues. The following paragraph attempts to define which are the particular needs that are relevant to a specific approach within the framework of the development policies of the Alpine region.

---

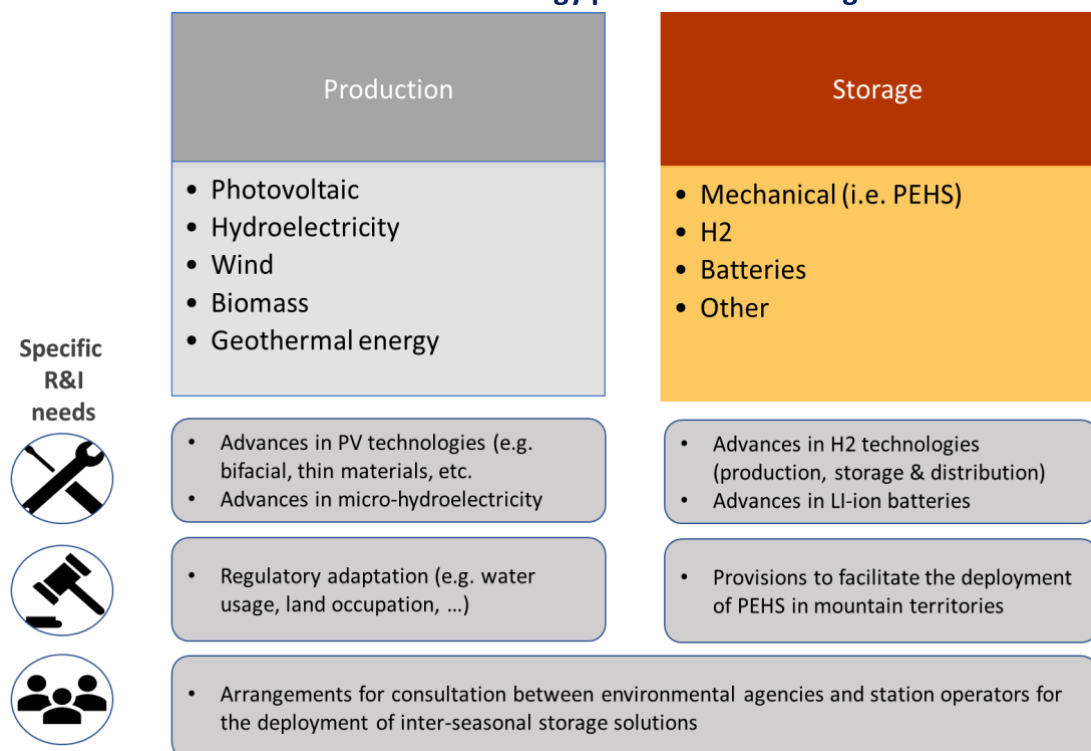
<sup>61</sup> Foray, D., Mowery, D. C., & Nelson, R. R. (2012). Public R&D; and social challenges: What lessons from mission R&D; programs?. *Research policy*, 41(ARTICLE), 1697-1702.



### Axis 1 – Reduction of energy consumption

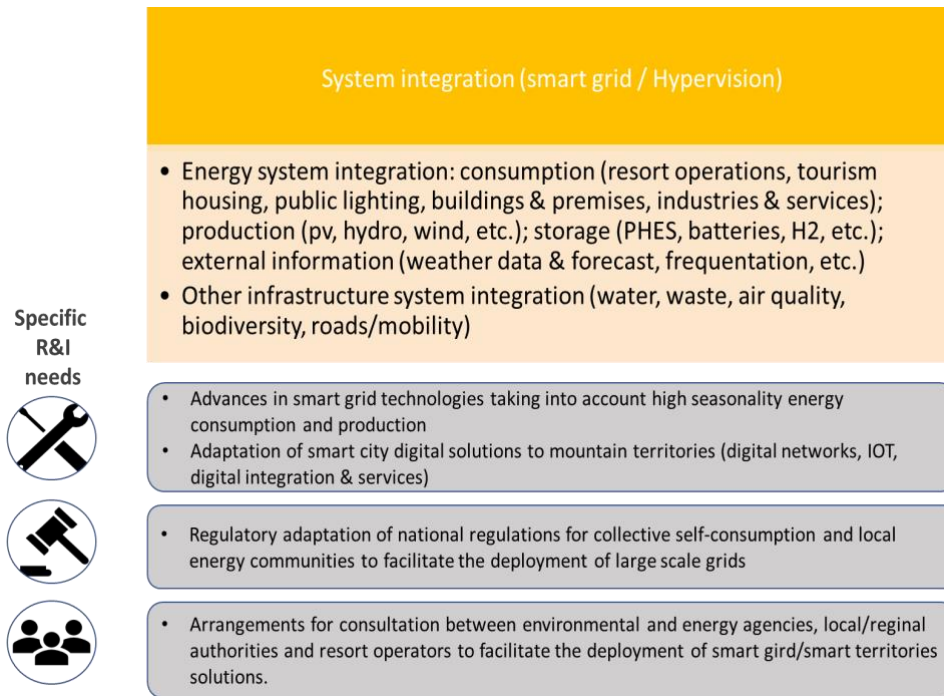


### Axis 2 – Renewable energy production & storage





### Axis 3 – System integration



Other fields of importance, such as mobility, are not examined in this document because they are not part of the Smart Altitude project. However, they will have to be considered in a more global view of R&I specific needs of mountain territories for economic performance and sustainable development.

### Smart Specialisation Strategies (S3)

Smart specialisation is an innovative approach that aims to boost growth and jobs in Europe, by enabling each region to identify and develop its own competitive advantages. Through its partnership and bottom-up approach, smart specialisation brings together local authorities, academia, business spheres and the civil society, working for the implementation of long-term growth strategies supported by EU funds.

Since 2011, the European Commission provides advice to regional and national authorities on how to develop and implement their smart specialisation strategies via a mechanism called 'Smart Specialisation Platform'. This Platform facilitates mutual learning, data gathering, analysis, and networking opportunities for around 170 EU regions and 18 national governments. Thematic Smart Specialisation platforms have also been created. Regions join forces and pool resources on the basis of matching smart specialisation priorities in high valued added sectors. For example, partnerships have been developed in the fields of 3D printing, medical technology, smart grids, solar energy, sustainable buildings and high-tech farming.

---

As energy is a topic with high interest amongst the Member States and regions registered in the S3 Platform, the identified strategies set priorities at national and regional levels to build competitive advantage by developing and matching Research & Innovation (R&I) own strengths with business needs, to address emerging opportunities and market developments in a coherent manner, while avoiding duplication and fragmentation of efforts. They may take the form of, or are included in, a national or a regional R&I strategic policy framework. In this context, there is an **emerging need to align innovation roadmaps across EU policies and territories**. There is also an upcoming challenge in accompanying the implementation of innovation strategies with the appropriate methodological development and related tools, with regard namely to benchmarking, trans-national cooperation and mutual learning.

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 to develop 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.

Considering the fact that the geographic and structural characteristics of the Alps provides good potentials to make the Alpine region a European “model region for renewable energies and energy efficiency”, Macro-regional policy planning helps the Alpine region to tackle the challenge to meet energy demand sustainably, securely and affordably. EUSALP is therefore organising several Energy Conferences with EUSALP Action Group 9.

Considering the key challenges and the specific role of tourist economic of mountain resorts in the Alpine region, it is a great opportunity to support the integration of SMART ALTITUDE results in Smart Specialisation Strategies as a contribution to EUSALP.

## 6. Territorial attractiveness: Benchmarking low carbon tourism labels and working group towards a Smart Altitude label

The specific issue of sustainable tourism in the Alpine region has been a major debate for many years of cooperation through the Alps. In particular, the Tourism Protocol of the Alpine Convention<sup>62</sup> was ratified in 2005 to contribute to sustainable development in the Alpine region within the existing institutional framework by promoting environmentally-friendly tourism through specific measures and recommendations that take into account the interests of the local population and tourists.

The current French Presidency of the Alpine Convention has proposed to the Permanent Committee to set up a steering committee to work on the challenging topic of a Charter for Sustainable Resorts.

In order to address the issue of more sustainable tourism in the Alps, one of the priority themes of the French presidency of the Alpine Convention, the idea of a guide to tourist destinations, based on the SDGs, was presented. Discussions are needed to clarify the scope, content and form. In particular, the following questions will be taken into consideration:

- 1) **Guide terms and vocabulary.** According to many participants, a definition of the terms used in the guide is necessary, particularly, to distinguish between destination area and ski resort. It is also requested that the definitions in the guide are aligned with the tourism Protocol of the Alpine convention.
- 2) **Guide recipients.** The idea is to target public local destinations. However, there are private operators in some regions, so a specific perimeter must be established for those actors. As this guide would come from governments, it would be easier to address public actors, but also to try to enlist enterprises to get them involved. In short, the main target would be public mountain destinations, but the guide should be designed in such a way that it can be used also by private mountain destinations.
- 3) **Deliverable.** Some members of the Committee stressed the importance of avoiding redundancy with what has already been developed, for example with the existing sets of indicators. Moreover, there is already an extensive collection of good practices examples. Another idea was to also give examples of things not to do, examples of bad practices. The initial idea was to propose concrete and relevant indicators (ETIS and others) for tourism destinations in the Alps, for each SDG. But another method was foreseen to choose relevant issues, indicators and SDGs for the local stakeholders.

<sup>62</sup> Alpine Convention. 2005. Protocol on the Implementation of the Alpine Convention of 1991 in the field of tourism. Available at: [https://www.alpconv.org/fileadmin/user\\_upload/Convention/EN/Protocol\\_Tourism\\_EN.pdf](https://www.alpconv.org/fileadmin/user_upload/Convention/EN/Protocol_Tourism_EN.pdf)

The next step is to work on a list of indicators for each issue and a survey will be addressed to the members of the Committee to match them with the SDGs. Thus, the guide could consist in: i) a list of issues relevant to the successful implementation of a tourism project in an Alpine destination; ii) a list of “SMART” indicators for each issue, selected from existing works; iii) a mapping of issues to SDGs to facilitate reporting; iv) a list of links – bibliography of good practices and useful information for involvement.

It should be noted that many transnational cooperation projects of the Alpine space program have developed operational actions in favour of sustainable tourism. Their experiences and contributions are absolutely crucial to understand what could be done and what is needed to face the growing challenges of sustainable tourism in the context of climate warming. For its part, EUSALP is working actively on this topic, in particular by developing specific actions and events. For example, the French Presidency is supporting the organisation of “*Les Etats généraux de la transition du tourisme en montagne*” organised by Mountain Wilderness.

SMART ALTITUDE should raise awareness of contribute to these various initiatives by informing on the best practices identified and on the conditions of their transferability. While the environmental dimension of sustainable tourism drives the various analysed and actions, it seems absolutely necessary to develop a concrete and operational contribution to mobilise as much as possible the alpine tourist destinations and resorts in the elaboration of their sustainable development strategies. SMART ALTITUDE therefore has a key operational role to play on the theme of labelling and certification.

Ecolabels are widespread in the tourism sector<sup>63</sup> <sup>64</sup> <sup>65</sup>. In 2020, the Worldwide Ecolabel Index references 457 ecolabels worldwide. Among these 457 labels, 130 are currently applicable to the tourism sector. We will subsequently focus only on these 130 labels, which are listed in Annex 4. A first distinction between those labels can be made by taking into account the scope of action of each of these labels. Respectively 11% and 15% of those ecolabels are European or international. The national ecolabels (68%) were not short-listed because they were too specific to the characteristics of the countries concerned. Finally, transnational labels generally cover 2 or 3 countries. This kind of label, specific to the Alpine Space, could be envisaged within the Smart Altitude project. However, setting up a transnational label can be more complicated as it requires coordination which is not necessarily natural between the different countries concerned.

<sup>63</sup> Buckley, R.C. (2002). Tourism ecolabels. *Annals of Tourism Research*, 29, 183-208

<sup>64</sup> Buckley, R. 2012. Sustainability Reporting and Certification in Tourism. *Tourism Recreation Research* 37(1): 85-90.

<sup>65</sup> Font, X., & Buckley, R. C. (Eds.). (2001). *Tourism ecolabelling*. Wallingford: CAB International

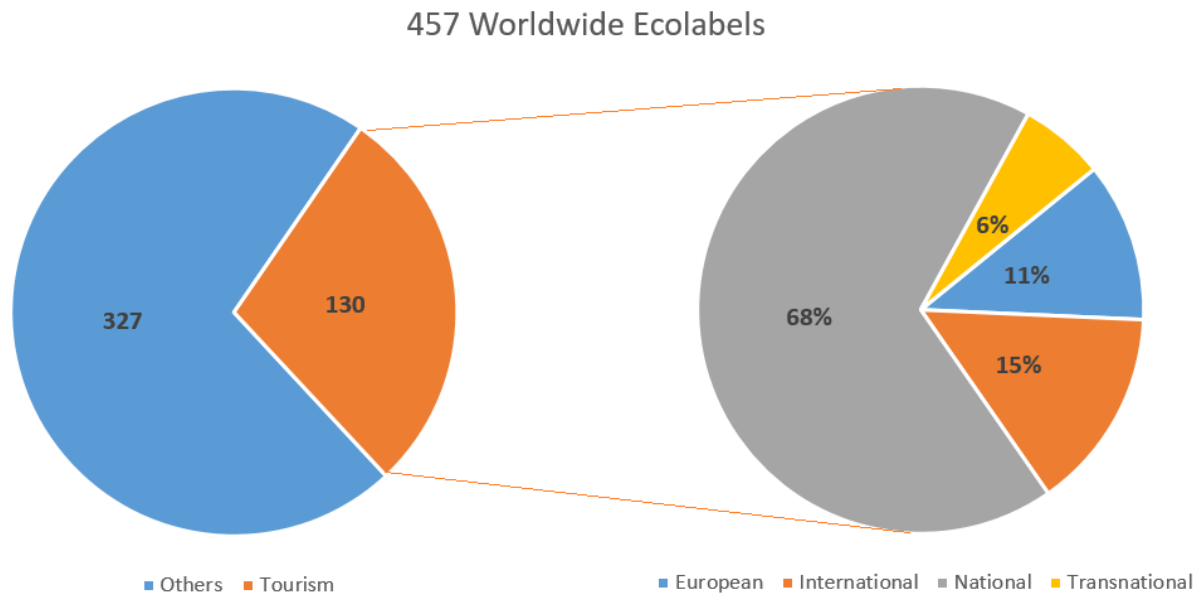


Figure 3: Scope of action of the 130 ecolabels compatible with the tourism sector.

A second distinction between these 130 labels can be made by taking into account the subject addressed by each label. Although they are all ecolabels, 78 (60%) of them deal with mitigation aspects such as reducing energy consumption or greenhouse gas emissions. The other 52 labels deal more with social and environmental issues not directly related to climate change.

By combining the two criteria "European/International" and "mitigation", only 24 (18%) labels meet the expectation of a project such as Smart Altitude.

In a more targeted manner, a distinction has been made between the remaining 24 labels by classifying the labels into one of the following categories:

- Tourism Accommodation (TA), means that the label only addresses tourist accommodation
- Non-relevant Space or field (N/R), means that the label is specific to a particular perimeter (national park, rain forest, beach, corporate tourism, etc.)
- Restricted to one field (R), means that the label deals with only one theme, for example energy performance
- Global (G), is used when the label deals simultaneously with the multiple aspects of eco-tourism (tourist accommodation, mobility, shops, energy aspects, etc.).

### Ecolabels by category

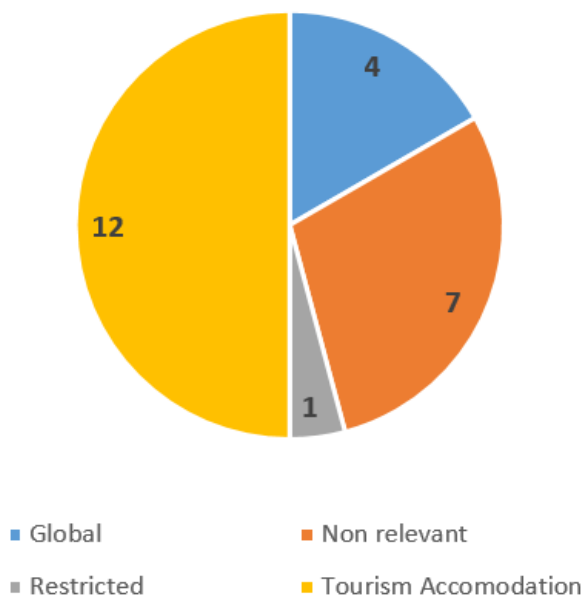


Figure 4: Ecolabels by category.

In the end, only 4 of the 130 ecolabels, i.e. 3%, cover both a European/International perimeter and deal globally with all the themes and sectors related to climate change.

These 4 low carbon tourism labels are as follows:

- European Ecotourism Labelling Standard,
- ECOPROFIT (Ecological Project for Integrated Environmental Protection),
- Green Globe Certification,
- ISO 14001.

## Annex 1 - Stakeholder Analysis Matrix – Smart Altitude Project partners

Stakeholder groups	Interest /Impact	Influence/Power	What is important to the stakeholder?	How could the stakeholder contribute to the project?	How could the stakeholder negatively influence the project?	Strategy for engaging the stakeholder
<b>Ski infrastructure operators</b>	High	High	Reliable operation of cable cars/ lifts tourism promotion, energy efficiency, use of renewable energy Visibility, knowledge transfer, tools to facilitate the decision process on energy saving of GH emission reduction	<u>In Project LLS:</u> Perform Smart Altitude activities; <u>In other ski areas:</u> Smart Altitude replication, i.e. include EE, EMS-solutions/ RES, smart grid. Return of experience for implementation of an Energy management platform, cost, energy reduction and return of investment, issues and solutions to barriers for implementation.	<u>Project LLS:</u> Stop activities in the Living Labs, delaying actions, transferring negative views to other Ski area/infrastructure operators <u>Other ski areas:</u> Not engaging in replication	<u>In LLS:</u> fully involved since the beginning by local partners. Potential involvement in an Alpine Space round table to discuss the Smart Altitude results and promote replication. Focus on the Smart Altitude label and visibility return in their local/regional framework and programming <u>For potential replicators:</u> Make contact to introduce Smart Altitude, comms materials, newsletter, website and web toolkits, WPT3 online seminars, local events.
<b>Ski resort operators/managers</b>	High	High	Revenue, “green” reputation, long term viability and sustainability of operations,	<u>In Project LLS:</u> Perform Smart Altitude activities, promote Smart Altitude solutions as a way of making the resort more attractive, especially for	<u>Project LLS:</u> Stop activities in the Living Labs, delaying actions, transferring negative views to other Ski	<u>In LLS:</u> fully involved since the beginning by local partners. Potential involvement in an Alpine Space round table to discuss the Smart Altitude results and promote



			promoting the resort	eco-ware tourists, <u>Replicators</u> : Commit to Smart Altitude Approach/engage as replication site	area/infrastructure operators <u>Other ski areas</u> : No interest or engagement in Smart Altitude project	replication. Focus on the Smart Altitude label and visibility return in their local/regional framework and programming. Dedicated space on ski resort's website. <u>For potential replicators</u> : Make contact to introduce Smart Altitude, comms materials, newsletter, website and web toolkits, WPT3 online seminars, local events
<b>Municipalities</b>	Medium/High	High	Revenue from tourists, good employment situation, Tourism promotion; Economic, environmental and energy sustainability; Adaptation to climate change	Support introduction of low carbon measures for ski resort by taking away financial and legal barriers or by subsidizing low carbon measures, promotion of the Living Labs to the population and other SHs, facilitation of SH dialogue, Smart Altitude replication in other ski areas	No interest or engagement in Smart Altitude project, or even opposition due to political reasons, lack of continuity of support due to changes in elective representatives.	Engaged since the beginning in Smart Altitude LLs. For potential replicators: Info materials (flyers, newsletter, dedicated space on ski resort's websites), online workshops/webinars. Potential involvement in an Alpine Space round table to discuss the Smart Altitude results, potential policies and promote replication. Focus on image return, attractiveness, synergies with local and regional policy framework and objectives.

<b>Business support organisations</b>	High	High/Medium	Depending on the mission of the organisation, the interest is the territorial development, whether economic, touristic or energy related	Potential support to project development, high potential for dissemination and replication	Low risk of negative influence, but if not engaged replication and dissemination potential could be hampered	Depending on the potential to support the implementation of the project, it is important to involve SH in all phases of project development and in the active participation in workshops on related themes set up by SH themselves. Invite to dissemination events, workshops, and relay presence in the media. Develop a specific argumentation on the economic and ecological benefits for SH.
<b>Service providers (public and private)</b>	High	High/Medium	Economic results and image benefits	Both public service providers and private (Incl. SMEs, energy companies etc) can be valuable partners in project development and implementation, and for the innovation potential of the implemented solutions.	Whenever engaged in project development and implementation activities, there is a high risk that the SH could fail results or present delays, if not properly monitored and supported.	Follow up on economic benefits and image return. Strengthen partnership through other projects and initiatives, involve in events.
<b>Research Institutions/Foundations in the field of sustainable</b>	High	High	Be up-to-date and create synergies with	Provide technical and scientific advice, list of contacts, networking	-	Engaged in Smart Altitude as project partners and observers. To others:

<b>energy, low carbon, climate mitigation and adaptation</b>			research projects on energy issues, and sustainability, develop innovative sustainable projects	opportunities, share knowledge and promote the project widely.		Newsletter, communication events, presentation to conferences, publications and networking
<b>Regional authorities</b>	Medium	Medium/High	Economic, environmental and energy sustainability; climate adaptation and mitigation, good employment situation, healthy tax base, citizen consensus	Support low carbon transition in winter tourism areas by taking away financial and legal barriers or by subsidizing low carbon & adaptation measures, reducing bureaucracy and facilitating administrative procedures (Regional Development & other policies and plans), promotion of the Living Labs and support to mainstreaming of Smart Altitude policy recommendations (WPT4)	Not aware of the project, low interest or engagement in Smart Altitude. Potential opposition due to political reasons, lack of continuity of support due to changes in elective representatives.	Some engaged as Observers of Smart Altitude. Use any Communication materials (flyers, newsletter, brochures, press releases, events), online workshops/webinars. Potential involvement in an Alpine Space round table to discuss the Smart Altitude results, potential policies and promote replication. Focus on image return, attractiveness, synergies with regional and national policy framework and objectives and benefits for regional development.
<b>Residents</b>	Medium	Medium/High	Employment possibilities and	Engagement with ski resorts and	Contrasting the project actions for some	Engage since the project beginning in LLs through all

			economic development, reduce negative impacts of tourism, attractive and healthy living environment	municipalities to create synergies in communication and marketing to tourists.	reason (not in my backyard, etc)	Communication materials and tools (websites, flyers, brochure, local events, etc)
<b>National authorities</b>	Low/medium	Medium/High	Economic, environmental and energy sustainability; climate adaptation and mitigation, good employment situation, healthy tax base, citizen consensus	Support low carbon transition in winter tourism areas by taking away financial and legal barriers or by subsidizing low carbon & adaptation measures, reducing bureaucracy and facilitating administrative procedures (National Development Strategies, Climate and Energy Strategies and Plans, Regulations and Tax measures), mainstreaming of Smart Altitude policy recommendations (WPT4)	Not aware of the project, low interest or engagement in Smart Altitude; new policies or regulations potentially challenging implementation of project measures.	Invite to project final event, online workshops/webinars. Potential involvement in an Alpine Space round table to discuss the Smart Altitude results, potential policies and promote replication. Reach through national/EU networks. Focus on synergies with national policy framework and objectives.

<b>Funding bodies</b>	Low	High	Innovative ideas and investments in low carbon ski areas	Very important as co-financing to the project comes from Interreg Alpine Space Funding Programme of the EU, which made project actions possible. Local and regional funding bodies are very important to support replicator sites in the transition to low carbon. Potential contribution in drafting recommendations (financial sector).	No funding for replicator sites would hamper the implementation of actions in replicator sites.	Engage through all Communication materials and tools (websites, flyers, brochure, local events, etc). Potential involvement in an Alpine Space round table to discuss the Smart Altitude results, recommendations and replication. Reach through local and regional networks (seek support and contacts from regional/local authorities)
<b>Tourists/skiers</b>	Low	Medium	Attractive ski resort, service quality and quantity, accessibility, costs, "green reputation"	Good reputation and increased visibility across users, also benefitting project visibility and results dissemination	-	Info materials (such as flyers, dedicated space on ski resort's website), all promotional tools (digital screens with info and news, etc). Potential marketing campaigns with attractive prices thanks to energy savings
<b>Regional bodies/initiatives/networks supporting energy</b>	High	Medium	Supporting the diffusion of energy efficiency and renewable	Disseminate project results to local stakeholders and communities of ski	Not aware of the project, low interest or engagement in Smart Altitude	Invite to project final event, online workshops/webinars, newsletters and communication tools.

<b>efficiency and renewable actions</b>			energy practices in businesses, local authorities and communities	areas, support replication in other sites		
<b>Associations for sustainable development of mountain regions</b>	High	Medium	Sustainability in alpine space	Network, expertise in alpine space and documentation	Not aware of the project, low interest or support to Smart Altitude project	Invite to project final event, online workshops/webinars. Potential involvement in an Alpine Space round table to discuss the Smart Altitude results, potential policies and promote replication. Reach through national/EU networks. Focus on synergies with interregional and alpine policy framework and objectives.
<b>Tourism associations/ Local or regional Tourism promotion bodies</b>	Medium/High	Medium	Keeping the entire area attractive for tourists, promote tourism, support local tourism operators	Promote Smart Altitude solutions as a way of making the resort more attractive, especially for eco-ware tourists, promotion to other potential replication sites across the region, contribution in drafting recommendations and potential policies (tourism sector),	Not aware of the project, low interest or engagement in Smart Altitude	Info materials (such as flyers, newsletter, dedicated space on ski resort's website) Make initial contact to introduce smart Altitude Smart Altitude Newsletter. Involvement in an Alpine Space round table to discuss the Smart Altitude results, recommendations, potential policies and replication Focus on the Smart Altitude label.

				contribution to the Smart Altitude label.		
<b>Energy and Sustainability Agencies</b>	Medium	Low	Low carbon strategies and actions (energy efficiency, renewable energy; sustainable mobility), adaptation strategies and actions	Promotion of the Living Labs, Smart Altitude replication in other ski areas, contribution in drafting recommendations and potential policies (energy sector). Contribution to the Smart Altitude label.	Not aware of the project, low interest or engagement in Smart Altitude	Smart Altitude Newsletter. Involvement in an Alpine Space round table to discuss the Smart Altitude results, recommendations, potential policies and replication. Focus on the Smart Altitude label.
<b>Utility and multi-utility companies, Energy Consortia</b>	Medium	Low	Revenues, which comes from selling energy but also from services (Interventions for energy monitoring, energy efficiency and renewable energy)	Knowledge on renewable data useful, district heating operation. Knowledge of energy challenges in the region. Contribution in drafting recommendations (energy sector).	Not aware of the project, low interest or engagement in Smart Altitude	Smart Altitude Newsletter. Involvement in an Alpine Space round table to discuss the Smart Altitude results, recommendations and replication.
<b>Environmental NGO's</b>	Medium/High	Low	Promotion of sustainability and low carbon economy	Raising awareness about low carbon measures and sustainable results achieved by the project among tourists and local communities, promoting	Not aware of the project, low interest or engagement in Smart Altitude, potential opposition to ski resort industry	Communicate positive results of the project with all communication materials and tools (websites, flyers, brochure, local events, etc).



				project support and visibility		
<b>Natural parks and protected areas</b>	Low	Medium	Managing an alternative tourism offer to skiing	Providing synergies for regional area promotion and comprehensive tourism offer	-	Newsletter, communication events, presentation to conferences, publications and networking

## Annex 2. Grid analysis of existing policies

ADAPTATION and MITIGATION			
	Local level	Regional level	National level
Operational axis	<b>TARGETS:</b> <ul style="list-style-type: none"> <li>- <u>2050 targets</u> of CO2 emissions-energy consumption reduction and increase of renewable energy (Kempten/Allgaeu, <u>includes skiing area</u> Oberstdorf, Germany)</li> </ul>	<b>TARGETS:</b> <ul style="list-style-type: none"> <li>- <u>Targets</u> in climate protection law, reduction of GHGs, climate-neutral states (Bavaria, Baden Wurttemberg, Germany)</li> <li>- Integrated Energy and Climate Protection Action plan (IEKK) (Baden Wurttemberg, Germany)</li> <li>- <u>Regional strategy</u> for climate change adaptation (strategie 2030 dev. Durable VS) (Switzerland)</li> </ul>	<b>TARGETS:</b> <ul style="list-style-type: none"> <li>- Reduce greenhouse gas emissions in line with the German energy transition “Energiewende” and the decision to phase out nuclear energy production.</li> <li>- Energy Efficiency Target of reducing primary energy consumption from 2008 levels by 20% in 2020 and by 50% in 2050 (Germany)</li> </ul>
	<b>ACTION PLANS:</b> <ul style="list-style-type: none"> <li>- <u>Programmes for cities</u> to promote energy efficiency and renewable energy use, <u>voluntary measures</u> (Cité énergie / société à 2000W, Verbier, Switzerland; Götzis, Austria)</li> <li>- Action plans at local level and initiatives such as the KlimaHaus Certification and the Green Mobility Programme (which sponsors electric mobility) (Italy) (France)</li> <li>- Infrastructures built in order to limit or avoid private traffic, prioritising public transport (Les Orres and Les Gets councils, France; Oberstdorf and Tegersee, Germany)</li> <li>- e-MOTICON project that supports public administrations in the implementation of electric mobility in the Alps (Slovenia)</li> <li>- Use of replicable tools to develop sustainable mobility strategies (ASTUS)</li> <li>- Municipal programme for environment protection, sustainable urban strategy and energy action (Velenje, Slovenia)</li> </ul>	<b>ADAPTATION PLANS:</b> <ul style="list-style-type: none"> <li>- Regional Adaptation Strategies (Styria, Austria; Lombardia, Italy; Canton of Grisons, Switzerland)</li> <li>- The Austrian KLAR! model region pilot program to strengthen the implementation of the National Adaptation Strategy at the local level</li> <li>- The Swiss Pilot Program Adaptation to Climate Change supports innovative projects in Switzerland's cantons, regions, cities and communes</li> </ul> <b>MITIGATION PLANS:</b> <ul style="list-style-type: none"> <li>- <u>Regional Action Plans</u> for low carbon, sustainable energy, sustainable tourism, etc. (Baden Wuerttemberg, Germany), or carbon reduction in industry, transports sectors (ALPSTAR, Veneto, Italy)</li> <li>- Energia-Alto Adige-2050, a climate plan. Regional environmental and sustainability programmes (Lombardy, Piemonte, Italy)</li> <li>- Climate Strategy in the Canton of Grisons (Switzerland);</li> <li>- Climatic and energetic strategy Salzburg, climate neutral, energy autonomy, sustainability (Austria)</li> <li>- <u>Use of domestic renewable energy sources</u> (Sustainability strategy Tyrol, Austria)</li> <li>- TECV law – Regional energy and climate plans (Plans climat énergie territoriaux– PCET) are compulsory</li> </ul>	<b>ADAPTATION PLANS:</b> <ul style="list-style-type: none"> <li>- <u>Strategy for Adaptation to Climate Change</u> focused on tourism (Nationwide tourism strategy)(Austria)</li> <li>- Adaptation strategy of the federal council focused on energy, management, tourism (Switzerland)</li> </ul> <b>MITIGATION PLANS:</b> <ul style="list-style-type: none"> <li>- <u>National Action Plan</u> on Energy Efficiency to reduce energy consumption, and Renewable Energy Act (EEG) (Germany)</li> <li>- Energy Transition Act-Law and following targets (France)</li> <li>- Energy strategy 2050, Swiss CO2 act (CO2 levy, increased electricity surcharge cap) (Switzerland)</li> <li>- Operational programmes for limiting GHG emissions. Energy efficiency and renewable energy plans (Slovenia)</li> <li>- <u>German Energy Transition Legislation, The Renewable Energy Act (EEG) CHP Act 2016 (KWKG)</u></li> <li>- <u>“National Action Plan on Energy Efficiency” (NAPE)</u></li> <li>- <u>Climate Action Law</u></li> </ul>

		at inter-municipal level and aim to cover the entire region (France) (26). - Regional and territory spatial planning plans (France)	
	<b>CERTIFICATIONS:</b> - <u>Certification and quality management systems</u> (E5 programme, Austria)	<b>CERTIFICATIONS:</b> - <u>Labels</u> (FDDM, Valais excellence) (Switzerland)	
<b>Economic axis</b>	<b>SUBSIDIES:</b> - Low level <u>subsidies</u> for planning stage of various measures, e.g. district heating networks (Baden Wuerttemberg, Germany) - Communal <u>subventions</u> (Switzerland)	<b>SUBSIDIES:</b> - The regional Environment Ministry BMUB provides <u>subsidies</u> for 80% of eligible expenses or relevant measures (Bavaria – KlimaSoli) - Low level subsidies for planning stage of various measures, e.g. district heating networks (Baden Wuerttemberg, Germany)	<b>FEED-IN TARIFFS:</b> - EEG surcharge/ feed-in tariffs: Owners of renewable energy installations –are guaranteed a <u>fixed, above-market price</u> per kWh for the power they feed into the grid over a period of 20 years. With reform in 2012, this has been replaced by an auction system for new installations over a certain size and tariffs for smaller installations have been cut significantly to reflect falling technology prices (Germany) - For energy efficiency the most important tool is <u>cheap loans for SMES</u> by the state bank KFW. (Germany) - <u>Feed-in tariffs to renewable energy producers</u> (hydropower, biomass, solar, wind, geothermal) providing price certainty and long-term contracts that help finance renewable energy investments, accompanied by investment aids when the production increases such as <u>hydropower remediation and tenders for energy efficiency</u> (Switzerland) - <u>Feed-in-premium scheme: direct contracting and competitive tenders</u> for electricity produced from renewables (France)
	<b>FUNDS:</b> - Investments on skiing infrastructures, areas, technologies (Trentino Sviluppo, Pozza di Fassa, Italy) - Calls to companies to improve efficiency of areas, technologies, energy with prices (Trentino Sviluppo, Italy) - POSITIVE ENERGY TERRITORY: National programme invests in sustainable energy initiatives by local public administrations (financial support grant). The initiative is financed by the Ministry of Energy and regions (France)(26).	<b>FUNDS:</b> - KEFF <u>public funding initiative</u> for small businesses to introduce them to energy audits, support for energy efficiency. supported for four years by the European Regional Development Fund and by state funds (33 supporting organisations) (Baden Wuerttemberg, Germany) - Funds for investments in lifts of regional importance (Programme batiment, Nouvelle politique regional-new regional policy) (Switzerland)	

	<ul style="list-style-type: none"> <li>- ROP Energy Efficiency for municipalities</li> <li>- Financial support by ERDF Interreg (questionnaires)</li> </ul>	<b>TAXES:</b> <ul style="list-style-type: none"> <li>- <u>Tax</u> in addition to the income tax used for upgrading the alpine infrastructure in mobility (bus, train) (Bavaria)</li> </ul>	<b>SURCHARGES:</b> <ul style="list-style-type: none"> <li>- <u>EEG surcharge added to consumer bills in proportion to their power consumption</u>. Cogeneration act, <u>bonuses</u> for the electricity generated, targets for electricity generation (max?) (Germany)</li> <li>- Climate Action Law (has yet to pass, <u>pricing system for carbon emissions</u> in transport and buildings) (Germany)</li> </ul>
<b>Governance axis</b>	<b>PARTNERSHIP:</b> <ul style="list-style-type: none"> <li>- Collaboration, partnership with local University and Research entities, organisations, start-ups, foundations (Uni-Mont, Energy For Sustainable Development, Fondazione Bruno Kessler, EuroMontana), (Italy), (Centre for Development and Environment, Switzerland)</li> <li>- <u>Working with various associations</u> matching up the tourist interests with the demands of landscape (Germany)</li> <li>- Calls for inclusive, innovative and entrepreneurial solutions in the Alpine region, mountain communities to increase productivity and other opportunities (Trentino Sviluppo, Italy)</li> <li>- Conferences regarding sustainable development, air, environment quality and management with organisations, companies, different partners (Les Orres council, France)</li> <li>- Local Energy Agency Pomurje (LEAP) spreads Local energy information for municipalities in the Pomurje region. Technical assistance services offered (Slovenia) (26)</li> <li>- 2020 TORino is GETting THERE (2020 TOGETHER) – Coordinated multilevel authorities and other</li> </ul>	<b>PARTNERSHIP:</b> <ul style="list-style-type: none"> <li>- European Mountain Forum is a regional network that promotes processes and best practices of sustainable development in the mountains of Europe and raises awareness of their importance.</li> <li>- Ecological tourism in Europe, NGOs that support the development of sustainable tourism and regional development in protected areas and mountainous regions.</li> <li>- Collaboration with regional associations (pro-MONT BLANC) (France, Switzerland, Italy)</li> <li>- Verein Bayerischer Energieagenturen – Network of regional energy agencies in Bavaria that provides funds and support to municipalities (Germany).</li> <li>- European Energy Award –to enhance municipalities potentials to implement actions. Experience exchange meetings to inform about successful projects and initiate actions (Germany) (26).</li> <li>- Collaborate with consultancy companies to implement measures (Italy)</li> </ul>	<b>PARTNERSHIP:</b> <ul style="list-style-type: none"> <li>- Collaborate with consultancy companies to implement measures (Italy)</li> <li>- European, international collaboration, projects</li> </ul>

	<p>stakeholders in order to create partnerships for the renovation of public buildings and street lighting throughout the region. Regione Piemonte/ City of Turin, Italy (26).</p> <ul style="list-style-type: none"> <li>-Energy Alliance Oberallgäu – Supports energy management action in municipalities by providing information on actions and supports with expertise and workforce. Oberallgäu Landkreis (Germany) (26).</li> <li>- Collaborate with consultancy companies to implement energy measures (Italy)</li> </ul>		
	<p><b>STAKEHOLDER ENGAGEMENT:</b></p> <ul style="list-style-type: none"> <li>- Focus on <u>lectures and seminars</u> alongside guided tours. Nature conservation measures (Germany)</li> <li>- Prevention campaigns with youth generations regarding sustainable consumption, waste reduction in the mountains (Les Orres, France)</li> <li>- Raise awareness and information about the environmental sustainability of local skiing areas through websites and initiatives, how to have an environmental-friendly vacation for tourists (Verbier, Switzerland)</li> </ul> <p><b>PROMOTION:</b></p> <ul style="list-style-type: none"> <li>- Meeting places, training and research in the field of sustainable development in mountain regions to promote, support, and develop projects (Foundation for Sustainable Development in Mountain Regions, Switzerland)</li> <li>- Energiewende Unterallgäu Nordwest – Initiative that supports the development of renewable energy and efficiency projects in rural areas through cooperation with a regional coordinator. Free consulting regarding all energy projects is offered to municipality administrations. The initiative is</li> </ul>		

	financed by the national ministry for Agriculture (Germany) (26).		
Other	<b>INFORMATION:</b> <ul style="list-style-type: none"> <li>- Shared Energy Consulting (Conseil en énergie partagée) provides small local communities with shared energy support services. ADEME (National energy agency) (France) (26).</li> <li>- TECV law – This measure provides for data relative to energy to be transmitted to public authorities (France) (26).</li> </ul>	<b>INFORMATION:</b> <ul style="list-style-type: none"> <li>- <u>Climate Adaptation Information</u> Platform to inform cantons (Switzerland)</li> <li>- international scientific journals to recommend policy-makers on sustainable technical, economic, social policies, specific to mountain regions (Mountain Research and Development) (Switzerland)</li> <li>- <u>Information about national funding instruments</u> (Baden Wuerttemberg, Germany)</li> <li>- Support to regional energy efficiency networks for businesses to <u>raise awareness</u> and facilitate exchange on technologies and experiences (Bavaria, Germany)</li> </ul>	<ul style="list-style-type: none"> <li>- ProKilowatt program, SuisseEnergy, Innotour (Federal law that supports innovative tourism) initiatives (Switzerland)</li> <li>- <u>Net metering programme</u> to support energy efficiency and self-production (Slovenia)</li> <li>- <u>Central register of energy auditors</u> useful to apply for national funding instruments (Germany)</li> </ul>
	<b>RESEARCH and MONITORING</b> <ul style="list-style-type: none"> <li>- Mountain research initiative, Bern</li> <li>- The <u>CO2 calculator</u> of the Agentur für Energie Südtirol – KlimaHaus/Agenzia per l'Energia Alto Adige – CasaClima enables to establish eco footprint and to detect areas where they can conserve energy (Italy)</li> <li>- GLORIA (long-term global monitoring network in alpine areas) (Austria)</li> <li>- Local climate and meteorological forecasting and projections (Les Orres council, France)</li> </ul>	<b>RESEARCH and MONITORING:</b> <ul style="list-style-type: none"> <li>- <u>Regional climate scenarios</u> to analyse economic vulnerability in the tourism and sport activities sector (Lower Austria) for alpine regions (Austrian adaptation strategy)</li> <li>- ENERCLOUD+ Webtool introducing an energy management system for small and medium municipalities. Piemonte Region, Italy.</li> </ul>	



## Annex 3. Gap analysis of existing policies

	Local axis	Regional axis	National axis
Operational axis	<b>ACTION PLANS:</b> <ul style="list-style-type: none"> <li>- The Paris Agreement is not translated into concrete instruments at the local level;</li> <li>- Need to reassess the climate plan “Energie-Südtirol-2050” (Energy-South Tyrol-2050) (Italy)</li> <li>- Climate protection and climate adaptation measures are not transferred into laws and specialised plans, especially into the provincial law for spatial planning and the agrarian sector, the plan for water use, the plan for dangerous zones and the provincial forestry plan (Energy Sud-Tyrol 2050, Italy)</li> </ul>	<b>ACTION PLANS:</b> <ul style="list-style-type: none"> <li>- Inconsistency between regions in action plans for climate adaptation (Italy)</li> </ul>	<b>ACTION PLANS:</b> <ul style="list-style-type: none"> <li>- Yet to be approved <u>climatic and energetic strategy</u> by 2050 (Italy)</li> <li>- Not all the <u>national strategies have a section focused on tourism</u></li> <li>- No dedicated regulatory framework that stipulates policy making and implementation of climate adaptation in the Adaptation Strategy (Austria)</li> <li>- Adaptation strategies are based on the principle of mainstreaming adaptation into existing policies, rather than introducing new policies focused exclusively on adaptation</li> <li>- There are little to no direct legal mandates for regions or municipalities to engage in climate adaptation in any analysed country.</li> </ul>
	<b>SUPPORT:</b> <ul style="list-style-type: none"> <li>- Few <u>R&amp;I investment and support</u> (Italy)</li> <li>- Insufficient operational support, especially related to skiing areas (Germany).</li> <li>- <u>Limited technical support, capacity building</u> (DMT)</li> <li>- Support restricted to territorial development of measures</li> </ul>	<b>SUPPORT:</b> <ul style="list-style-type: none"> <li>- Few R&amp;I investment and support (Italy)</li> <li>- Scarce operational support (Germany)</li> <li>- Limited regional support for energy optimisation projects</li> </ul>	<b>SUPPORT:</b> <ul style="list-style-type: none"> <li>- Few R&amp;I investment and support (Italy)</li> </ul>
	<b>INFRASTRUCTURES:</b> <ul style="list-style-type: none"> <li>- Lack of <u>efficient mobility and infrastructures</u> plans (Austria).</li> <li>- Limited electric mobility.</li> <li>- Solutions addressed locally, not integrated plans between Alpine mountain sites and next areas.</li> </ul>	<b>INFRASTRUCTURES:</b> <ul style="list-style-type: none"> <li>- Lack of efficient mobility and infrastructures plans in the alpine region (Austria).</li> </ul>	<b>TARGETS:</b> <ul style="list-style-type: none"> <li>- <u>Failure to meet short-term targets</u>. Still high use of coal and natural gas over renewables (Germany). Targets not strict enough</li> <li>- Yet to be approved structured national climate mitigation and adaptation targets and Acts (Italy)</li> </ul>
Economic axis	<b>FUNDS:</b> <ul style="list-style-type: none"> <li>- E5 programme does not provide funds, only operational (Austria).</li> <li>- Lack of incentives and <u>financial support</u> to support detailed energy audits, Integrated Energy Management Systems and feasibility studies for energy efficiency and integration of renewables (Italy, Germany, questionnaires)</li> <li>- Limited funds for monitoring and data analysis of energy consumption (questionnaires)</li> </ul>	<b>FUNDS:</b> <ul style="list-style-type: none"> <li>- Need of more incentives (Italy).</li> <li>- <u>Access to European Regional Development Fund</u> Lack of financial support (Germany)</li> </ul> <b>SUBSIDIES:</b> <ul style="list-style-type: none"> <li>- Need of subsidies for tourist arrivals and departures via public transport, few initiatives to reduce emissions (Energie Sud-Tyrol 2050, Italy)</li> </ul>	<b>FUNDS:</b> <ul style="list-style-type: none"> <li>- Lack of national funds finalised to climate mitigation and adaptation in <u>tourism field</u> (klimaaktiv provides advices and network Austria).</li> <li>- Need of more incentives (Italy)</li> <li>- Funding options exist but they are not attractive enough to achieve large scale implementation to ensure meeting of targets</li> <li>- Extended national support for energy optimisation projects</li> <li>- Scarce use of EU funds (Austria?).</li> </ul>

	<p>- Lack of support to detailed Climate Change <u>impact forecasts for skiing areas</u> (Germany)</p> <p><b>SUBSIDIES:</b></p> <p>- Subsidies for tourist arrivals and departures via public transport, more initiatives to reduce emissions are needed (Energie Sud-Tyrol 2050, Italy)</p> <p><b>SURCHARGES:</b></p> <p>- Need to mitigate the impact on transit traffic on alpine population (CIPRA)</p> <p><b>COSTS:</b></p> <p>- High energy costs of ski resorts (questionnaires)</p>		<p>- Liechtenstein and Switzerland are not entitled to receive ERDF</p> <p>- No specific national public fund instruments available for Alpine development (except for new regional policy in Switzerland)</p>
<b>Governance axis</b>	<p><b>STAKEHOLDER ENGAGEMENT:</b></p> <p>- Lack of <u>stakeholder engagement</u> and communication. Necessity to involve stakeholders to move from a conservative approach to a more innovative one in the public management of alpine areas (questionnaires)</p> <p><b>OBLIGATIONS:</b></p> <p>- Stricter laws, <u>obligations, targets, penalties</u> dedicated specifically to skiing areas are missing (Germany, questionnaire)</p> <p><b>COOPERATION:</b></p> <p>- Scarce <u>Political continuity</u> between administrations (DMT)</p> <p>- Scarce interventions by Public service providers, regional and national authorities in the implementation of the Living Lab actions (questionnaires)</p> <p>- Limited number of meetings to engage regional and national partners in a shorter term (questionnaires)</p> <p>- Lack of a formalised approach to climate adaptation, lack of overall vision that leads to maladaptation, inconsistency between sectors and possibly lack of commitment for dedicated additional funding.</p> <p><b>PROMOTION:</b></p> <p>- Required <u>Promotion</u> of low carbon ski areas (label, communication) (Italy)</p>	<p><b>STAKEHOLDER ENGAGEMENT:</b></p> <p>- Lack of stakeholder engagement and communication.</p> <p><b>OBLIGATIONS:</b></p> <p>- Stricter laws, <u>obligations, targets, penalties</u> dedicated specifically to skiing areas are missing (Germany, questionnaire)</p> <p><b>COOPERATION:</b></p> <p>- Lack of a horizontal coordination body for the implementation of cross-cutting adaptation strategies</p> <p>- Lack of a formalised approach to climate adaptation, lack of overall vision that leads to maladaptation, inconsistency between sectors and possibly lack of commitment for dedicated additional funding.</p> <p><b>PROMOTION:</b></p> <p>- Required Promotion of low carbon ski areas (label, communication) (Italy)</p>	<p><b>STAKEHOLDER ENGAGEMENT:</b></p> <p>- Lack of stakeholder engagement and communication.</p> <p><b>OBLIGATIONS:</b></p> <p>- <u>Barriers to implementation of RES due to planning rules often conflicting with other environmental legislation</u> (Germany)</p> <p><b>COOPERATION:</b></p> <p>-Lack of <u>Integrated local, regional, national, international policies</u> (DMT)</p> <p>- Need to install a horizontal coordination body for the implementation of cross-cutting adaptation strategies</p> <p>- Lack of a formalised approach to climate adaptation, lack of overall vision that leads to maladaptation, inconsistency between sectors and possibly lack of commitment for dedicated additional funding.</p> <p><b>PROMOTION:</b></p> <p>- Required Promotion of low carbon ski areas (label, communication) (Germany)</p>
<b>Other</b>	<p><b>INFORMATION:</b></p> <p>- Lack of detailed knowledge about climate change risks and vulnerability, mitigation strategies, emergency</p>	<p><b>INFORMATION:</b></p> <p>- Lack of detailed knowledge about climate change risks and</p>	<p><b>INFORMATION:</b></p> <p>- Lack of detailed knowledge about climate change risks, impacts, and</p>

---

	- Many members of the administration, especially on the regional and local level, have little to no experience in or understanding of how best to cooperatively develop a multi-sectoral strategy	vulnerability, mitigation strategies, emergency	vulnerability, mitigation strategies, emergency <u>(Italy, Germany)</u>
--	---	---	---

## Annex 4. Ecolabels & certifications in the tourism sector

Label/Certification Tourism*	Country / location	Target	Mitigation (Y/N)
BIO Hotels	Europe	TA	
BioHotels (ehc-Zertifizierung)	Europe	TA	1
Blaue Schwalbe	Europe	TA	1
Blue Flag	International	N/R	
Brazilian Sustainable Tourism Standard	Brazil		
Calidad Galapagos	Galapagos		
California Green Lodging Program	USA		1
Certification for Sustainable Tourism (CST)	Costa Rica		
Chouette Nature	France		
Clean Tourism Certificate	Poland		
Climate Action Certification Program (CACP)	Australia		1
Connecticut Green Lodging Certification Program	USA		1
CSR-Tourism	Europe	N/R	1
David Bellamy Conservation Award	Great Britain		1
Delaware Green Lodging	USA		1
Discover Eco-Romania	Romania		1
EarthCheck	international	TA	1
ECEAT Quality Label	Europe	TA	1
eco awards Namibia	Namibia		1
ECO certification	Malta		1
eco hotels certified	Austria		1
Eco Hotels Certified	Europe	TA	1
ECObiz Queensland	Australia	TA	1
ECOCAMPING	Europe	TA	1
Eco-Friendly STAR Accreditation	Australia		
Ecogite	France		1
Eco-label "Donana 21"	Spain		
EcoLabel Lu embourg	Luxembourg		1
Ecolodge Japan	Japan		
Ecotel	international	N/R	1
Ecotourism	Australia		1
Ecotourism Kenya's Eco-rating scheme	Kenya		
Ecotourism Label	Ireland		
Ecotourism Norway	Norway		
EIFEL - Qualität ist unsere Natur	Germany		
EKOenergy	international	N/R	
EMAS	Europe	G	
Emblem of Guarantee of Environmental Quality	Spain		
Encouraging Conservation in Oklahoma	USA		1
EnerGuide for Appliances	Canada		
Energy Labelling of Buildings: EU	Europe	TA	1
ENERGY STAR®	international	N/R	
Enviro-Mark®	NZ		
Estonian Ecotourism Quality Label	Estonia		
European Ecolabel for tourist accommodation services and camps	Europe	TA	
<b>European Ecotourism Labelling Standard (EETLS) /EEN</b>	<b>Europe</b>	<b>G</b>	<b>1</b>
Fair Trade in Tourism South Africa	South Africa		1
Florida Green Lodging Program	USA		1
Gîtes or Guest Rooms "Panda"	Belgium		
Gites Panda	France		
GREAT Green Deal Guatemala	Guatemala		
Green Business Certified	USA		1
Green Business Program	Hawaii		1
Green Certificate: Latvia	Latvia		
Green Flag Award	United Kingdom		

Green Globe Certification	international	G	1
Green Hospitality Award	Ireland		1
Green Key	International	TA	1
Green Key Eco-Rating Program	International	TA	1
Green Leaf Business Scheme	United Kingdom		1
Green Leaf Environmental Standard	South Africa		1
Green Leaf Foundation	Thailand		1
Green Lodging Michigan	USA		
Green Power Australia	Australia		1
Green Restaurant	USA		1
Green Seal	USA		1
Green Star Hotel	Egypt		
Green Stay South Africa	South Africa		1
Green Suitcase rating system	International	N/R	1
Green Tourism Business Scheme	UK & Ireland		1
Green-e Energy	USA, Canada		1
Green-e Marketplace	USA, Canada		1
Heritage Environmental Rating Programme	Africa	N/R	
International Eco Certification Program	Australia		
ISO 14001	international	G	1
Leadership in Energy and Environmental Design (LEED) for Hospitality	USA		1
Legambiente Turismo	Italy		1
Maine Green Lodging Certification Program	USA		1
Maryland Green Travel Program	USA		1
MINERGIE	Switzerland	TA	
Missouri Certified Green	USA		
National Tourism Accreditation Framework NTAF	Australia		
Naturemade	Switzerland		
Nature's Best Ecotourism	Sweden		1
New Hampshire Sustainable Lodging and Restaurant Program	USA		1
Nordic Swan for hotels and youth hostels	Europe	TA	1
Normas de Turismo Sostenible	Colombia		
OK Power	Germany		1
ÖKOPROFIT	International	G	1
Oregon Bed and Breakfast Guild Green Certification Program	USA		
PAN PARKS Initiative	International	N/R	1
Partnership for a Sustainable Georgia	Georgia		1
Peak District Environmental Quality Mark	United Kingdom		1
Programa Nacional de Auditoría Ambiental (PNAA)	Mexico		
Prüfzeichen Schorfheide-Chorin	Germany		
PUG audit (TOFTigers)	India, United Kingdom		
Q certification Tourism	Spain		
Qualitäts- und Umweltsiegel für den Kanutourismus	Germany		
Qualmark	New Zealand		1
Rainforest Alliance Certified	international	N/R	1
RECS International Quality Standard	Europe	N/R	1
Respecting our Culture (ROC)	Australia		1
Responsible Tourism System - Biosphere Hotels	international	TA	1
Rhode Island Hospitality Green Certification for the Hospitality and Tourism Industry	USA		1
SmartVoyager	Ecuador, Colombia, Honduras, Costa Rica		1
South Carolina Green Hospitality Alliance	USA		1
South Luangwa Eco Awards	Zambia		
Stay Green Illinois	USA		1
Steinbock	Switzerland		
Sustainable Tourism Eco-Certification Program STEP	USA		1
Sustainable Tourism Education Program (STEP)	international	N/R	1
Sustainable Tourism Standards	Mexico		
Tourisme Responsable	France		
Travel Green Wisconsin	USA		1
Travelife Awards	international	TA	1
TÜV SÜD Mark EE01/EE02	Germany		
Umweltgütesiegel auf Alpenvereinsstütten	Italy, Germany, Austria		1
UNESCO World Heritage	international	N/R	
Vermont Green Hotels	USA		1
Viabono	Germany		1
Virginia Green	USA		1
WindMade	international	R	
100 % Energie Verde	Italy		
Audubon Green Leaf Eco-Rating Program	North America		1
Austrian Ecolabel for Tourism	Austria		1
Bayerisches Umweltsiegel für das Gastgewerbe	Germany		1
ECST / Europarc	Europe	N/R	
EU ecolabel	Europe	N/R	
Flocon vert	France	G	1
ISO 50001	International	R	1