Establishing the South Tyrol Sustainable Tourism Observatory

Preliminary Study Report

Draft Version - June 2018
Status of the Study Report:
June 2018

Project implementing partners:
Eurac Research, Center for Advanced Studies in cooperation with IDM Alto Adige/Südtirol

Project Team:
Eurac Research: Harald Pechlaner, Corinna Säger, Anna Scuttari, Greta Erschbamer, Philipp Corradini, Giulia Isetti

IDM Südtirol: Birgit Mayr

Contact details:
harald.pechlaner@eurac.edu; corinna.saeger@eurac.edu
birgit.mayr@idm-suedtirol.com;
Table of Contents

1 Introduction .................................................................................................................................. 8
2 Situation Analysis of the Tourism Sector at Destination Level ................................................... 10
3 Basic Economic Data .................................................................................................................. 24
4 Key Sustainability Issue Areas – Secondary Data Analysis .......................................................... 34
5 Key Sustainability Issue Areas - Primary Data Analysis ............................................................... 56
6 Current monitoring activities and structures ............................................................................... 73
7 Data needs, availability, sources, gaps ....................................................................................... 74
8 Objectives of the Observatory (short, medium, long-term) ........................................................ 76
9 Proposed monitoring methodology ............................................................................................ 79
10 Proposed structure of the Observatory ........................................................................................ 81
11 Relevant Stakeholders in the Destination .................................................................................... 83
List of References .......................................................................................................................... 89
Annexes .......................................................................................................................................... 92
Annex 1: Pre-selection of Possible Sustainability Criteria and Indicators ...................................... 92
Index of Tables

Table 1. The umbrella brand and its sub-brands. .............................................................................................................. 15
Table 2. South Tyrol’s Tourism Strategy (2017-2022). ................................................................................................. 21
Table 3. Objectives of the Observatory .................................................................................................................. 77
Table 4. Possible members of the Working Group at regional level. ................................................................. 85
Table 5. Possible members of the Working Group at national level. ........................................................................ 87

Index of Graphs

Graph 1. Annual number of arrivals and overnights (left axis) and annual average length of stay in days (right axis) by NUTS 2 regions – 1950 to 2017 ................................................................................................. 11
Graph 2. Tourism capacity in hotel establishments by accommodation category – 1990-2016 .................... 12
Graph 3. Overnights at tourist accommodation establishments by market – 1960-2016 ............................ 13
Graph 4. Expenditures in percentage during the tourism year - 2012/13 ...................................................... 27
Graph 5. Expenditures in percentage during the winter season - 2012/13 ............................................... 28
Graph 6. Expenditures in percentage during the summer season - 2013 ...................................................... 28
Graph 7. Number of employees within the winter and summer seasons, divided by type of contract – 2014/15 to 2017 ............................................................................................................................... 29
Graph 8. Arrivals of foreign and domestic tourists by month – 2015 to 2017 ........................................ 30
Graph 9. Overnights by month – 2015 to 2017 ................................................................................................. 31
Graph 10. Overnights by market & month – 2015 to 2017 ............................................................................... 32
Graph 11. Occupancy rate of accommodation establishments by month and type - 2015 to 2017 .......... 33

Index of Figures

Figure 1. International Network of Sustainable Tourism Observatories .......................................................... 8
Figure 2. Tourism governance system in South Tyrol ......................................................................................... 14
Figure 3. Experience bundles – supply side ......................................................................................................... 16
Figure 4. Experience bundles – demand side ........................................................................................................ 17
Figure 5. Data sources of tourism sector in South Tyrol ....................................................................................... 25
Figure 6. Most important issue areas for sustainable tourism development in South Tyrol .................. 57
Figure 7. Issue area “Mobility (1)” ..................................................................................................................... 58
Figure 8. Issue area “Mobility (2)” ..................................................................................................................... 59
Figure 9. Issue area “Nature” .......................................................................................................................... 60
Figure 10. Issue area “Cooperation” ............................................................................................................... 61
Figure 11. Agriculture and regional products. ................................................................................................. 62
Figure 12. Issue area “Employment in the hospitality industry” .................................................................... 63
Figure 13. Quality ........................................................................................................................................... 64
Figure 14. Issue area “Hotels” ......................................................................................................................... 65
Figure 15. “Local Population”. ...................................................................................................................... 66
Figure 16. Issue area “Winter tourism”. .......................................................................................................... 67
Figure 17. Issue area “Spatial planning and infrastructure” ......................................................................... 68
# List of abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Meaning</th>
</tr>
</thead>
</table>
| ASGB         | Autonome Südtiroler Gewerkschaftsbund  
              | South Tyrolean Federation of Trade Unions – Trade and Hospitality Industry |
| ASTAT        | Amt für Statistik or Landesinstitut für Statistik  
              | Provincial Institute of Statistics |
| BBT          | Brenner Base Tunnel |
| BfN          | Bundesamt für Naturschutz, Deutschland  
              | Office for Nature Protection, Germany |
| BLS          | Business Location Südtirol/South Tyrol |
| BTE          | Tourismus- und Regionalberatung  
              | Tourism and regional consulting |
| CAI          | Club Alpino Italiano  
              | Italian Alpine Club |
| CSR          | Corporate Social Responsibility |
| DME          | Destination Management Einheiten (units) |
| DMO          | Destination Management Organization |
| DTV          | Deutscher Tourismusverband  
              | German Tourism Association |
| ECIA         | European Creative Industries Alliance |
| ECST         | European Charter for Sustainable Tourism in Protected Areas |
| ECT          | European Credit Transfer |
| EIA          | Environmental Impact Assessment |
| EMAS         | EU eco-management and audit scheme |
| EOS          | Istituto per la promozione dello sviluppo economico  
              | Institute for the promotion of economic development |
| ETIS         | European Tourism Indicator System |
| EUSALP       | EU-Strategy for the Alpine Region |
| EV           | Electric Vehicles |
| g.g.A.       | Geschützte geographische Angabe  
              | Protected geographical indication |
| GIS          | Geographic Information System |
| GSTC         | Global Sustainable Tourism Council |
| GVA          | Gross Value Added |
| HDS          | Handels- und Dienstleistungsverband Südtirol  
              | South Tyrolean Trades and Services Association |
| HGV          | Hoteliers- und Gastwirteverband Südtirol  
              | South Tyrolean Hotels and Restaurants Association |
| IDM          | Innovation Development Marketing |
| InRouTe      | International Network on Regional Economics, Mobility and Tourism |
| ISTAT        | Istituto Nazionale di Statistica  
              | National Institute of Statistics |
| LAU          | Local Administrative Units |
| LTS          | Landesverband der Tourismusorganisationen Südtirols  
<pre><code>          | South Tyrolean Association of Tourism Organizations |
</code></pre>
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>LVH</td>
<td>Wirtschaftsverband Handwerk und Dienstleister</td>
</tr>
<tr>
<td></td>
<td>South Tyrolean Crafts and Services Association</td>
</tr>
<tr>
<td>MiBACT</td>
<td>Ministero dei Beni Culturali e delle Attività e del Turismo</td>
</tr>
<tr>
<td></td>
<td>Ministry of Cultural Heritage and Activities and Tourism</td>
</tr>
<tr>
<td>Mwh</td>
<td>Megawatt hours</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-Governmental Organizations</td>
</tr>
<tr>
<td>NUTS</td>
<td>Nomenclature des unités territoriales statistiques</td>
</tr>
<tr>
<td></td>
<td>Nomenclature of the territorial statistical units</td>
</tr>
<tr>
<td>PST</td>
<td>Piano Strategico del Turismo 2017-2022</td>
</tr>
<tr>
<td></td>
<td>Strategic Plan for Tourism 2017-2022</td>
</tr>
<tr>
<td>R-TIS</td>
<td>Regional Tourism Information System</td>
</tr>
<tr>
<td>SAO</td>
<td>Sentinel Alpine Observatory</td>
</tr>
<tr>
<td>SBB</td>
<td>Südtiroler Bauernbund</td>
</tr>
<tr>
<td></td>
<td>South Tyrolean Farmers Association</td>
</tr>
<tr>
<td>SME</td>
<td>Small and Medium Enterprises</td>
</tr>
<tr>
<td>SMG</td>
<td>Südtiroler Marketing Gesellschaft</td>
</tr>
<tr>
<td></td>
<td>Society of Marketing in South Tyrol</td>
</tr>
<tr>
<td>STA</td>
<td>Strutture Trasporto Alto Adige - Südtiroler Transportstrukturen AG</td>
</tr>
<tr>
<td></td>
<td>South Tyrolean Transport Structures</td>
</tr>
<tr>
<td>STGD</td>
<td>Sustainable Tourism in German Destinations</td>
</tr>
<tr>
<td>STO</td>
<td>Sustainable Tourism Observatory</td>
</tr>
<tr>
<td>STR</td>
<td>Sustainable Tourism Report</td>
</tr>
<tr>
<td>SWG</td>
<td>Stakeholder Working Group</td>
</tr>
<tr>
<td>TIS</td>
<td>Techno Innovation Südtirol/South Tyrol</td>
</tr>
<tr>
<td>TSA</td>
<td>Tourism Satellite Account</td>
</tr>
<tr>
<td>TOUERM</td>
<td>Tourism and Environment Reporting Mechanism</td>
</tr>
<tr>
<td>VCS</td>
<td>Vereinigung der Campingplatzbetreiber Südtirols</td>
</tr>
<tr>
<td></td>
<td>South Tyrolean Campsite Operators Association</td>
</tr>
<tr>
<td>VPS</td>
<td>Verband der Privatmieter Südtirols</td>
</tr>
<tr>
<td></td>
<td>South Tyrolean Non-Commercial Accommodation Providers Association</td>
</tr>
<tr>
<td>WHS</td>
<td>World Heritage Site</td>
</tr>
<tr>
<td>WIFO</td>
<td>Institut für Wirtschaftsforschung</td>
</tr>
<tr>
<td></td>
<td>Institute for Economic Research</td>
</tr>
<tr>
<td>ZTS</td>
<td>Zukunft Tourismus Südtirol 2030</td>
</tr>
<tr>
<td></td>
<td>South Tyrol Tourism Strategy 2030</td>
</tr>
</tbody>
</table>
1 Introduction

The growing awareness about the impacts associated with the tourism industry, along with the general acceptance of the principle of sustainable development, has led the world community to reassess tourism activities in the light of its long-term economic, social and environmental sustainability. In recent years, an increasing number of initiatives that analyze, monitor and evaluate the implications of tourism development have appeared (UN, UNWTO, 2008)\(^1\). One of them is the UNWTO International Network of Sustainable Tourism Observatories (UNWTO-INSTO).

Created in 2004, the UNWTO-INSTO network of observatories pursues to support the continuous improvement of sustainability in the tourism sector at sub-national destination levels through systematic monitoring of tourism performance, resource use and impact. The regular monitoring provided by the observatories is meant to support policy makers, planners, tourism managers and other relevant stakeholders in strengthening their institutional capacities and in formulating and implementing sustainable tourism policies, strategies, plans and management processes. Through this approach, observatories strive to simulate and catalyze innovative developments in destinations leading to the continuous enhancement of sustainability in the tourism sector (UNWTO, 2016)\(^2\).

At the moment, there are 22 observatories worldwide participating in the UNWTO-INSTO network, as illustrated in figure 1.

Figure 1. International Network of Sustainable Tourism Observatories
Source: UNWTO-INSTO, 2018\(^3\).

South Tyrol, the Italian Autonomous Province of Bolzano/Bozen – Alto Adige/Südtirol, is located in the Italian Alpine area. Tourism constitutes a very strong pillar of South Tyrol’s overall economy. Just recently (in early 2017), South Tyrol has issued a tourism strategy for 2030 that contains a number of trends and measures relevant for sustainable tourism development. While launching this strategy, it became obvious that the establishment of a monitoring system for sustainable tourism in South Tyrol would help to foster the implementation of the strategy while motivating the destination’s stakeholders to proceed on the ongoing path towards improved sustainability in tourism.

\(^1\) Direct quotation slightly revised.
\(^2\) Quotation with slight modifications.
\(^3\) Retrieved at insto.unwto.org
Two other strategical frameworks were crucial in motivating the decision to start monitoring sustainable tourism: the Italian Strategic Plan for Tourism (PST) and the activities of the Working Group on Sustainable Tourism of the Alpine Convention. The recently launched Italian Strategic Plan for Tourism includes sustainability as a main pillar of development strategies and represents the national context for the implementation of the Observatory. In fact, the Directorate-General for Tourism of the Ministry of Cultural Heritage and Activities and Tourism welcomed the Observatory as a Pilot Project for the implementation of sustainable and competitive tourism at local level. Similarly, the Alpine Convention, an international treaty between Alpine Countries and the EU for the sustainable development and protection of the Alps, also supported the initiative. The Alpine Convention is based in Innsbruck and in Bolzano/Bozen (South Tyrol) and developed in 2013 the IV Report on the State of the Alps on Sustainable Tourism, at the same time coordinating a permanent working group on Sustainable Tourism.

As the UNWTO-INSTO Initiative forms interesting interfaces with parts of the South Tyrol Tourism Strategy 2030, as well as with the Italian Strategic Plan for Tourism and the Report on the State of the Alps by the Alpine Convention, it lies close to set up an UNWTO/INSTO-driven observatory. The engagement into global networking and mutual learning will help fostering the management and monitoring of sustainable tourism development in South Tyrol. By piloting a membership of an Italian destination in the INSTO Network, the engagement of South Tyrol also aims at contributing to mutual networking and learning to improve sustainability monitoring on an Italian scale.

The present preliminary study is a major step in the process of establishing South Tyrol’s Sustainable Tourism Observatory in compliance with the regulations and recommendations of the UNWTO-INSTO Initiative. Its findings will be discussed with relevant local stakeholders to take a participatory decision on the Observatory’s most relevant key issue areas for future monitoring and analysis of sustainable tourism.
2 Situation Analysis of the Tourism Sector at Destination Level

Short overview of South Tyrol

South Tyrol is an Italian Autonomous Province and constitutes, together with the other Autonomous Province of Trento, the region Trentino-South Tyrol, located in the Italian Alps and bordering with Austria and Switzerland. The Province has an area of 7,400 square kilometers and a total population of round 511,000 inhabitants. Its capital is the city of Bolzano, with about 100,000 inhabitants, but there are a few other small towns with more than 20,000 inhabitants (Meran/Merano, Bressanone/Brixen, and Brunico/Bruneck). For historical reasons, South Tyrol is trilingual, with German, Italian and Ladin speakers living in close proximity. The Autonomous Province relishes a considerable level of self-government, based on a vast range of exclusive legislative and executive powers and a fiscal regime that allows the province to withhold large parts of the levied taxes, while still contributing to the national budget.

South Tyrol is known for its mountain areas and natural landscapes covering approximately 90% of the territory. The territorial morphology is characterized by mountains and valleys. Only 5,5% of the overall territory is amenable to settlement, with one third of these 5,5% already developed (ASTAT, 2012). About 37% of South Tyrol’s territory is protected land (Morello, Oggiano, 2015). This includes those protected areas that form part of the core of the renowned Dolomites natural heritage site, which was declared UNESCO World Natural Heritage in 2009 for its value in landscape aesthetics and its geologic and geomorphologic importance in science. The Dolomites World Natural Heritage Site (Dolomites WHS) spreads over five Italian Provinces (Belluno, Bolzano - Bozen, Pordenone, Trento, Udine) and belongs to the three regions of Friuli Venezia Giulia, Trentino-South Tyrol and Veneto. As the Dolomites are increasingly visited by tourists, a common strategy and action plan for the sustainable development of tourism in the Dolomites natural heritage territory was developed by the 5 Provinces and 3 Regions, under the supervision of the Dolomites UNESCO Foundation and the support of Eurac Research.

The role of tourism in South Tyrol's economy

Tourism plays a major role in South Tyrol’s economy, contributing over 8.2% to the local GDP with direct effects only, according to the result of the most recent assessment of the tourism satellite account (TSA), which refers to the year 2005 (ASTAT, 2009a). In 2017, tourism in South Tyrol produced over 32.4 million overnights and nearly 7.3 million arrivals (ASTAT, 2018). The main tourist source markets are the DACHI markets, an abbreviation standing for Germany, Austria, Switzerland and Italy. Germany accounts for nearly 50%, followed by Italy (31.4%), Switzerland (5.1%) and Austria (3.1%). The average length of stay amounts to 4.5 days (IDM, 2017b).

Since the advent of tourism data collection in 1950, which mainly concerned the number of arrivals and overnights, the industry, apart from a few exceptions, has been experiencing a steady growth. In the year 1950, the number of arrivals were 330,289, with 1,826,166 overnights. The most recent yearly data are from 2017, which has seen 7.3 million arrivals and 32.4 million overnights (ASTAT Online Database, 2018).\(^6\)

---

\(^4\) Retrieved at www.dolomitiunesco.info

\(^5\) Source: http://qlikview.services.slag.it/QvAJAXfc/opendoc.htm?document=tourismus.qvw&host=QVS%40titan-a&anonymous=true
The gap within the graph is due to the missing data for the year 1958. While both the number of arrivals and overnights have been increasing, the average length of stay saw a steady increase until 1970 (average length of stay 8.59 days). After that point in time, due to less than proportional growth rate of the number of overnights in comparison to the arrivals, the average length of stay saw a permanent diminishment, which in 2017 amounted to 4.44 days (ASTAT Online Database, 2018).

Accommodation facilities have experienced dynamics of concentration and quality increase. Indeed, the number of accommodation facilities slightly decreased across the last two decades (4,885 facilities in 1990 vs. 4,066 in 2016), but the number of beds slightly increased (149,705 in 1990 vs. 150,708 in 2016). In parallel, the quality of accommodation facilities has increased, with a raise in 3, 4 and 5 star hotels and a reduction of 1 and 2 star hotels (see Fig. 3). In practice, this change is due to an increase in quality and dimension of existing infrastructures, who have enlarged and developed over time.

---

6 Source: http://dati.istat.it; http://qlikview.services.siag.it/QvAJAXZfc/opendoc.htm?document=tourismus.qvw&host=QVS%40titan-a&anonymous=true

7 Source: http://qlikview.services.siag.it/QvAJAXZfc/opendoc.htm?document=tourismus.qvw&host=QVS%40titan-a&anonymous=true
Concerning tourism markets, it can be seen in Figure 4 that proximity markets prevail over long-distance markets. Germany and Italy have represented more than 80% of the nights spent in South Tyrol since the very beginning of the tourist economy. The Swiss market has been recently developing, while the Austrian market is a minority and is stable over time. Additional international markets have increased up to the years 2000 and seem to slightly increase over time. Among these emerging markets, Poland, Czech Republic and the United Kingdom stand out.
South Tyrol’s tourism governance system and umbrella brand

South Tyrol’s tourism governance system and the cooperation between its various stakeholders is coordinated by IDM (an acronym for Innovation, Development and Marketing Südtirol/Alto Adige), South Tyrol’s Destination Management Organization (DMO). IDM not only functions as South Tyrol’s regional DMO, coordinating 3 Destination Management Units (DME) at sub-regional level and 78 tourism boards at local level, but it also deals with business location development, agricultural marketing, and export. IDM ultimately offers services to businesses inside and outside South Tyrol, to foster innovation and network development. IDM is a recently born agency for territorial development, and it results from the fusion of four development agencies (BLS, TIS, SMG and EOS), respectively in charge of business location, technological innovation, tourism and export. The DMO previously in charge of tourism was SMG (an acronym for “Südtiroler Marketing Gesellschaft”), founded in 1999 and in charge of tourism management and – up to 2005 - management of the South Tyrolean umbrella brand.

The governance structure of the tourism system has been redesigned recently, in accordance with the establishment of IDM following a merger between the four organizations BLS, EOS, SMG and TIS. The previously 11 sub-regional tourism boards at county level have been aggregated into 3 destination management entities (DME), that are situated geographically closer to the local stakeholders than IDM’s head office in Bolzano/Bozen. The DMEs are operational since 2018 and they are in charge of market communication, social media marketing and PR. The 78 tourism boards (or associations) are in charge of developing tourism products at regional and local level, and of networking with local stakeholders.
In 2004/05, South Tyrol introduced a regional umbrella brand with the intention to join forces and unite existing individual brands of products and services in the region under one roof. The aim was to set up synergies, especially between tourism and local agriculture, as they are seen as one of the main strengths of the destination. The purpose of the umbrella brand is to convey the identity of the region, being at the same time “rooted” as well as under “dynamic”, continuous development. The South Tyrol umbrella brand is a trademarked brand. Its use is strictly regulated and requires authorized registration. Previous research on the South Tyrolean tourism governance system revealed that the brand “South Tyrol” was a unique project, because it helped to create a platform of cooperation between tourism, agriculture and other South Tyrolean businesses (Pechlaner, Herntrei, Pichler, Volgger, 2012).

---

8 Source: www.dachmarke-suedtirol.it
<table>
<thead>
<tr>
<th>Destination brand for tourism related enterprises and organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location label for manufacturing and service companies from South Tyrol</td>
</tr>
<tr>
<td>The quality label is used by South Tyrolean producers of high quality and controlled food products.</td>
</tr>
<tr>
<td>The South Tyrolean apple consortium and the bacon consortium are entitled to carry the protected geographical indication &quot;g.g.A.&quot; (abbreviation for “geschützte geographische Angabe”).</td>
</tr>
<tr>
<td>The South Tyrolean DOC wines are entitled to carry the brand “Südtirol Wein”.</td>
</tr>
</tbody>
</table>

**Tourism products and experience bundles: comparing the demand and supply perspective**

Natural resources are the most important tourist attraction in South Tyrol and outdoor activities are the most practiced way of experiencing nature. Hiking and mountain biking, but also winter sports, are the main motivations for holidays in South Tyrol (ASTAT, 2009b). Wine and regional specialties, farms, as well as wellness and health are dominating themes of the tourism sector. South Tyrol can be subdivided into sub-regional destinations showing diverse features. Gherdëina, Kronplatz and Alta Badia, for example, are top winter sports destinations. The southern parts of South Tyrol and Eisack Valley are renowned viniculture and culinary destinations, whereas Alta Badia, Seiser Alm and Gherdëina are known for their nature and national parks. Other points of attraction include Trauttmansdorff Castle (nearby Merano), and Merano’s spa facilities. The City of Bolzano hosts the South Tyrol Museum of Archaeology, home of the preserved body of Ötzi the Iceman. The Seiser Alm, which is the largest plateau and high-altitude farm
area in Europe, the Messner Mountain Museum, the “Three Peaks of Lavaredo”, as well as the Kronplatz skiing area also play key roles in attracting large numbers of visitors.

Based on a cluster analysis of tourism demand and supply data, the South Tyrol Tourism Strategy (ZTS) 2030 identified four main “experience bundles” that characterize the current status quo of tourist demand and supply in South Tyrol (Pechlaner et al., 2017). These experience bundles are defined – based on Pine and Gilmore’s experience economy theory (Pine and Gilmore, 1999) – as groups of factors determining the tourist experience in the destination. Among these factors, the most important were the following: travel motivations, attractions, destination areas, tourist markets and season of visit.

Analysing data from tourism supply – i.e. tourism boards' thematic offers and accommodation capacity data, four clusters were defined for South Tyrol (see Fig. 6)

1) Experiencing the Dolomites

Many tourist experiences offered by the supply side are based on the Dolomites area, that attracts both Italian and international guests from higher price segments – in winter and summer. The quality of accommodation is high. The guests are interested in traditional winter sports and activities such as wellness, mountain biking and cycling. The Dolomites also attract families and individuals with an interest in sustainability and nature conservation.

Figure 3. Experience bundles – supply side.
Source: Pechlaner et al., 2017
2) Alpine-Mediterranean gastronomy

South Tyrol represents itself as a mixture between Alpine and Mediterranean flair. Cuisine and culture are characterized by Alpine and Mediterranean influences from both Italian and German traditions. Both urbanised and rural areas offer local cuisine as a speciality. Mediterranean food is more typical for South Tyrolean towns, whereas Alpine traditions are more widespread in remote areas. This bundle is particularly directed to German guests who tend to visit South Tyrol in summer season, selecting high quality accommodation facilities.

3) Being active in the mountains of South Tyrol

A variety of different outdoor activities can be performed in South Tyrolean municipalities. There are many possibilities for outdoor sports, both in winter and in summer: hiking, cycling, skiing, ski mountaineering and other mountain sports such as climbing. This cluster refers to territories where the presence of a variety of sport offers enables long-lasting and active vacations.

4) Traditional South Tyrol

Traditional South Tyrolean mountain culture and untouched landscapes are the main characteristic for the last cluster. In these remote areas of South Tyrol, peace seekers and families will find attractive landscapes, possibilities for recreation and wellness, but also the possibility for being active in the mountains. Compared to other clusters, the “Traditional South Tyrol” area has a low density of tourism establishments and does not refer to mass tourism destinations.

Figure 4. Experience bundles – demand side.
Source: Pechlaner et al., 2017
If comparing the supply-driven cluster analysis with the demand driven one, similar experience bundles stand out. Demand-driven data include tourism flows, tourism markets and online-research behaviour by consumers on Google.it and Google.de. The clusters of “being active in the mountains”, the cluster on “Alpine-Mediterranean gastronomy” and the one of “Mountain experience for international markets” result also in the demand-driven cluster analysis. Additionally, a new cluster stands out with reference to “short stays”. The comparison between Figure 3 and Figure 4 offers a detailed representation of tourism products and offers and reveals that – despite some minimal differences – there is a match between demand and supply patterns.

**Selected sustainability Initiatives related to tourism**

Several sustainability initiatives have been initiated in South Tyrol during the last few years. Some of them have a regional character, other are more focused on single attractions. Below is a list of outstanding and pioneering initiatives in the tourism sector or strongly affecting it. They can be divided into: strategical frameworks, networking initiatives, (voluntary) schemes for certification, initiatives for product distribution.

- **Strategical frameworks:**
  - **Alpine Convention’s working group on sustainable tourism.** The Alpine Convention is an international treaty between eight Alpine countries. Within this framework agreement, a working group is focused on sustainable tourism, addressing two core issues: the greening of alpine tourism, in particular through the reduction of CO₂ emissions from the tourism sector, and the identification of strategies for innovating touristic products in Alpine destinations.
  - **Dolomites UNESCO WHS Overall Management Strategy.** In 2009, the Dolomites became part of the UNESCO natural world heritage. In 2016, the heritage site adopted an Overall Management Strategy, which is shared between the institutions and territorial authorities of the 5 Italian Provinces sharing the Dolomites, including the Province of Bolzano (South Tyrol). The strategy focuses on actions aimed at conserving, communicating and enhancing the site.
  - **Energy & Climate Plan South Tyrol 2050 (KlimaLand Südtirol).** This provincial strategy sets the goal to constantly reduce the per capita energetic consumption and the CO₂ per capita emissions. Focus lies on the use of renewable energies instead of fossil fuels, on promoting a new culture of sustainability and on participating in national, international and cross-border development strategies and programs.

- **Networking initiatives:**
  - **“Green Mobility” network.** Green Mobility is an initiative of the Province of Bolzano and is coordinated by STA - Strutture Trasporto Alto Adige SpA/Südtiroler Transportstrukturen AG. The project was launched with the ambition of transforming South Tyrol into a model region for sustainable Alpine mobility. The aim is therefore to include the development and coordination of all forms of sustainable mobility, as well as paving the way for new and innovative projects. The initiative connects different players at the interface between research and practice, enabling innovation in sustainable mobility.
  - **Under Construction.** Under Construction is a school for sustainable innovation developed by Eurac Research and IDM that aims at linking researchers, professionals and accommodation facilities under the common challenge of building sustainable hotel comfort. The school involves 12 young architects or engineers that work in cooperation with small and medium
enterprises (SME) and researchers to increase thermal comfort and reduce energy consumption under the common framework of sustainable development.

- **(Voluntary) schemes for certification**
  - **Klimaneutralitätsbündnis 2025.** The Alliance for Climate Neutrality is an initiative that aims at making business activities climate neutral within 2025 in order to contribute to solving the issues related to the global climate change. Those businesses and institutions that actively commit to the alliance – and thus to reducing CO₂ emissions - commit themselves to regular measurement, reduction, compensation, certification and communication.
  - **Climate House Agency.** It is a public agency of the regional government that certifies the adoption of energy-saving building construction methods in South Tyrol. Besides certifying the energy-savings of hotels, wine cellars, schools, homes, it also develops research projects and it promotes awareness-raising campaigns for local inhabitants on climate change issues.
  - **GreenEvent certification.** GreenEvent is an initiative promoted by the Province of Bolzano to increase the sustainability of (tourism) events; it certifies those events that are planned, organized and realized according to sustainability criteria. The focus is on ecological products, energy efficiency, waste management, valorization of local products and social responsibility.
  - **Sustainability check.** The South Tyrolean association of hoteliers and restaurants (HGV), in cooperation with TourCert and Terra Institute plans to promote an initiative verifying the degree of sustainability of hotels and restaurants in South Tyrol (sustainability check) and support them on their ways towards TourCert certification.

- **Initiatives for product distribution**
  - **Pur Südtirol** is a private organization with the goal to promote sustainable cultivation, production and consumption of wine and food in South Tyrol. The organization owns a network of shops spread in several towns of South Tyrol, that work as distribution channels for regional products.
  - **Roter Hahn.** The South-Tyrolean Farmers Association (SBB) runs the marketing trademark “Roter Hahn” (red rooster) which focuses on farm holidays. Farmers who provide agritourism accommodation can receive the red rooster classification ranging from 1 - 5 flowers. Every farm applying for the red rooster is checked according to a list of service quality-based criteria.
  - **Cooperative of Bio-farming Bio Vinschgau (VI.P).** The fruits and vegetables farmers’ co-operative Bio Vinschgau (VI.P) (bio Val Venosta) represents the interests of member farmers in the valley “Val Venosta”, located in western South Tyrol. The co-operative’s main aim is to support its members with joint storing, processing, sales and marketing. It also promotes the improvement of product quality and environmentally friendly production.

**Challenges**

Tourism development in South Tyrol not only draws from a strongly developed and differentiated tourism demand and offer, but also faces a series of challenges, which should be tackled in the future, as shown in the paragraphs below (Pechlaner et al., 2017):

1. A major challenge for guests and residents alike revolves around private and public transport. Nowadays, 89% of guests access the destination by means of private transport (mostly car), causing the access of around 2,2 million vehicles per year for incoming tourists and 2,1 million vehicles for same-day visitors (Scuttari, Della Lucia, Martini, 2013). As a result, private transport is one of the most noticeable burdens of tourism in peak seasons with negative impacts on local attitudes toward tourism as well as on
the attractiveness of the destination for visitors. It is therefore necessary to rethink the ratio of private transport and public mobility, even more so against the backdrop of climate goals, climate change, and technological innovations in the field of electrification and automation of cars. The role of trains, buses, rope ways and ski lifts, e-bikes, e-cars and self-driving cars as part of an intelligent mobility system for the future remains to be further explored and promoted. The infrastructure project “Brenner Base Tunnel” (BBT) - a 55 km long railway tunnel project connecting Innsbruck (Austria) and Fortezza (Italy) by the year 2030 as part of the Trans-European Transport Network between Berlin and Palermo – will certainly influence the mobility behavior of guests, inhabitants and transients and has therefore to be included in future decision making for the destination.

2. Tourism as land use sector is considered and discussed as another major challenge, especially in connection with the revised Spatial Planning Act of South Tyrol.

3. Another challenge is to maintain and nurture the historically grown community-based tourism model with income spreading effects, that is said to be one of the main causes of South Tyrol’s success story. Just to mention an example in the accommodation sector: there are currently more than 220,000 bed-places in hotels and similar establishments in South Tyrol with a total number of more than 10,000 accommodation establishments (ASTAT Online Database, 2017). The majority is managed by families in the form of small and medium-sized businesses. Accommodation structures vary from 1 to 5-star hotels, from family, wine and bike hotels to camping and farm holidays. International trends in the tourism industry, however, show an increasing development of larger units (resorts) that try to offer the entire tourist service range from a single source. This evolving trend may shift developments in South Tyrol – whose origins can be traced back to the community-based destination model with a large variety of entrepreneurs benefitting from the economic impacts caused by tourism – towards resort driven destination models with a handful of exclusive, larger entrepreneurs.

4. Authenticity, hospitality and service related professionalism are some of the main characteristics of tourism in South Tyrol. These characteristics have to be maintained in order to guarantee a successful tourism development, especially with regard to employment. Local family businesses often encounter difficulties in the intra-generational transition of economic activities. New generations should be facilitated in taking over businesses. At the same time, migrant workers are often employed in the tourism sector. They should be trained to understand and carry the regional values and to promote local tourism offers, in order to avoid feelings of estrangement in guests.

5. The ongoing trends in mechanization and automation are leading to an increasing presence of robots and machines in many production areas. A number of studies suggest that robots will take over or automate a significant part of working processes in the current century. Although services such as tourism are somewhat less vulnerable, the widespread presence of human resources in these areas could come under pressure. This can mean a loss of jobs but possibly also a decrease in quality, since many service values in tourism are characterized by interpersonal contact.

6. The demographic change in Europe, especially in Germany and Italy, has the consequence of causing within the society a growing proportion of older people at progressive rates. Not only the ageing society, but also migration will lead to changes in the composition of tourist markets. In the future, it is going to

---

9 Source: http://qlikview.services.siag.it/QvAJAX2fc/opendoc.htm?document=tourismus.qvw&host=QVS%40titan-a&anonymous=true
be important to be prepared for these new guests and to know their needs. In addition to questions of product development and the need for market research, this includes, for example, removing barriers for older and impaired people.

7. Currently, older guests and families dominate among the guests who spend their holidays in South Tyrol. Nevertheless, certain sub-destinations have turned towards youth tourism (in groups). It is vital to keep an eye on this target group of young and urban guests, especially millennials and generation Y, because they are the guests of tomorrow. The innovative impulses, which they bring to the development of tourism in the region, seem to be very important.

Strategic plans: South Tyrol’s Tourism Strategy (2017 – 2030) and Italy’s Strategic Plan for Tourism (2017 – 2022)

A set of 20 development strategies has been outlined for South Tyrol in the South Tyrol’s Tourism Strategy (2017 – 2030), resulting from the ZTS 2030 study. These strategies include sustainable development as an underlying principle for future tourism, and claim for the management of resources and tourism flows, as well as the distribution of benefits within the broad community of South Tyrolean inhabitants. Below is a table that summarizes the strategies and their main objectives.

<table>
<thead>
<tr>
<th>Strategies</th>
<th>Main Objective</th>
<th>Importance (1=low – 3=high)</th>
<th>Priority (1=low – 3=high)</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1 Umbrella-Branding-Act</td>
<td>Keep alive and develop the umbrella brand</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>#2 Export-Synergy-Act</td>
<td>Develop a territorial marketing through (but beyond) tourism</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>#3 Growing-Digital-Act</td>
<td>Foster digitalization in SMEs and tourism boards</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>#4 Tourism-Education-Act</td>
<td>Encourage continuous training programs on languages, foreign cultures, localhood and digital technologies</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>#5 Valorize-the-Basics-Act</td>
<td>Encourage the link between tourism and agriculture, two key sectors for South Tyrolean economy</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>#6 Public-Transport-Act</td>
<td>Encourage hard and soft factors for sustainable mobility</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>#7 Enjoy-Pass-Act</td>
<td>Introduce traffic management measures for congested areas, typically mountain passes</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

Table 2. South Tyrol’s Tourism Strategy (2017-2022).
Source: Pechlaner et al, 2017
<table>
<thead>
<tr>
<th>#</th>
<th>Act</th>
<th>Description</th>
<th>Priority</th>
<th>Urgency</th>
</tr>
</thead>
<tbody>
<tr>
<td>#8</td>
<td>Hospitality-Act</td>
<td>Encourage a hospitality culture and a favorable attitude towards tourism among local inhabitants</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>#9</td>
<td>Tourism-Employee-Act</td>
<td>Introduce incentives for the recruitment of high-quality workers in the catering sector</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>#10</td>
<td>Go-International-Act</td>
<td>Encourage pro-actively a sustainable and nature-based international tourism in the Dolomites area</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>11</td>
<td>International-Link-Act</td>
<td>Encourage rail accessibility and improve connections to international airports outside South Tyrol</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>#12</td>
<td>Think-Big-Act</td>
<td>Develop new products for international tourists, that encompass wider destination areas</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>#13</td>
<td>Product-Development-Act</td>
<td>Encourage specialization and differentiation of sub-destination areas</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>#14</td>
<td>Clear-Conscience-Act</td>
<td>Include sustainability as key aspect of tourism products, use of facts and figures as well as emotions to encourage sustainability</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>#15</td>
<td>365-Day-Tourism-Act</td>
<td>Encourage de-seasonalization of tourism through new market attraction, service provision during shoulder seasons, service alternatives in case of bad weather</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>#16</td>
<td>Healthy-Aging-Act</td>
<td>Develop products for seniors, around the topics of healthy aging and life-long learning</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>#17</td>
<td>Attraction-Network-Act</td>
<td>Create tourism and transport integrated offers, to strengthen the destination network of actors and promote sustainable mobility</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>#18</td>
<td>Cooperation-Act</td>
<td>Encourage cooperation among SMEs on the digital media communication</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>
#19 Adaptability-Act
Enable flexibility in the reconversion of accommodation establishments
2
2

#20 Tourism-Intelligence-Act
Increase monitoring activities on tourism
2

The table reveals how most of the strategies relate explicitly or implicitly to issues of sustainable tourism development, for instance the wellbeing of local population, but also the support of sustainable forms of mobility, the introduction of management measures for visitor flows, de-seasonalization, and finally the introduction of a monitoring tool to observe tourism development and guide future policies.

The Italian Strategic Plan for Tourism (2017 – 2022) developed by the Italian Ministry of Cultural Heritage and Activities and Tourism works as a broader framework for this strategical objectives and is perfectly matching the regional strategies for tourism development. Indeed, the Strategic Plan for Tourism “is based on key drivers such as technological and organizational innovation, skill building, and quality services. These aspects are integrated with the need to have a lasting and sustainable approach to [...] environmental and cultural heritage” (MiBACT, 2017). The guiding principles of Italy’s tourism system for the next six years are innovation, sustainability and competitiveness, and they are perfectly in line with the local strategies for tourism development. The participatory approach and collaborative process of monitoring are also key aspects of the National Strategic Plan, which are reflected in the local structure of the Observatory. Therefore, the Ministry has decided to support the South Tyrolean Initiative to establish an Observatory as a Pilot Project of the National Tourism Plan (see support letter attached).
3 Basic Economic Data

This chapter gives an overview of the basic characteristics of South Tyrol’s tourism industry based on the structure suggested by the “UNWTO basic economic data sheet”.

As previously stated, in South Tyrol the tourism industry represents a strong pillar of the overall economy. Hence, general tourism data are made available through a public web portal on a regular basis (yearly and/or monthly) by ASTAT, the Provincial Institute of Statistics. The tourism data provided by ASTAT mainly concern the tourism flows (arrivals and overnights per month, year, accommodation category, market municipality) and the tourism capacity (number of accommodations and beds per month, year and accommodation category). Regarding the capacity data, the following subdivision is made by ASTAT (ASTAT Online Database, 2017):

- Accommodation providing catering services (hotels, residences, apartments);
- Accommodation not providing catering services (campsites, private accommodation, agritourism and others).

Moreover, additional data and information can be retrieved at the national statistics institute (ISTAT) and the Bank of Italy (Banca d’Italia).

The following chart depicts a general map of the data sources regarding the tourism sector of South Tyrol. The present preliminary study report mainly draws on online ASTAT data sources regarding demand, supply, expenditure and TSA. Additional online data sources from other institutions were used, e.g. ISTAT’s room capacity data. Data, which are available only upon request at provincial level (e.g. ISTAT’s sample survey on domestic travel and Bank of Italy’s survey), were not included, but are considered for further research in section 2.

---

10 Source: http://qlikview.services.siag.it/QvAJAXZfc/opendoc.htm?document=tourismus.qvw&host=QVS%40titan-a&anonymous=true
This chapter covers as many aspects listed in the UNWTO basic economic data sheet as possible. However, it does not raise any claim to completeness due to the limited availability of regularly updated data sets on tourism employment and the overall economic impact of tourism.

Furthermore, for the sake of completeness, it has to be stated that the visualization and analysis of most tourism industry data collected within the region follows the tourism year, which extends from the 1st of November to the 31st of October. Based on the INSTO-guidelines, the following data representations have been adapted to the calendar year, ranging from January to December and refer to the past three years (2015 – 2017). In case of missing data, the most recent available figures before 2015 are reported. The following data refer to South Tyrol and correspond to the NUTS 2 regions.
1. Tourism Industry

In the last three years the total number of accommodation establishments (with and without catering services) increased by 1.87% from 10,049 in 2015 to 10,237 at the end of 2017. It can be observed that within the timespan from 2015 to 2017 establishments offering catering services registered a decrease by -0.56%, while those without catering services experienced an increase of +4.06% (ASTAT Online Database, 2018).11

The documentation about the number of rooms refers to the years of 2015 and 2016 and comprises solely the accommodations providing catering services. In 2015, 73,024 rooms were available within this type of accommodation structures, while in 2016 a total of 73,169 rooms were available, resulting in a room-structure-ratio of 17.97 rooms per accommodation structure (ISTAT Online Database, 2017).12

The variations of the number of bed-places are well documented, especially regarding the period from 2015 until 2017. During this period the bed-places within establishments offering catering services increased by 1.40%, respectively from 149,796 to 151,897, while the increase within establishments without catering services was 3.80% (from 69,452 to 72,090).

2. The contribution of tourism to the economy

The local GDP of South Tyrol has been steadily growing over the past years, amounting to €21,003,200,000 in 2014 (value added at basic prices €18,923,000,000 plus net indirect taxes €2,080,000,000) and €21,540,700,000 in 2015 (value added at basic prices €19,418,100,000 plus net indirect taxes €2,122,600,000). At the time this study was compiled, the GDP growth 2016 was estimated to be comprising 1.1% (amounting to €21,777,648,000) and 1.5% in 2017 (amounting to €22,104,312,420) (ASTAT, 2018; ASTAT, 2017a).

The first major economic sector regarding the GDP of South Tyrol is Sales, hotels and transport and is located within the service sector. It contributed by 23.53% in 2014 (absolute value: €4,966,100,000) and by 24.16% in 2015 (absolute value: €5,204,500,000) to the GDP. This sector also comprises “Accommodation and restaurants and bars”, which in 2014 contributed by 9.60% (absolute value: €2,015,900,000) and by 9.66% in 2015 (absolute value: €2,080,400,000) to the overall GDP. The second major economic sector is the manufacturing industry, located within the industry sector, contributing by 10.65% in 2014 and 11.02% in 2015 to the GDP. The third major economic sector is the real estate and housing industry, located within the service sector, and contributing by 9.09% in 2014 and 9.30% in 2015 to the GDP of South Tyrol (ASTAT, 2018; ASTAT, 2017b). Since the numbers regarding 2016 and 2017 are only estimates, the overall contribution of the tourism industry during these years was not retrievable.

The promotion of South Tyrol as a tourism destination is organized on a regional and local level. On the regional level South Tyrol’s promotion is implemented by IDM. The budget is provided by the Provincial Government and derived also partially from direct activities of IDM. The total funds at the disposal of IDM

---

11 Source: http://qlikview.services.siag.it/QvAJAXZfc/opendoc.htm?document=tourismus.qvw&host=QVS%40titan-a&Anonymous=true
12 Source: http://dati.istat.it/
for the destination marketing in 2016 amounted to € 18,064,121, while in 2017 the total funds amounted to € 18,369,575 (IDM, 2017).

Regarding the expenditures of the entirety of tourists in South Tyrol, the most recent data are regarding the tourism year 2012/13 (ranging from November 2012 to October 2013). During this tourism year, the average daily expenditure per tourist was € 117.00. During the winter season (from November until April) the average daily expenditure was €136.00 and during the summer season (from May until October 2013) €105.00. The expenses for reaching and departing from South Tyrol were not included within these amounts. The following graphs show the distribution of expenditures (in percentage) during the tourism year 2012/13 (ASTAT, 2015):

![Graph 4. Expenditures in percentage during the tourism year - 2012/13](image)

Source: ASTAT, 2015

A differentiation between the expenditures of visitors in the winter season (November 2012 – April 2013) and the summer season (May 2013 – October 2013) provides the following picture:
Although visitors spent in average 7.9% more for the accommodation during the winter season, the most striking difference between the expenditures during the winter and summer season are the percentages regarding seasonal services, which are heavily influenced by the purchases of ski passes, which contribute by 11.9% to the overall 15.6% of seasonal services (ASTAT, 2015).

Subdividing the daily expenditures between the different source markets, it can be stated that the tourists from the two major source markets (Germany and Italy – for further details about the source markets please refer to point 2 of this chapter “overnights”) spent the following:

- Inbound visitors from Germany: € 111,00
- Domestic visitors: € 118,00
3. Employment

The tourism sector plays a major role within the employment market of South Tyrol. In 2015 the tourism industry provided employment for 23,475 employees, who represented 12.35% of the total workforce of South Tyrol. In 2016 the number of persons employed within the tourism industry saw a slight increase, amounting to 12.87% (absolute number 25,149), and in 2017 it amounted to 27,214 people (13.48%).

As the tourism industry exhibits considerable seasonal fluctuations, the occupational differences between the winter and summer season have to be taken into account. The following graph depicts the number of employees within the tourism sector during the winter seasons (November – April) and summer seasons (May – October), differentiating also between permanent and fixed-term contracts as well as contracts on call (Amt für Arbeitsbeobachtung, ASTAT, 2015a, 2015b, 2016a, 2016b, 2017a, 2017b)

MONTHLY/ QUARTERLY ECONOMIC DATA

1. Travel Flows

Regarding the tourism arrivals in South Tyrol, an increase of 12.41% can be observed from the year 2015 to 2017, amounting to a plus of 806,446 arrivals, comprising an increase of 13.17% of inbound tourists (absolute value 551,350 arrivals) and of 11.05% of domestic arrivals (absolute value 255,096 arrivals). The
aggregated arrivals for the years 2015, 2016 and 2017 divided by the different months can be extracted from the following graph:

Graph 8. Arrivals of foreign and domestic tourists by month – 2015 to 2017
Source: ASTAT Online Database, 2018

2. Overnights

In the past three years, the total number of overnights increased by 10.06% from 29,475,245 in 2015 to 32,440,078 in 2017. The seasonal distribution of the overnights emphasizes the traditional peak in the summer months July and August. The months characterized by the lowest overnights are November, April and May (ASTAT Online Database, 2018).
The average ratio of domestic visitors compared to inbound visitors did not change substantially during the previously mentioned timespan and represents a distribution of 32% domestic and 68% foreign visitors (ASTAT Online Database, 2018). The five major source markets are the following:

1. Germany: 49%
2. Italy: 31%
3. Switzerland and Liechtenstein: 5%
4. BeNeLux: 3%
5. Austria: 3%

The remaining 8% are classified as “other markets”.

Germany represents the first of the source markets with 49% of the overall overnights. It has seen an increase from 14,378,294 overnights in 2015 to 15,780,499 in 2017, which implies a percentage increase of 9.75% in the last three years. The domestic market with 31% of the total overnights represents the second source market. In 2015 the Italian tourists spent 9,394,738 nights in South Tyrol. In 2017 this number increased to 10,300,299 overnights, resulting in an increase of 9.64%. The third source market is constituted by tourists of Switzerland and Liechtenstein, and represents 5% of the overnights in South Tyrol. This source market has seen an increase of 9.79% from 1,454,231 overnights in 2015 to 1,596,628 overnights in 2017.

Graph 9. Overnights by month – 2015 to 2017
Source: ASTAT Online Database, 2018

http://qlikview.services.siag.it/QvAJAXZfc/opendoc.htm?document=tourismus.qvw&host=QVS%40titan-a&anonymous=true
http://qlikview.services.siag.it/QvAJAXZfc/opendoc.htm?document=tourismus.qvw&host=QVS%40titan-a&anonymous=true
Overnights in 2017. The aggregated numbers of Belgium, Netherlands and Luxembourg represent with 3% of the overall overnights the fourth source market of South Tyrol. Between 2015 and 2017, the market exhibited the lowest growth of 6.58%, increasing from 14,378,294 overnights in 2015, to 15,780,499 in 2017. With 3% of the overall overnights, Austria is the fifth source market. It saw the largest increase from 2015 to 2017, ranging from 901,497 overnights in 2015 to 1,032,603 overnights in 2017, resulting in 14.54% of growth. This percentage increase is only surpassed by the increment of the other markets, which account for 8% of the overnights in South Tyrol. With 2,348,833 overnights in 2015 and 2,666,984 overnights in 2017, the increment within this timespan was of 13.55% (ASTAT Online Database, 2018).

The following graph depicts the distribution of overnights based on source market, months and years.

![Graph 10. Overnights by market and month – 2015 to 2017](Source: ASTAT Online Database, 2018)

### 3. Occupancy

Looking at the past three years, the overall occupancy rate of bed places in South Tyrolean accommodation establishments (with and without catering services) increased from 36.92% (in 2015), to 38.94% (in 2016) and to 40.02% (in 2017). The following graph depicts the occupancy rates within the months of the years 2015, 2016 and 2017. Furthermore, it differentiates between accommodation

---

17 Source: [http://qlikview.services.siag.it/QvAJAXZfc/opendoc.htm?document=tourismus.qvw&host=QVS%40titan-a&anonymous=true](http://qlikview.services.siag.it/QvAJAXZfc/opendoc.htm?document=tourismus.qvw&host=QVS%40titan-a&anonymous=true)

18 Source: [http://qlikview.services.siag.it/QvAJAXZfc/opendoc.htm?document=tourismus.qvw&host=QVS%40titan-a&anonymous=true](http://qlikview.services.siag.it/QvAJAXZfc/opendoc.htm?document=tourismus.qvw&host=QVS%40titan-a&anonymous=true)
providing catering services and not providing catering services, the subdivision applied by ASTAT (ASTAT Online Database, 2018).\(^\text{19}\)

Graph 11. Occupancy rate of accommodation establishments by month and type - 2015 to 2017

Source: ASTAT Online Database, 2018\(^\text{20}\)

\(^{19}\) Source: http://qlikview.services.siag.it/QvAJAXZfc/opendoc.htm?document=tourismus.qvw&host=QVS%40titan-a&anonymous=true

\(^{20}\) Source: http://qlikview.services.siag.it/QvAJAXZfc/opendoc.htm?document=tourismus.qvw&host=QVS%40titan-a&anonymous=true
4 Key Sustainability Issue Areas – Secondary Data Analysis

As said in the Introduction, this preliminary study report is the first step in the development of the South Tyrol Sustainable Tourism Observatory as a member of the global UNWTO-INSTO Network Initiative. The South Tyrol Observatory will therefore engage in the following 9 mandatory issue areas that sustainable tourism observatories are required by the UNWTO-INSTO to monitor to a certain extent:

1. Tourism Seasonality
2. Employment
3. Economic benefits at destination level
4. Governance
5. Local Satisfaction
6. Energy Management
7. Water Management
8. Waste Water Management
9. Solid Waste Management

In addition to these mandatory issue areas, UNWTO-INSTO proposes each observatory to include additional destination-specific issue areas into its monitoring system, which constitute – together with the INSTO mandatory themes - a destination’s so called “key sustainability issues”.

In order to gather a broad preselection of possible key issue areas for South Tyrol’s Observatory to choose from, existing international, national and regional guidelines and strategies for sustainable destination monitoring were examined. This was done by means of a desktop research analyzing secondary data and documentary sources, principally based on the ones listed in the text box shown further below.

The desktop research resulted in the preselection of the following possible additional destination-specific issues areas for South Tyrol’s Observatory (still to be selected and prioritized in a later stage of the process):

10. Innovation
11. Sustainable production and consumption
12. Ski tourism and other nature based outdoor sports
13. Biodiversity, nature protection
14. Cultural heritage and traditions
15. Mobility
16. Land use, spatial planning and tourism development control
17. Visitor management, control of use intensity and territorial distribution
18. Visitor satisfaction, wellbeing and behavior
19. Adaption to Climate Change
SECONDARY DATA AND DOCUMENTARY SOURCES (DESKTOP RESEARCH)

International Guidelines for Sustainable Destination Management and Monitoring:

UNWTO 2004, Indicators of Sustainable Development for Tourism Destinations Guidebook: One of the most important UNWTO documents that provide guidance on setting-up sustainable tourism issue areas and related indicators.

GSTC Criteria: The Global Sustainable Tourism Council (GSTC) Criteria and Performance Indicators constitute another internationally recognized destination management and monitoring framework: gstcouncil.org/gstc-criteria/gstc-destination-criteria/

European Commission 2016, The European Tourism Indicator System - ETIS toolkit for sustainable destination management: Provides destinations with guidance on sustainable tourism management and monitoring. It is designed as a locally owned process for collecting and analyzing data to assess the impact of tourism at destination level and to enable the local stakeholders to monitor their performance over time: ec.europa.eu/growth/sectors/tourism/offer/sustainable/indicators_it

UNWTO/InRouTe 2013, A Closer Look at Tourism: Sub-national Measurement and Analysis – Towards a Set of UNWTO Guidelines: This publication, jointly developed by the International Network on Regional Economics, Mobility and Tourism (InRouTe) and UNWTO, includes recommendations for future Regional Tourism Information Systems (R-TIS) on how to measure and analyze the economic value and impacts of tourism at sub-national levels.

Deutsches Bundesministerium für Umwelt/BfN/DTV/BTE 2016, Guidebook for Sustainable Tourism in German Destinations (Praxisleitfaden Nachhaltigkeit im Deutschlandtourismus): A guidebook for sustainable tourism with practical recommendations available to all German and other tourism destinations on their way to becoming sustainable destinations.

Relevant Strategies:

EURAC/IDM 2017, South Tyrol Tourism Strategy 2030: In 2017, Eurac Research - in cooperation with IDM, HGV and the Institute for Economic Research (WIFO) - published the South Tyrol Tourism Strategy 2030 (Il Futuro del Turismo in Alto Adige 2030 - Zukunft Tourismus Südtirol 2030). The strategy follows a long-term perspective until 2030. It is not a sustainability strategy, but it contains a set of challenges, trends and working topics relevant for shaping a more sustainable future for the tourist destination South Tyrol.

Italian Strategic Plan for Tourism 2017-2022: The Strategic Plan for Tourism (PST), drawn up by the Standing Committee on Tourism Promotion in Italy, aims to achieve a lasting and sustainable approach to the environmental and cultural Italian heritage thanks to the creation of a standardized vision for tourism and culture among all tourism operators. Operational tools include: participative methods, creating a dashboard to monitor Italy’s competitiveness based on selected criteria, monitoring and tracking of the plan itself. The plan has a time horizon of six years (2017-2022) and is based on key drivers such as technological and organizational innovation, skill building, and quality services.
Klimareport Südtirol – Rapporto sul clima Alto Adige (Climate report South Tyrol) 2018: The report, drafted by over 20 researchers, collects and interprets data and facts related to the impact of climate change on nature and society in South Tyrol. The impact of tourism is among the factors taken into consideration.

Energie-Südtirol 2050. Klima-Strategie (Climate Strategy – South Tyrol Energy)2050: The study commissioned by the Department for Land Use Planning, Environment and Energy of South Tyrol and authored by the KlimaHaus Agency, South Tyrol in cooperation with the University of Natural Resources and Live Sciences, Vienna, represents a strategic document, developed in 2011. It includes on one side the starting situation regarding the transport sector, private households and economy in South Tyrol and illustrates on the other side energy policy strategies, and measures in order to implement the vision for a sustainable future in South Tyrol.

Roadmap Smart Alpine Mobility - Green Mobility South Tyrol: The provincial strategy aims to enable South Tyrol to become a model region in the field of sustainable Alpine mobility. The strategy focuses on the expansion of cycle mobility, electromobility and inter-modality.

Alpine Convention 2013, Fourth Report on the State of the Alps – Sustainable Tourism: The Alpine Convention is an international treaty between all Alpine countries and the EU that sets out basic principles and general measures for the sustainable development and protection of the Alps. In 2013, the Alpine Convention published the “Fourth Report on the State of the Alps” which provides insights into the challenges and possible solutions for sustainable tourism and offers a macro-regional platform for benchmarking sustainable tourism performance.

European Commission 2015, Action Plan concerning the EU Strategy for the Alpine Region (EUSALP): EUSALP is a macro-regional strategy with the objective to promote sustainable economic and social prosperity of the Alpine Region through growth and job creation, improved attractiveness, competitiveness and connectivity, while preserving the environment and ensuring healthy and balanced ecosystems. EUSALP’s vision of a sustainable future for the Alps also includes a number of recommendations regarding sustainable tourism development.

In the future, additional frameworks may be analyzed and integrated into the South Tyrol Observatory Monitoring System – such as the EU eco-management and audit scheme (EMAS) as well as the Tourism and Environment Reporting Mechanism (TOUERM). These two frameworks were identified and sighted by the study team, but are not at the core of the desktop research.

The analysis of the above listed secondary data resulted in a preselection of mandatory and possible destination-specific issue areas for the South Tyrol Sustainable Tourism Observatory, which is described on the following pages. In order to align each of the issue areas to the local and regional dimension, linkages were drawn with these strategies. These linkages (connecting factors) are depicted for each issue area separately within a respective text box.

Furthermore, each issue area is subdivided into several criteria/components, which are again aligned to a set of possible indicators. The pre-selected criteria and related indicators were taken from the ETIS toolkit, the UNWTO indicators guidebook, the InRouTe Roadmap, the GSTC Criteria and Performance Indicators.
as well as the Guidebook for Sustainable Tourism in German Destinations (abbreviation: Guidebook STGD). They are provided in Annex 1. Possible additional indicators, which were not found in the secondary data analyzed, were freely developed on the basis of the Tourism Strategy for South Tyrol (ZTS 2030) and the Sustainable Tourism Report of the Alpine Convention (abbreviation: STR Alpine Convention). They are also included in the respective annex.

**MANDATORY ISSUE AREAS (UNWTO-INSTO)**

1) **Tourism seasonality**

The mandatory issue area of seasonality incorporates all those aspects of tourism that relate to seasonality, such as:

- Occupancy rates and operation times of tourism establishments over the year
- Tourism intensity, tourism peaks over the year
- Product and service availability and diversity in summer, winter, spring, autumn
- Full-time/ seasonal employment in tourism
- Seasonal sports, winter/summer tourism dependency

**Linkages to relevant strategies**

**ZTS 2030, “365 Day Tourism Act”**:  
- Further develop year-round tourism (365 days), strengthen shoulder seasons, mitigate peak seasons  
- Promote events in shoulder seasons  
- Improve year-round availability of offers (points of attraction, public transport, rentals etc.)  
- Create multioptional offers for every season, expand outdoor offers independent of weather conditions

**Sustainable Tourism Report (Alpine Convention)**  
- Aim at a better complementary between summer and winter tourist seasons by favouring inter-seasonal tourism  
- Harmonise school holidays calendars in order to limit peak season and the development of infrastructures  
- Promote off-season sport events

**The Italian strategic plan for Tourism 2017-2022**  
- Develop a destination marketing focused on markets and products that can reduce seasonality and geographic concentration most effectively  
- Focus on emerging destinations: strengthen specific qualities of the different landscapes helps differentiating the touristic offer, allowing therefore to reduce congestion of traditional tourism destinations and decrease seasonality of tourist flows  
- Emanate new policies that provide less well-known places with the means and the skills to develop their appeal and their hospitality capacity and therefore widening the choice of destinations

**Klimareport/Rapporto sul clima 2018**  
- Monitor rope ways and ski lifts flows in summer
Innovate touristic products related to ski lifts (e.g. sommer offer)

2) Tourism employment, education and capacity building

The issue area related to tourism employment, education and capacity building touches topics revolving around the quantity, quality and attractiveness of tourism employment, education and capacity building including aspects such as:

- Job creation by tourism
- Seasonal/all-year jobs, temporary unemployment
- Highly qualified/unqualified jobs
- Working hours, peak season work load
- Work-life balance, family wellbeing
- Local average income from tourism compared to cost of living
- Wages, pay levels of staff
- Equal gender opportunities
- Occupational health and safety, working conditions, labor regulations
- Skills and turnover of staff employed in tourism businesses
3) **Economic benefits at destination level**

The monitoring field “economic benefits at destination level generated by tourism” measures aspects such as:

- Tourist arrivals and overnights, same-day visitors
- Average length of stay
- Daily average expenditure of tourists and same-day visitors,
- Birth rate and number of tourism enterprises (establishments), classified according to size, jobs created, average wages and salaries, occupancy rate, revenue (income), employment and investment data
- Competitiveness of tourism businesses (price and value, quality, differentiation, specialization, vitality, business cooperation, long-term profitability)
- Contribution of tourism to the destination’s GDP
- Percentage of local produce and services sourced by the tourism enterprises (tourism supply chain)
- Public revenues from tourism taxes and charges
- Public and private investment in tourism
- Economic impact of tourism on smaller farming, organic farming, mountain farming

**Linkages to relevant strategies**

*South Tyrol Tourism Strategy 2030, “Go International Act”, “Hospitality Act” and “Cooperation Act”*:  
- Expand the radius of international (European) source markets (with focus on the Dolomites)  
- Enlarge the average length of stay, enhance product quality and price levels  
- Reduce communication costs through improved cooperation between companies and product groups (e.g. albergo diffuso), reduce duplicated online contents, enhance the role of the tourism associations in the sphere of communication

*Sustainable Tourism Report (Alpine Convention)*  
- Facilitate the earmarking of revenues form property taxes on second homes to financing public services in the mountain communities

*The Italian strategic plan for Tourism 2017-2022*  
- In order to increase the competitiveness, a reduction in taxation, bureaucracy and regulations for enterprise is opportune, including through improved use of digital services and rationalization of the regulatory framework;  
- Identify and tackle undeclared work, code new business models supported by digitalization and the sharing economy, greater financial support for sector enterprise and simplification of administrative procedures for large investment projects as well.

4) **Tourism governance, destination management**

Tourism governance and destination management is a broad monitoring field, which lies at the core of sustainable tourism monitoring frameworks. It includes a variety of monitoring elements, including the following:  
- Destination-wide system(s) promoting sustainability policies and standards for enterprises and potentially also for sub-destinations  
- Tourism enterprises taking part in sustainability certification or labelling regimes  
- Participation of local population in designing and deciding about tourism development plans  
- Image of the destination (branding, vision, strategic marketing)  
- Destination-wide cooperation between sub-destinations  
- Cooperation between tourism and other sectors, such as renewable energy, water resources, biodiversity and landscape protection, forestry, agriculture (regarding regional sustainable products, diversification including organic and mountain farming, trails, landscape aesthetics; tourism and leisure activities directly linked to mountain farming, etc.)
Linkages to relevant strategies


- Promote and improve the consistency of South Tyrol’s umbrella brand with focus on tourism, agriculture and mobility
- Link availability of tourism products with the availability of agricultural products
- Establish South Tyrol flagship stores
- Promote mutual understanding and cooperation between tourism, agriculture and nature protection (hiking trails, biking tracks, mountain farming, protection of landscapes, aesthetics)

**Sustainable Tourism Report (Alpine Convention)**

- Involve the local community in a discussion about the future of their tourism system and more specifically about the prospects for supporting tourism performances in a sustainable way, and by this promote the elaboration of strategies for local and sustainable development
- Manage stakeholders’ involvement in decision-making thanks to participatory methodologies (e.g. workshops)
- Improve regional welfare achieved through the cooperation between tourism and other sectors by fostering the consumption of local and regional food in restaurants, hotels and so on, enhancing the collaboration between tourism and agriculture/forestry by marketing local farm-based products and promoting on-farm holidays
- Possible indicator of sustainable tourism management practices: percentage of tourism enterprises in the destination with externally verified certification/labelling for environmental/sustainability and/or CSR measures

**The Italian strategic plan for Tourism 2017-2022**

- Adopt a system to monitor and track the Plan, which serves as both a “social report” for citizens and an “ongoing improvement and update tool” for the Plan itself
- Upgrade the European Charter for Sustainable Tourism in Protected Areas method and processes (ECST), including the tourist-cultural supply: reinforce the process of adoption of the ECST by protected areas, promoting achievement of the Charter of other protected areas and supporting completion of the entire certification process, including the final phase involving tourism operators
- Support the creation of a public/private governance through integration of the policies which have characterized the system so far; focusing on the areas of strategic appeal, identifying and constantly sharing policy requirements; identifying the principal business needs of the territories and the products concerned; creating integrated actions which are sufficiently important nationally to allow efficient promotion and marketing
- Identify new destinations and products, which allow expansion, innovation and diversification of the national tourism supply system, and particularly the creation of interregional itineraries and products.
- Introduce a single system of promotion of the brand and its portfolio of tourism products
5) Local satisfaction, local wellbeing

Local satisfaction and wellbeing is another major issue area to be monitored. It observes the state of hospitality and the satisfaction of residents with tourism including impacts of tourism on local identity and quality of life, traffic levels, satisfaction with destination management, etc. It involves further aspects, such as:

- The impact of tourism on the development of local living costs and real estate (housing) prices or changes in lifestyles.
- Local average income compared to living costs and real estate/housing prices
- Access of residents to key assets and services such as transport, health services, real estate
- Effects of visitation peaks (e.g. traffic)
- Population growth related to tourism growth, visitor numbers related to resident numbers, second homes related to resident homes, etc.

Linkages to relevant strategies

**South Tyrol Tourism Strategy 2030, “Hospitality Act”:**
- Monitor the cost of living of the local population
- Monitor the development of traffic
- Improve local living conditions through high quality products/high price segments and through prolonging the average length of stay

**Sustainable Tourism Report (Alpine Convention)**

- Reach a better balance of price level and income for the population in tourist areas
designating construction areas in territorial planning reserved to housing or businesses in other sectors (start-up centres/handicraft zones)

**The Italian strategic plan for Tourism 2017-2022**

- Improve cities’ accessibility for residents and tourists, developing smart cities and ensuring communication between local administrations and citizens, tourism systems and tourists, through universal communication languages and codes
- Improve the quality of life and competitiveness of urban and metropolitan areas (through development of rapid mass transport systems, new smart transport services for local public transport, shared mobility services, cycle-pedestrian mobility and “on-demand” services for areas with low demand)
- Develop the use of the new technologies to be accompanied by a significant expansion of the digital infrastructure of tourist destinations, e.g. guaranteeing open wi-fi access for citizens and tourists
- Promote a major revival of public transport and integration between transport policies and civic policies, in order to make life in big cities easier for their citizens and more attractive to tourists

**Roadmap Smart Alpine Mobility**

- Facilitate accessibility to sustainable mobility (e.g. institution of the South Tyrol pass, an interoperable pass that allows access to different public transportation means within the region, from busses to cablecars, including car sharing). The more kilometers are travelled, the lower the price, which translates in a higher accessibility for the local population
6) Energy management, “climate neutrality”

The issue area “energy management” pays attention to energy efficiency and climate neutrality of tourism businesses. It also observes the energy consumption of tourists compared to that of the residents. Other monitoring elements include:

- Energy consumption tourist/resident
- Overall energy consumption/amount from renewable resources used by tourism enterprises
- Energy from regionally produced renewable/ fossil sources used in tourism establishments
- CO₂ emissions from tourism enterprises
- Reduction and mitigation of greenhouse gas emissions from tourism enterprises

**Linkages to relevant strategies**

**Sustainable Tourism Report (Alpine Convention)**

- Start regular environmental audit of tourism destinations containing a "carbon report" and refer to this audit when granting authorizations and/or public subsidies
- Inform guests about energy consumption and emissions of tourist infrastructures and the sustainability impact of their stay
- Possible indicator for energy usage: per capita consumption of energy from all sources (overall and by tourist sector – per person per day)

**Climate Strategy – South Tyrol Energy 2050**

- Adapt power production as best as possible to the characteristics of the load profile (consumption) and its seasonal variations through smart grids and innovations to store energy, minimizing energy losses
- Monitor and test subsidies and facilities granted in South Tyrol in order to identify their relevance in terms of climate protection and replace those that counter climate targets
- Develop appropriate promotion concepts for conversion to hot water production with renewable energy sources for hotels
- Offer energy audits at cost-covering prices. Audits cover all of the processes that use energy

7) Water management

Water consumption caused by the tourism sector is another important monitoring field. It is vigilant about monitoring details, such as:

- The use of recycled water by tourism enterprises
- Water consumption of the tourism sector compared to the availability of water, water shortages, water requirements of local users in the destination and further downstream
- Quality of drinking and recreational water in the destination
- Impacts of tourism activities on water quality and quantity within the watersheds of the destination

**Linkages to relevant strategies**

**Klimareport/Rapporto sul clima 2018**

- Monitor water consumed during the snow-making process

**Sustainable Tourism Report (Alpine Convention)**

- Safeguard local water supply
8) **Wastewater management**

Wastewater management observes the proper treatment and safe release of wastewaters from tourism enterprises. It also observes particular thematic elements, such as:

- The extent and effectiveness of the waste water management system
- Water recycling and reuse of waste waters by tourism enterprises
- Impacts of released waters from tourism enterprises and key tourist sites on the water quality and quantity of streams, lakes, and water sheds
- Water contamination caused by tourism enterprises/sites

**Linkages to relevant strategies**

*Klimareport/Rapporto sul clima 2018*

- Monitor the quality of water and presence of sediments in the water
- Monitor water contamination

9) **Solid waste management**

The comparison between waste produced by tourists and waste produced by residents is at the center of the mandatory issue area “solid waste management”. This topic also integrates monitoring elements, such as:

- Waste recycled tourist/resident
- Tourist enterprises separating, reducing, recycling, reusing of solid waste
- Residual solid waste disposal of tourism enterprises, sites
- Solid waste management (waste volume produced, reduction, reuse, recycling, deposit, collection, hazardous substances, visitor perception/local perception of level of litter, percentage material taken in/brought back out)

**Linkages to relevant strategies**

*Solid waste management plan (Province of Bolzano)*

- Reduce solid waste
- Manage the recycling systems that already exist
- Use recycled materials
- Organize awareness raising campaigns with regard to recycling, reuse of recycled materials and solid waste management

**DESTINATION-SPECIFIC ISSUE AREAS (possible additional issue areas)**

10) **Innovation**

“Innovation” could play a major role as specific issue area for the South Tyrol Observatory. It could pursue innovative developments in the tourism sector including the field of ICT and digitalization (e.g. destinations management systems, PS-based 3D navigation and information systems, mobile Apps to support guests). It could also monitor further aspects, such as:
- Public funding for tourism-related innovation, diversification and start-ups;
- Cooperation between tourism and innovative industries, research institutions, private tourism entrepreneurs regarding knowledge and innovation
- Sustainable tourism innovation network(s) between universities, research centers, NGOs, tourism boards, etc.
- Worldwide positioning in the production of alpine recreational technology (e.g. climbing equipment, bike equipment, etc.)
- Diversification of tourism product portfolio

**Linkages to relevant strategies**


- Incentivize the diversification and specialization of innovative tourism and leisure products
- Launch public initiatives that support innovation in the sector
- Facilitate funding access for start-ups, tourism entrepreneurs
- Expand the digital infrastructure (Wlan) in the public and service sectors

_Sustainable Tourism Report (Alpine Convention)_

- Innovate not only products, but also processes (e.g. booking, transports) towards long-term sustainability
- Transmit the need of innovation across local and regional tourism stakeholders by demonstrating the approach of sustainable development is not contradictory to conservation
- Promote a coordinated R&D sustainable tourism innovation network of universities, research centres, NGOs and the national/regional tourism boards
- Set up a program "lifelong learning" for Alpine tourism professionals with certificates accepted as ECTs credits at Alpine Tourism Universities
- Support local authorities which diversify their activities and offer an alternative to Alpine skiing in winter

_The Italian strategic plan for Tourism 2017-2022_

- Support of intercommunicating digital environments which create interoperable flows and sources of data, due to definition of a clear system of underlying rules continuous training of sector operators, and also identification of professional figures capable of using the new analysis tools and communication methods
- Provide the country with a physical infrastructure which allows information, contents and relations to transit, i.e. broadband
- Accompany and specialize activities dedicated to start-ups in the sector, initiatives aimed at encouraging innovative business ideas in the tourism industry, such as organization of an Innovation Contest: young talent and aspiring entrepreneurs with different skills are asked to develop, in a group, an innovative business solution or proposal in response to an assigned theme;
- Support services and activities for creation of networks of creative firms, including participation in platforms and networks funded as part of European Planning (such as the European Creative Industries Alliance – ECIA)
Develop the use of the new technologies to be accompanied by a significant expansion of the digital infrastructure of tourist destinations, e.g. guaranteeing open wi-fi access for citizens and tourists

11) Sustainable production and consumption

Sustainable production and consumption is another possible issue area. It may measure the ratio of sustainable products in the tourism offer portfolio addressed to target groups interested in travelling with a clear conscience. It may also measure the number (and percentage) of tourism enterprises and services with sustainability certification or labelling (e.g. EMAS, CSR, EU flower, etc.). Additional monitoring aspects could include:

- Communication and marketing of sustainable products (marketing measures and effectiveness, market penetration)
- Tourist demand regarding sustainable products
- Use and sales of regional products in tourism generated by sustainable production techniques
- Ratio of sustainable nature experience and awareness products in the tourism product portfolio
- Carbon footprint ratio of tourism practices and products

Linkages to relevant strategies

**South Tyrol Tourism Strategy 2030, “Clear Conscience Act” and “Valorize the basics Act”, “Product Development Act”:**

- Reinforce the integration of sustainability, regionality and protection of natural resources into the development of products
- Promote facts-based communication campaigns
- Develop a sustainability check for South Tyrol
- Adapt product offer to regional availability (zero km products)
- Support the sustainable production and diversification of regional agricultural products
- Incentivize the diversification and specialization of innovative tourism and leisure products

**Sustainable Tourism Report (Alpine Convention)**

- Develop quality tourism offers combined with local/regional products
- Foster the consumption of local and regional food in restaurants, hotels and so on, enhancing the collaboration between tourism and agriculture/forestry by marketing local farm-based products and promoting on-farm holidays

**The Italian strategic plan for Tourism 2017-2022**

- Redevelop the environment and the landscape in tourist destinations threatened by overuse. In this case, the policies can trigger a virtuous circle of upgrading tourist flows towards sustainability, recovery of the environment and the landscape and attracting a new and more diverse tourism demand which is aware of the value of the landscape, the natural environment and culture
12) Ski tourism and other nature based outdoor sports

A major backbone of the Alpine tourism model in South Tyrol is composed of outdoor sports. Next to the classical hiking and mountaineering activities, a strong focus lies on skiing. There are also other outdoor leisure segments, including mountain biking and climbing. All of them are based on the availability of sound landscapes and natural resources while at the same time using these resources. For the future development of these segments, it will be increasingly important to develop sustainable solutions and practices. Possible monitoring aspects of this thematic field may include:

- Investments in artificial snow-making
- Assessment of the consequences on the environment
- Impacts of ski slopes, snowmakers, redesigned tracks on biodiversity, biotope sensitivity, natural surroundings
- Impacts of snowmakers on the consumption of energy and the quantity and quality of water resources
- Public funding for snow-making compared to public funding for alternatives
- Rope ways and ski lift policies and procedures responding to the requirements of ecology and landscapes
- New ski lift concessions/renaturation of disused skiing areas

Linkages to relevant strategies

*South Tyrol Tourism Strategy 2030, “Clear Conscience Act*”:

- Enhance sustainable product development with focus on skiing areas and mobility

*Sustainable Tourism Report (Alpine Convention)*

- Combine investment in snow-making equipment with the assessment of the consequences of such techniques on the environment and/or direct public funds towards other alternatives
- Design slope and grooming in order to better take advantage of the topological characteristics of ski areas
- Ensure ski slopes blend into the natural scenery and surroundings as much as possible, replant them and authorise the use of artificial snow only if allowed by the location's hydrological, climatic and ecological conditions
- Evaluate authorisations of ski lifts
- Concentrate ski areas at higher altitudes and glaciers and develop new cable-cars
- Snow farming, creating snow deposits in order to maintain a skiing-oriented strategy while using less resources
- Limit or prohibit landing by air for the purpose of sporting activities
- Control outdoor sporting activities, especially sporting activities using motorised vehicles
- Possible indicators for landscape and biodiversity protection: percentage of destination (geographical area in km²) that is designated for protection

*Klimareport/Rapporto sul clima 2018*

- Monitor the number of snow cannons
- Monitor water and energy consumption for the production of artificial snow
13) Biodiversity, nature protection

Biodiversity and nature protection may constitute a further important monitoring field. Possible monitoring aspects are manifold and may include some of the following:

- Contribution by tourists or tourism enterprises to the protection and maintenance of natural sites, ecosystems and traditional cultural landscapes, e.g. through user fees and access charges
- Contribution by tourists or tourism enterprises opting for environmentally friendly ecotourism or farm-based tourism products (e.g. on-farm holidays) or protected area products
- On-site protection activities supported by tourism
- Benefits of tourism for the European network of nature protection areas (NATURA 2000)
- Impacts of tourism on biodiversity fragmentation and habitat loss outside protected land (caused through transport, settlement, infrastructure and activities)
- Impact of tourism-related infrastructure on the conditions for traditional wildlife migration routes
- Existence, establishment of “quiet areas”, where no tourism facilities and activities are developed with the purpose to safeguard habitats for target species conservation
- Impact of nature-based outdoor sporting activities on nature and landscape
- Control measures for outdoor sporting activities with the aim to prevent environmental damage and to safeguard habitats for target species conservation
- Existence and effectiveness of destination-wide system(s) monitoring and controlling the environmental impact of tourism on habitats, species, and ecosystems
- Existence and quality of environmental impact assessments (EIAs) and assessments of soil function prior to tourism and leisure related developments and projects
- Implementation of findings and final decisions of EIAs and soil assessments regarding tourism and leisure related development and projects
- Enforcement of laws and guidelines for EIAs

Linkages to relevant strategies

**South Tyrol Tourism Strategy 2030, “trends”:**
- The Alps aim at becoming a benchmark for biodiversity protection in Europe

**Sustainable Tourism Report (Alpine Convention)**
- Develop action plans of a destination’s positive contribution (participatory process) in making tourism in Alps less detrimental to nature conservation, with an emphasis on experiencing and respecting nature
- Improve the existing environmental impact assessment for tourism
- Combine investment in snow-making equipment with the assessment of the consequences of such techniques on the environment and/or direct public funds towards other alternatives
- Design sensitive areas in spatial planning, where tourism facilities as well as tourism activities should not be developed
- Preserve the traditional cultural Alpine landscapes by supporting environmentally-friendly agriculture through an enhanced cooperation with tourism stakeholders
- Control tourism flow, install quiet areas and restrict activities in order to safeguard habitats for target species conservation
- Raise awareness among stakeholders, local population and visitors about biodiversity, natural resources, as well as on the importance of the implementation of conservation measures
The Italian strategic plan for Tourism 2017-2022
- Promote a responsible use of the landscape, such as protected areas on land and at sea and mountain and rural areas and the related food and wine production
- Support the national strategy for parks and protected areas, rural and inland areas

Klimareport/Rapporto sul clima 2018
- Elaborate/Implement regulative strategies to protect nature, landscape and environment within a “business-as-usual” scenario (e.g. with regard to artificial snow-making)

14) Cultural heritage and traditions
The maintenance of cultural heritage and preservation of regional traditions may also play a role in the monitoring system of South Tyrol’s sustainable tourism Observatory. Possible monitoring aspects are manifold and may include some of the following:
- Existence of rules regulating cultural heritage protection and control (against wear or abuse)
- Community/tourism sector support and involvement in cultural heritage protection and control
- Existence of a code of behavior for tourists
- Investment in cultural heritage conservation, recovery, protection and restauration measures
- Number of R&D project applications and grants devoted to the subject
- Degradation of cultural heritage due to climate change/air pollution

Linkages to relevant strategies
The Italian strategic plan for Tourism 2017-2022
- Reinforce systematically the physical and cultural accessibility of the places and territories open to enhanced tourism (giving visitors the opportunity to understand and interpret the history, complexity and variety of the sites visited (cultural permeability).
- Enhance Italy’s cultural and territorial heritage by guaranteeing long-term management and sustainable, responsible and innovative use
- Value employment in tourism-related activities, such as culture and museums

Sustainable Tourism Report (Alpine Convention)
- Set up a UNESCO based inventory of material and immaterial Alpine cultural heritage as a unique feature of Alpine destinations
- Develop sustainable tourist activities, which capitalize on regional traditional and local agriculture
- Promote participation of local population in designing and deciding about tourism development plans
- Possible indicators: percentage of events that are based on traditional culture and local assets, percentage of residents who believe that tourism is a. damaging, b. helps maintain, c. helps improve the distinctiveness and local identity, culture and heritage of the destination
15) Mobility

One of the most urgently discussed issues when it comes to sustainable tourism development in South Tyrol is mobility, transport and traffic. This major topic involves improved accessibility by train and bus (also across borders and to and from airports), improved accessibility by long-distance trains and their connectedness to regional and local public transport, but also an additional mosaic of different elements such as, e.g.:

- Tourism-related mobility patterns (public transport, shared transport, soft mobility, e-mobility)
- Efficient use of existing transport capacities compared to the extension of transport infrastructure
- Environmental impacts of transport used to arrive and get around at the destination (transport to, in, from destination)
- Distance to source of fuels
- Impacts of tourism transport on air quality and noise levels
- CO₂ emissions from transport used by tourists, average carbon food print home-destination,
- Reduction of ecological footprint, reduced dependency on combustion engines
- Public funding of zero emission transport systems (e.g. e-mobility powered by renewable energy)
- Ratio of public transport used by tourists/conventional transport
- Travel packages integrating public transport
- Effective frequencies of public transport in and between destinations, also cross-border
- Information on public transport options
- Measures encouraging tourists to use public transport
- Safety and low barriers in public transport
- Service quality and user friendliness of public transport
- Traffic planning and management
- Congestion management and visitor guidance systems
- Relief concepts for mountain pass roads

Linkages to relevant strategies


- Optimize public transport, rail infrastructure, rental and shared offers, e-mobility
- Improve integrated planning of traffic and visitor inflow
- Strengthen alternative mobility and temporary closures at mountain pass roads
- Optimize public transport accessing international airports and improve public access by means of long-distance trains
- Guarantee the accessibility of important points of attraction by public transport
- Create routes-based products linking different points of attraction, strengthen soft mobility

Sustainable Tourism Report (Alpine Convention)

- Promote soft mobility for reaching tourist sites by favouring the least polluting means of transportation
- Develop together with transport operators the "last mile" connection and long-distance access to tourist sites using railways
- Develop cross-border public transports and simplify tariff offers for tourist in the Alps
- Provide information on the public transport offer to, from and within Alpine tourism destinations for local tourism actors, local population and guests
- Integrate public transport into travel packages offered by public destination marketing organizations
- Promote good service quality in public transport in terms of availability of diverse and low-impact modes of transport, frequency and inter-destinations and cross-border connections
- Promote information campaign on the environmental impacts of travel and on possibilities to save and reduce CO₂ emissions
- Provide "carbon footprint calculators" comparing impacts of individual and public transport on consumers

The Italian strategic plan for Tourism 2017-2022
- The Special Tourist Mobility Plan aims to guarantee national and international accessibility to tourist destinations and to exploit the infrastructural system itself as a key element of the tourism supply
- Assure compatibility with the international community’s commitments on reducing pollution and greater use of renewable resources
- Develop apid mass transport systems, new smart transport services for local public transport, shared mobility services, cycle-pedestrian mobility and “on-demand” services for areas with low demand
- Elaborate and implement strategic mobility projects for tourism purposes (national cycle routes, paths, tourist rail services, slow mobility)
- Adapt the infrastructure network to improve mobility and inter-modality
- Target initiatives so that they lead to new areas of appeal and enhance them, in a sustainable and authentic manner, also through the creation and offer of footpaths, cycle paths, railway lines, food and wine and slow tourism

Climate Report South Tyrol 2018
- Monitor the average distance travelled by tourists by car, percentage of tourists travelling within the destination by car, average number of passenger/vehicle

Roadmap Smart Alpine Mobility
- Improve public transportation frequency, expand cycle paths, improve electric vehicles (EV) charging infrastructure for a better accessibility for and within the destination both for the local population and the guests
- Institute the South Tyrol pass, an interoperable pass that allows access to different public transportation means within the region, from busses to cablecars, including car sharing). The easiness of a unique pass makes it easier for guests to access public and sustainable mobility solutions within the region

16) Land use, spatial planning and tourism development control

The impact of tourism development on land use changes, natural areas, green areas, open landscapes – in general, the whole issue of land consumption for tourist infrastructure – is another possible field of concern. It may observe details such as:
- Percentage of area subject to tourism development control/ percentage of area designated for tourism purposes
- Percentage of tourism related building proposals undergoing environmental review (EIA)
- Percentage of proposals denied or sent to revision
- Number of charges for zoning or site plan violations
- Criteria for tourism development control
- Existence of review procedures
- Urbanization of the landscape by tourism development/ consolidation of urban space by tourism development
- Qualitative accommodation improvements (restoration, re-use)/ quantitative enlargements of bed capacity
- Visual impacts (visual pollution/ aesthetics) of tourism facilities and infrastructure on landscape scenery
- Physical erosion caused by tourism infrastructure and tourist use

**Linkages to relevant strategies**

**South Tyrol Tourism Strategy 2030, “Clear Conscience Act” and “Adaptability Act”:**
- Consider the protection and sustainable management of natural resources as a key to sustainable tourism products
- Elaborate sustainable scenarios for the accommodation sector which take account of the preservation of “green areas” outside settlements

**Sustainable Tourism Report (Alpine Convention)**
- Reduce or stop land use due to new tourism projects or secondary effects by studying possible limitations on the construction of second homes by establishing a maximal percentage rate of the total number of residential units within communities and reducing the area that can be used for constructions or introducing compensatory taxes
- Achieve a sharp reduction of land consumption for tourism infrastructure as an objective of spatial and territorial planning especially in glaciated, periglacial and wilderness areas
- Foster assessments of soil functions to protect fertile agricultural soil and soils that need to be protected
- Strengthen the enforcement and effectiveness of existing laws and guidelines for environmental assessments when developing new tourism facilities
- Give preference to qualitative improvements against a quantitative enlargement of bed capacity
- Raise awareness on the effects of land use by tourism infrastructures as well as by all building and settlement purposes

**The Italian strategic plan for Tourism 2017-2022**
- Promote wider distribution of tourist flows, by using responsibly the landscape, such as protected areas on land and at sea and mountain and rural areas
- Compare organizational and land management patterns, identifying most incisive formulas for integrated actions
17) Visitor management, control of use intensity and territorial distribution

The whole issue area of visitor management, control of use intensity and territorial distribution including the management of tourist crowds is a cornerstone of sustainable tourism management and should become part of South Tyrol’s monitoring system measuring elements such as:

- Tourism pressure – visitor load (number of tourists per day per 100 residents)
- Congestion and intrusion arising from visitors
- Tourist flows and dispersion of tourism intensity
- Existence and performance of carrying capacities
- Perceptions regarding carrying capacities
- Existence and performance of use intensity control (stress on sites and systems, tourist numbers, crowding, percentage of visitors accompanied by trained guides, average size of groups)
- Existence and performance of visitor management system(s) for cultural and natural attraction sites, including measures to protect and enhance natural and cultural assets
- Existence and performance of visitor guidelines at sensitive sites to minimize adverse impacts and strengthen positive visitor behavior
- Existence and quality of site interpretation at natural and cultural sites
- Dispersion of tourism-development over different sub-territories (remote areas with lower development opportunities/ highly developed areas)
- Management of events (sport events, fairs, festivities, crowd control)

Linkages to relevant strategies

**South Tyrol Tourism Strategy 2030, “Tourism Intelligence Act:”**
- Optimize the monitoring and analysis of visitor behavior/ impacts
- Elaborate sustainable scenarios for the accommodation sector which take account of the preservation of “green areas” outside the settlements

**Sustainable Tourism Report (Alpine Convention)**
- Seek a balance between intensive and extensive tourism in areas under heavy tourism pressure

**The strategic plan for Tourism 2017-2022**
- Polarize flows towards a small number of destinations and underuse the potential appeal of certain territories
- Include less well-known sites/assets on the list of Unesco WHS, which contribut to enhancing the tourism supply in areas which are still not receiving large numbers of visitors, as well as lightening the impact on the major attractions

18) Visitor satisfaction and behavior

A tourism destination cannot remain successful in the long term, if the visitors are not satisfied with the quality of services and experiences of their stay. The Observatory should therefore carefully monitor the rate of change in the number of visitors and of selected sub-components of perceived visitor satisfaction, such as with:
- Hospitality
- quality of tourism infrastructure and quality of the destination in general
- the condition of the environment
- congestion, traffic levels
- other expectations, perceptions, complaints, problems

As said before, the aspect of quality plays a major role with regard to visitor satisfaction. This may include additional monitoring aspects, e.g.:
- Tourist accessibility to mobility (including older tourists, persons with disabilities) with focus on accessible (low barrier) public transport
- Alignment of private and public tourism-related infrastructure with low barrier concepts
- Low barrier planning for tourism related buildings with approval procedures
- Number of rooms accessible for people with disabilities
- Low barrier tourist attractions
- Tourist access to health services
- Tourist security
- Variety of tourism experiences (product diversification, range of services, trip circuits, routes)
- Adaptation of product portfolio to growing number of older consumers (low-barrier hardware, age based services)

**Linkages to relevant strategies**

**South Tyrol Tourism Strategy 2030, “challenges”, “Healthy Aging Act” and “Tourism Intelligence Act”:**
- Know the diverse tourist target groups, their needs, requirements and future-oriented trends
- Monitor the perception and requirements of the tourists with regard to the quality of products
- Develop products for elder guests, including outdoor and mountain products as well as recreational and health offers
- Strengthen accessible mobility/transport for senior guests and also impaired people
- Consider the relation between hosts and guests as major important asset
- Optimize the monitoring and analysis of visitor satisfaction and behavior/impact

**Sustainable Tourism Report (Alpine Convention)**
- Enforce the principle of low barrier planning in developing approval procedures of new tourism related buildings projects (e.g. entrance areas, public restrooms, share of low barrier rooms and restaurants places)
- Publish and spread planning guidelines on "how to offer low barrier tourism"
- Possible indicators of customer satisfaction: relative contribute of tourism to the destination's economy (percentage of total GVA), percentage of repeat/return customers (within 5 years)

**The Italian strategic plan for Tourism 2017-2022**
- Pursue by any action undertaken tourist satisfaction as the primary goal
- Guarantee accessibility to all people, irrespective of age or health
- Monitor markets to identify consumer orientation and satisfaction
• Set up a national classification system of accommodation to improve the quality of hospitality facilities and consequently to increase competitiveness of tourist destinations, through introduction of minimum structural and quality standards
• Consider physical activity as a natural and overarching element, a distinguishing factor of the host territory, where the hospitality structures and services for travellers satisfy the most diverse needs

19) Adaption to climate change

Lust but not least, the adaption to climate change is of high relevance for the future of alpine tourist destinations. The Observatory may consider the monitoring of adaption measures of tourism activities to climate change and the diversification of the tourism offer for the sake of increased flexibility in reacting to uncertain climate conditions. This may include the reduction of the dependency from ski tourism, but also further possible monitoring details, such as:

- Existence, performance of long-term climate change adaptation strategy for the destination
- Existence, performance of climate change/ natural disasters risk assessments for new tourist infrastructure and activities
- Public funding for climate resilient developments
- Destination marketing promoting identity and authenticity independent from weather conditions (local culture, local products, handicraft, gastronomy, protected areas, agriculture, regional economic cycles)
- Measures that attract customers to ski areas also in summer
- Number of tourism enterprises involved in climate change mitigation schemes
- Number of tourism infrastructure located in vulnerable zones

Linkages to relevant strategies

**Sustainable Tourism Report (Alpine Convention)**

- Favour the rehabilitation of real estate aimed at tourists by adapting it to climate change instead of building new infrastructures which generates "empty beds"
- Adapt the resorts’ communication and marketing strategies to reflect the new measures
- Develop quality tourism offers combined with local/regional products and services

**Klimareport/Rapporto sul clima 2018**

- Incentivate the creation of innovative touristic products able to motivate tourists to use ski lift in summer
5 Key Sustainability Issue Areas - Primary Data Analysis

In addition to the review of secondary data, the Project Team collected primary data by means of qualitative interviews with local and external experts, residents and tourists in order to extract current perceptions of pressing issue areas for the destination, where progresses are most needed on the path towards improved sustainability in tourism. The analysis of primary data will represent – together with the secondary data analysis - the basis for deciding in the first stakeholder workshop on the key issues areas to be monitored by the Observatory.

The number of interviewed persons was 26. The interview partners were selected from different target groups:

- 18 Experts from the environmental, social, cultural and economic (tourism) sectors (composed of 15 local and 3 international experts);
- 4 visitors from three different countries (Italy, Germany, Switzerland).
- 4 residents from South Tyrol.

The qualitative interviews were analyzed by means of the computer-based software GABEK®. Thanks to GABEK® the knowledge and attitudes of the interviewed people are translated into networked “knowledge systems” to develop an overall overview by means of so called “network graphics”. These graphics provide orientation for understanding the whole landscape of opinions while reducing their complexity. This method can be used as a helpful tool to prepare decisions, specify aims and propose measures.

**Key sustainability issue areas**

The most mentioned key words where progresses are mostly needed on the path towards improved sustainability in the tourism destination South Tyrol are listed in the table below.

- Mobility and traffic
- Nature
- Cooperation
- Agriculture and regional products
- Employment in the hospitality industry
- Quality
- Hotels
- Local population
- Winter tourism
- Spatial planning and infrastructure
- Awareness raising
- Promotion and marketing
- CO2 emissions and climate change
- Innovation
The topics “employment” and “local population (local satisfaction)” overlap with the mandatory issue areas of the UNWTO-INSTO network.

![Figure 6. Most important issue areas for sustainable tourism development in South Tyrol. Source: own elaboration through the software GABEK®](image)

**Mobility and traffic**

The interviewees perceive mobility and traffic as the major issue area to be tackled, when it comes to a sustainable destination development in South Tyrol. Almost every respondent perceives this field of action as particularly urgent and pressing.

In South Tyrol, the volume of traffic has considerably increased in recent years. The interviewees report on congested roads, especially in highly frequented areas of the territory, a prime example of this phenomenon are the pass roads in the Dolomites, which are particularly affected. Not only tourism traffic contributes to this situation, but also the traffic volumes generated by the local population. The infrastructure can no longer cover these volumes satisfactorily, particularly at peak times. Hence, the interviewees recognize an urgent need to expand public rail transport - even if it is more expensive and complicated than the expansion of the existing roads.

When thinking about a desirable future, many respondents would like to have a car-free South Tyrol. Some of them state that much is being done already, but that a larger overall vision and innovative overall concepts are still missing.
When talking about concrete measures for the years to come, many respondents relate to the expansion of public mobility with regard to arrivals and departures (by train) as well as to local mobility (by bus, train, alternative transport means). Guest cards play an important role in motivating guests to use local public transport instead of their own car. Furthermore, many interview partners mentioned that electro-mobility and shared mobility should also be strengthened, and that bicycle and bike mobility should be promoted as an alternative to get around locally without using the car. Improved travel comfort, including the last mile connection to the hotel, and improved information and communication are decisive in ensuring that guests switch to alternative, more sustainable transport means.

In addition to the above-mentioned aspects, the respondents perceive an essential need of improved connectivity and harmonization between local public transport systems (provided by the individual communities and valleys), including the provision of integrated smart service applications so that guests get a faster and more comprehensive overview of public transport offers. Moreover, accommodation establishments should strengthen their communication with guests in order to encourage them to use public and alternative means of transport.
Nature

The top priority issue "mobility and traffic" is followed by the core topic "nature". The interview partners stress that South Tyrol's tourism is landscape-based and that it has made the offering of tourist products related to nature as a key strength. They also mention that the protection of nature is an important precondition for leaving a healthy environment to the next generations, but that in several areas in South Tyrol there are conflicts between conservation and the use of nature for tourism purposes.

Many guests seek tranquility and relaxation in nature, according to the opinion of several interview partners. Tourism related infrastructure (e.g. rope ways, streets, hiking trails, etc.) enables people to experience nature, but it also has impacts on biodiversity and landscape and can even negatively influence the experience of nature. Hence, interviewees state that product development should increasingly guarantee a sustainable experience of nature and avoid tendencies towards turning South Tyrol into an “amusement park”. Nature-based sports, products and industries should be organized and managed in more sustainable ways (e.g. mountain biking). Alternative offers to experience nature - in the sense of appreciating and sensing nature as such - should be strengthened.
The work of South Tyrol’s nature parks is perceived positively. Interview partners mention that the parks should reinforce communication and awareness raising in order to make concepts and ideas of sustainability more present.

In the protected areas (nature parks) of the Dolomites UNESCO WHS, the pressure on nature by growing visitor numbers, leisure activities and related infrastructure development is growing. More and more sports and promotional events as well as film productions are being organized, which are said to contribute to the enhancement of this pressure. There is a need to define what kind of tourism promotion and events really benefit the UNESCO WHS and its population. Moreover, there is a perceived lack of planning and management of tourist use in more sustainable ways.

**Cooperation**

Many interviewees mention improved cooperation, communication, networking and trust between the individual stakeholders in the destination as decisive elements, when it comes to sustainable tourism development in South Tyrol. This concerns both a more trusting and open-minded relationship between communities and strengthened cooperation between the tourism sector and other sectors - including agriculture, ecology, crafts, trade, culture and youth policy. Another essential factor is cooperation and communication between tourism and the population, as the proximity of tourism to the local population is important to enable residents to understand and support tourism. In this context, the elaboration of local tourism development plans based on participatory approaches involving the local population plays a major role. Participatory approaches should be improved and intensified in the future.
Agriculture and regional products

This thematic core area relates to the food sector - including regional and local products and the strengthening of small cycles through close cooperation between agriculture and tourism. Guests are increasingly looking for South Tyrolean quality products - and the offer can be described as high quality. The farmers are indispensable in their role as “landscape carers” helping to cultivate and preserve the cultural landscapes, which are so important for South Tyrol’s tourism sector. On the other hand, tourism can help the farmers earn an additional income from offering accommodation on their farms and selling their products to hotels and restaurants. These small cycles between agriculture and the tourism industry are traditionally very strong in South Tyrol and should be further strengthened in the interest of sustainability.
It is however necessary, as the interviewees concede, to work on a clear vision towards which direction South Tyrol's conventional agriculture will head in the future. A gradual change towards pesticide-free and organic agriculture is at the core of current debates. A gradual rethinking of agricultural practices is regarded urgent to keep the sustainability promises made by tourism and to be able to be positioned as a credible destination in the perception of the guests.

Concerning agritourism (farm holidays), the interview partners address the traditionally high quality of the offer. Nevertheless, some respondents point out that when it comes to marketing and communication, the promise of purely regional South Tyrolean products should be scrutinized. More honesty and credibility are needed. This does not only apply to agritourism, but to the agricultural sector in general. As South Tyrol can produce less food than demanded by the population and the tourists together, a precise definition of the concept of regionality is needed. Honest communication is regarded a priority area.

**Employment in the hospitality industry**

Growing employment rates in the hospitality industry and the simultaneous shortage in local work force are perceived another pressing issue, which calls for action. For the interview partners it as major problem that many young locals are trained for the hospitality industry but then tend to leave their occupation after a couple of years. The respondents conclude that the tourism sector must scrutinize its attractiveness as an employer.
The sector should offer more interesting working models. It should not only aim at attracting young employees, but also try to make them stay. This should be achieved by creating conditions that enable improved satisfaction and joy at work in a long-term perspective.

The personnel structures should be adapted in a way that makes it possible to take time off on weekends. More flexible working hours, the de-seasonalization of jobs and improved work contract models play a key role in improving the working conditions.

**Quality**

For many interviewees, quality is a top concept, which positively influences sustainable development. South Tyrol’s tourism sector is already regarded as high quality, but the opinion prevails that South Tyrol should increasingly focus on strengthening quality tourism and further reducing price-oriented low-cost tourism.

For some respondents, this means the strengthening of South Tyrol’s position as an international market niche for top quality. Others emphasize that quality guests are not only those ones who pay a lot, but particularly those who respect and identify themselves with South Tyrol’s population, culture, nature and local values.
Interviewees share the opinion that the destination receives highly educated guests, who look for quality and sustainability in the location they visit. Topics of interest include, e.g. regional products, pesticide-free and organic agriculture.

Quality is also closely linked to services. According to some respondents, the different valleys and areas in South Tyrol are still not sufficiently connected, e.g. when it comes to mobility. Actions are required in the field of digitalization, smart services, innovative information and booking systems, and the harmonization of South Tyrol-wide apps would help build a smarter destination. Digital tools and smart services are also perceived an important prerequisite for improved visitor flow management.

Quality also means differentiating the offer with regard to diverse guest groups. This includes younger guests and customers with special needs (inclusion). The development of cultural, youth and urban tourism should receive more attention alongside the traditional nature-based tourism for older guests.

Some interviewees are worried about a gradual loss of quality due to a perceived "standardization" of the offer (mass products). Some places are running the risk of losing their local values and cultural peculiarities.
Some respondents perceive the necessity to recognize the limits of tourism growth and strengthen qualitative instead of quantitative growth. Qualitative instead of quantitative growth is seen as a method to react proactively to over-tourism phenomena while other respondents suggest the setting of ceilings that limit numbers.

**Hotels**

Regarding the hotel industry, the interview partners recognize the need of a stricter confinement of hotel construction development outside settlements as well as the necessity to reduce the consumption of water and energy resources. The quality of digital connectivity and smart services should also be improved. In addition, hoteliers should continue to support local agriculture and small economic cycles by purchasing products produced by local farmers.

Serving as first hand points of contact, hotels are meant to play an important role in raising guests' awareness of sustainability - including sustainable consumption and the use of public mobility and other means of more sustainable transport.

Some respondents observe an increased growth of large hotel resorts which disconnect from the rest of the respective sub-destination. Resort guests often tend to cover all their needs directly at the hotel resort - including food services. This affects the income of other entrepreneurs in the destination, such as mountain huts, taverns, restaurants, and others - and reduces the regional distribution of added value.
Another important field of concern is the so-called second or third generation of family owned hotel operators. Some respondents perceive that parts of the successors suffer from tourism fatigue and are losing their motivation.

**Local population**

Respondents realize that a sustainable South Tyrol should give special focus to the local population and its satisfaction regarding tourism. As long as residents have the feeling that they benefit from tourism, a destination can consider itself successful and sustainable. Hence, the perceived quality of life and wellbeing and the residents’ impression that they can meet their own needs and necessities – without restrictions provoked by tourism-induced developments - serve as major indicators for social sustainability.

In South Tyrol – according to the opinion of interviewees – there is a tendency (particularly in highly frequented tourist areas) of an increase in housing prices. Also other costs of living are relatively high, and some of the interview partners think that tourism demand has a major influence on this situation.

![Figure 15. “Local Population”](image)
*Source: own elaboration through the software GABEK®*

To compensate South Tyrol’s residents for the tourism pressure they experience, the respectful behavior of guests and the guest-host-relationship play a pivotal role. Another very important aspect which helps uphold the morals and positive perceptions of the locals in favor of tourism is the involvement of residents in tourism planning. Raising local awareness and knowledge of tourism are also crucial.
On the other hand, South Tyrol’s residents are also said to have responsibility. In their role as owners of the territory, their ways of living, consumer behavior and resource use patterns provide the basis for the behavior of the visitors. These statements of the interview partners lead to the conclusion that both sides – the hosts and the guests – are responsible for modeling a sustainable South Tyrol – be it as the homeland and habitat of the locals or the destination of their guests.

**Winter tourism**

Sustainable development of winter tourism is another pressing issue for the alpine destination South Tyrol. Interviewees state that skiing areas are intense consumers of landscape, water and energy resources. They impact on species, particularly flora, and put stress on water ecosystems, as snow making machines consume high amounts of water in the winter when liquid water is less available anyway, and species are confronted with harsher conditions.

The unstoppable construction of new ropeways often leads to the expansion of ski and mountain bike downhill slopes. Off-piste skiing can put additional pressure on nature. Some interview partners mention the need to create alternative, more sustainable offers, which have the potential to gradually replace the classical skiing product. Moreover, with increasing temperatures due to climate change, the preparation of ski slopes at lower altitudes is getting more and more expensive due to highly mechanized and resource intense artificial snow making techniques.

Concrete solutions and approaches to make winter tourism more sustainable – next to the creation of alternative offers and enhanced awareness raising of the correlation between skiing and climate change - were not stated by the respondents.
**Spatial planning and infrastructure**

The interviewees point out that it is difficult to find areas in South Tyrol that are not developed and used for tourism and leisure purposes. The development of infrastructure is particularly present in certain valleys, provoking visible impacts on landscape and biodiversity.

According to some interviewees, infrastructure development and use of natural resources in settlements (roads, water supply, sewage disposal, etc.) are too strongly geared to the needs of hotels and hotel resorts in peak seasons. Some of the interviewees are therefore in favor of establishing limited numbers of bed places; others do not favor such limitations.

Some interviewees suggest that an improved zonation is needed. Spatial planning should e.g., set up zones that are not accessible or zones, which enable the "development of tranquility and peace". Some interviewees also propose the setting of upper limits for visitor numbers in selected zones.

The new spatial planning law (not yet in force) is seen as an essential instrument for restricting the use of land by tourism, especially outside the boundaries of settlements. Other considerations with regard to spatial planning concern the issue to decide where tourism structures and leisure facilities should be located in order to avoid mobility and traffic.
According to the interviewees, hotel resorts and other large tourism infrastructures should increasingly rely on electricity from renewable energy sources (hydropower, solar energy, etc.). Investments in renewable energies should be strengthened, but the optimization of existing hydropower plants should be preferred to the construction of new infrastructure.

**Awareness Raising**

There is a perceived need to strengthen awareness raising and information on sustainable tourism and other sustainability related topics, such as consumption, resource use, resource depletion, the limits of growth, etc. Target groups, whose awareness should be raised, include the local population, communities, schools, guests, hotels and other accommodation providers, as well as other tourism-related businesses and service providers.

![Figure 18. Issue area “awareness raising”. Source: own elaboration through the software GABEK®](image)

**Promotion and marketing**

Promotion and marketing are also amongst the mentioned key words related to the most pressing sustainability issues in South Tyrol. According to the opinion of interviewees, marketers often use images of intact mountain nature and lonesome mountain pass roads in order to promote tourism offers (or other products such as cars, etc.). By doing this an illusion is created, which doesn’t match very much the reality.
Respondents observe that tourism marketing and promotion often promise that sustainability is part and parcel of a holiday in South Tyrol. The destination should do its very best in the coming years to keep this promise. Moreover, marketers should scrutinize their promotion strategies and make sure that marketing is very close to the reality and actual products. Interviewees also mentioned that the destination may check the possibility of “de-market” certain zones and areas in South Tyrol.

Marketing and promotion is particularly strong in the Dolomites UNESCO WHS. Respondents observe a steadily growing number of sports and promotional events as well as film production activities inside or adjacent to the nature parks of the Dolomites. Some of them are described as being extreme and in contradiction with the core values of UNESCO. It is said that promoters and films crews do not always understand the contents of UNESCO but use its logo. To address this issue, a working group was established between tourism and nature protection specialists, which started developing first solutions tackling this problem.

Respondents say that there is an urgent need to further strengthen the cooperation between tourism and nature protection in order to find ways to harmonize tourism product development and marketing with nature protection objectives.
CO₂ emissions and climate change

The interviewees also address the challenge of CO₂ emissions and climate change. They find it important to continue the process of changing to renewable energy sources. They also say that mobility and transport (particularly private vehicles), artificial snow-making in skiing areas and hotels produce high amounts of CO₂ emissions and should reinforce their endeavors to reduce and compensate their emissions.

Interviewees report that in the mobility and hotel sectors first initiatives in this direction are emerging, e.g., the so-called Climate Alliance (“Klima-Bündnis Südtirol). A couple of organizations and businesses - including the hotel sector - already participate in this alliance and have committed themselves to reduce their CO₂ emissions and to pay for compensation projects in developing countries. Respondents express the wish that more and more organizations and businesses become partners of the alliance.

Innovation

Finally, innovation is amongst the key words mentioned as a crucial factor in developing a sustainable future for the destination. Innovation, particularly in the sphere of culture and arts, is regarded a driving force for the constant regeneration of relationships and ties within South Tyrol’s society - across
generations and age groups – and it is important for the formation, strengthening and renovation of shared identities.

Figure 21. Issue area “innovation”.  
Source: own elaboration through the software GABEK®

Towns and cities play a major role for innovation. In urban environments, young and open-minded people are often promoters of innovation and start small and innovative businesses. Innovation itself is important to create smart and sustainable technologies for example in the sphere of mobility. Digital innovation and smart-services are key words with regard to building a smarter destination.

Interviewees from the cultural and social sector would like to see South Tyrol laying more focus on tourism offers, which are attractive for young people. Hence, new offers for young guests should be a priority topic for tourism development in South Tyrol.
6 Current monitoring activities and structures

In South Tyrol, there is currently no institutionalized destination-wide monitoring system on sustainable tourism. However, there are institutions and initiatives that gather regional and municipal data on tourism, e.g.:

- ASTAT - the Institute of Statistics of the Province of Bolzano - gathers monthly data about tourist flows in the region (arrivals, overnight stays, number of tourist accommodation establishments). These are available online in form of interactive tables (link see footnote)\(^{21}\). Moreover, since 1995, every five years ASTAT implements and publishes a household survey with focus on income and pecuniary circumstances. The last household survey (Einkommensstudie) was published in 2015, the next one will be conducted in 2019 and published in 2020. ASTAT - together with Eurac Research - also introduced a periodic guest observation survey (Gästebarometer) that investigated the spending behavior and customers’ price fairness perception. The last survey report was published in 2012/2013. Currently the initiative stopped, but is planned to be continued in the future.

- The Institute of Alpine Environment of Eurac Research in collaboration with the Institute of Economic Research of the Chamber of Commerce and the Environmental Agency of the Province of Bolzano launched a Monitoring Initiative in 2001. The Project is called “Sustainable South Tyrol” and is based on 74 indicators observing 19 issue areas attributable to the environmental and socio-economic dimensions of sustainability. The Initiative constantly monitors the sustainable development of the 116 municipalities of South Tyrol. The issue areas observed include water, air, biodiversity, land use, energy, waste, traffic, labor market, corporate structures (enterprises), tourism, agriculture, demographics/population, education, politics, social care, housing and commuting. The user target groups include communal administrators and policy makers, particularly those who are in the process of setting up or implementing local development strategies. Currently there are no updated reports available on the project website.

- The Sentinel Alpine Observatory (SAO) is an environmental monitoring/remote sensing initiative implemented by the Institute of Earth Observation of Eurac Research. The project develops innovative methodologies for applying the new sensor technology on board of the Copernicus Sentinel satellites with the aim to create multi-temporal datasets of biophysical and descriptive variables that cover the entire alpine range. SAO aims at becoming a networking platform for users of earth observation data in the alpine region. Issue-specific maps are provided to the users through a web GIS platform.

\(^{21}\) [http://qlikview.services.siag.it/QvAJAXZfc/opendoc.htm?document=Turismo.qvw&host=QVS%40titan-a&anonymous=true](http://qlikview.services.siag.it/QvAJAXZfc/opendoc.htm?document=Turismo.qvw&host=QVS%40titan-a&anonymous=true)
7 Data needs, availability, sources, gaps

In South Tyrol, provincial data are made available to a considerable extent by ASTAT. ASTAT hosts an open website, which displays regularly updated data and indicators in the following fields:

- Territory, environment and energy
- Agriculture and forestry
- Mobility and tourism (including indicators such as number of accommodation establishments, bed places, arrivals, overnight stays, average length of stay, occupancy rate of bed places)
- Construction activity and housing
- Population
- Society and social aspects
- Health
- Education and culture
- Employment, income and consumption
- Economy and businesses
- GDP, public finance and non-profit organizations
- Prices and rates

In addition to that, ASTAT implements at regular intervals thematic studies and surveys as shown in the list below:

- Rope ways and ski lifts in South Tyrol
- Youth Study South Tyrol
- Mobility and traffic in South Tyrol
- Income and wealth of households in South Tyrol
- Construction activity and real estate market in South Tyrol
- Employment in South Tyrol
- Permanent settlement area in South Tyrol
- South Tyrol Energy Balance
- Statistical yearbook

Despite the important work of ASTAT, certain data are exclusively available on a national level (Italy) or supra-provincial level (Region of Trentino – Alto Adige) and not on a provincial level. The Observatory could be an opportunity to fill this gap and increasingly collect data on the provincial and municipal level.

With regard to sustainable tourism development and destination management, the following gaps and data needs were identified (this list is not exhaustive):

- Tourism key data concerning value creation as well as micro- and macro-economic effects (data related to the impact of the tourism industry on South Tyrol’s overall economy)
- Tourism Satellite Account for South Tyrol (no current data available)
- Tourism related taxes, fees and charges in the destination
- Assessment of commercial and non-commercial accommodations
- Resident’s perception of tourism development (qualitative approach) in order to guarantee acceptance and authentic hospitality
- More specific employment (ex. total number of full-time and part-time tourism jobs) and health data concerning the tourism industry
- Traffic and mobility patterns linked to tourists and day visitors
- Data on daily visitor flows
- Regular survey on customer needs, visitor satisfaction and guests’ behavior
- Visitor search behavior on online platforms (google, etc.)
- Data about the phenomenon of sharing economy in tourism (e.g. Airbnb Data)

At a consultation meeting held between ASTAT and Eurac Research during the preparatory phase for the future Observatory, the possibility was discussed to include questions regarding residents’ perception/local tourism satisfaction into the questionnaire template of the province-wide household survey planned to be implemented by ASTAT in 2019 and to be published in 2020.
8 Objectives of the Observatory (short, medium, long-term)

This chapter proposes a mission and vision statement as well as possible objectives of the Observatory, which are planned to be discussed in the first stakeholders workshop.

Vision

Through intersectoral, destination-wide cooperation and innovative monitoring and communication models, the Tourism Observatory seeks to contribute to the creation of a livable socio-environmental habitat for South Tyrol’s future generations and their guests.

Mission

The Observatory will monitor, evaluate and communicate on South Tyrol’s tourism developments and the impacts they have on the “habitat”. Like a future-oriented think tank, it strives to point out risks and opportunities, develop ideas, as well as provide recommendations and practices towards continuous improvement of sustainable tourism and smart destination management. The enabling of awareness, learning and evidence-based decision making for different target groups of South Tyrol’s society shall lie at its very core.

Objectives

Striving towards the achievement of the vision and the implementation of the mission, the following paragraphs define the preliminary short-term, medium-term and long-term objectives for the Observatory that will be discussed at the first stakeholder workshop. They were elaborated based on a synthesis of the perceptions of experts who were interviewed in the context of the above described qualitative analysis (see chapter 5).
### Table 3. Objectives of the observatory

Source: own elaboration

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Short term</th>
<th>Medium term</th>
<th>Long term</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Establish the monitoring system:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Gain a comprehensive overview of data and information sources relevant for establishing South Tyrol’s sustainable tourism monitoring system.</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Create a shared understanding of sustainable tourism and gain a joint picture of a wishful sustainable future for the destination of South Tyrol.</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Decide on thematic monitoring areas (based on the preliminary study) - and decide if goals need to be defined per thematic area. On that basis, set up the monitoring system with the indicators. Start monitoring per thematic area.</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Link this activity closely to the monitoring of the implementation of measures proposed by the South Tyrol Tourism Strategy (ZTS 2030).</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Set-up the observatory’s indicator system, test and introduce appropriate and innovative indicators as well as new monitoring techniques and methodologies.</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>• Start the regular collection, consolidation, and evaluation of data related to the indicators.</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>• Test ways to show with the indicators where the development trends are going in the future.</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>• Explore ways for letting residents and communities participate in the monitoring process.</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td><strong>Be on the loop of developments and regularly inform about them:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Deliver a clear and regular picture of the resources used and the impacts tourism has on South Tyrol’s society, economy and environment.</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>• Identify and communicate good developments, potentials and opportunities.</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>• Warn about extreme developments, risks and dangers.</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Serve as a think-tank:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• ... which enables sustainable tourism planning and practices through the provision of ideas, possible measures, recommendations and solutions for politicians and other decision makers (e.g. private sector) as well as for other target groups - including young locals and guests.</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
• ... which provides ideas on how to sustainably tackle the challenges of continuous tourism growth and its impacts\textsuperscript{22} and which proposes possibilities for a balanced development.

• ... which can impact on politics - at provincial level, national level and at global level (by being a member of the UNWTO-INSTO network).

\textit{Raise awareness and enable learning:}

• Create a better public understanding of what sustainable tourism is, raise awareness amongst different target groups, including the private sector, the population in general, schools and students, visitors etc.

• Explore the possibility to create a short course training scheme for destination managers and other tourism stakeholders, based on findings gained by the monitoring.

• Compare and identify best practices of the individual places and communities in South Tyrol. Bring community actors together so they can learn from each other.

• Network and exchange sustainable tourism knowledge and experience with other tourism destinations worldwide, compare practices, discuss problems and learn from each other.

\textit{Provide evidence for decision makers:}

• Provide reliable data and facts as a solid basis for decision-makers from the private and public sector, from where they can derive strategic orientations, objectives and modalities.

• The monitoring results can also support tourism marketers in communicating more credibly about sustainable tourism.

• Create evidence to enable decision-makers to perceive the impacts and results of their decisions.

\textit{Enable communication, cooperation and networking - build trust:}

• Foster trust, mutual understanding and engagement through regular communication and networking between the private sector, research sector, public and civil sector and between nature conservation, economy, society and culture.

\textsuperscript{22} Interviewees mentioned various and also contradicting ideas - including quotas, limitations, maximum capacities, qualitative instead of quantitative growth, limitation of growth, trading of bed places, quality labels, certification systems, de-marketing of certain areas,
9 Proposed monitoring methodology

The monitoring methodology is based on four basic steps: data collection; data analysis, visualisation and interpretation; data validation, feedback collection and amendments; data evaluation linked to policies, communication of results and awareness raising. Figure 22 illustrates these basic steps and highlights the main aspects of each of them.

Data collection includes both primary and secondary sources and both quantitative and qualitative data. They are available online or can be sent upon request. If possible, data will be collected at LAU 2 level, or even at a sub-municipal level for areas of specific interest. As it was shown in previous sections, South Tyrol is a province with a relatively rich amount of data in the tourism sector and in the correlated areas. Therefore, the Observatory will focus on data systematization on the one hand, and on innovative methodologies to collect new data on the other hand. Data systematization includes methodologies for the creation of composite measurements of sustainability, for instance through statistical methods such as Principal Component Analysis, Cluster Analysis, etc. These enable the evaluation of sustainability from a holistic but at the same time aggregated perspective. Moreover, a special focus on innovative qualitative and quantitative methodologies might include, for instance: mixed methods of research, digital methods, visual methodologies, data mining, big data analytics. A strength in the use of mixed methods is that they can work as powerful tools to monitor emerging issues of sustainability research that have never been explored before. Mixed methods help to grasp phenomena from an overall perspective, including quantitative and qualitative data, i.e. both measurements and perceptions. This might be very useful when it comes to the evaluation of social sustainability at destination level. All data collected and analysed are then validated by the stakeholder working group, before they are included in reports, in the online portal or eventually presented during public events.

It is important to stress that monitoring methods will be both a tool to observe existing critical issues for sustainable tourism, but also an instrument to raise awareness of previously unknown aspects of sustainable tourism. For instance, visual methodologies could help to monitor the visual intrusion of tourism in a destination, e.g. by studying landscape features, or overcrowded attractions. Monitoring methods are continuously adapted and revisited according to the available technological standards, as well as the advances in tourism research.
Figure 22. Monitoring steps.
Source: own elaboration
10 Proposed structure of the Observatory

The Observatory is built around a core unit – made up by Eurac Research and IDM – and a working group – constituted by relevant stakeholders. Figure 23 represents the envisaged structure of the Observatory, as well as the main tasks and the main outputs of both core unit and stakeholder working group.

The core unit is in charge of data collection, data analysis, data visualization and their interpretation. All these processes take place with the support and supervision of the stakeholder working group (SWG), which is in charge of ensuring participatory decision making, constant monitoring, accurate results and innovative future perspectives for monitoring local issues.

The **core unit** is constituted by researchers and tourism (management, marketing and governance) experts, skilled in:

- dealing with quantitative and qualitative research strategies, as well as mixed methods for social research;
- developing evidence-based policies to ensure a constant improvement of tourism sustainability in South Tyrol.

These two core competences reflect the analytical skills of Eurac Research and the management and market skills of IDM. Based on these skills, Eurac Research and IDM will also develop innovative methodologies to

---

*Figure 23. Envisaged structure of the Observatory. Source: own elaboration*
monitor sustainable tourism, using the leverage of digital technologies and data, as well as visual methodologies, as explained above.

The **stakeholder working group** is made up by two main type of stakeholders:

- data providers, who will regularly share data with the Observatory, give advice on its interpretation and usage, as well as eventually cooperate to envisage new surveys or variables to be collected;
- support and advice providers, who will provide thematic inputs on relevant topics or problems, give feedbacks on monitoring results and processes, and ultimately help to establish a general feeling of support and trust towards the Sustainable Tourism Observatory (STO) initiative, ensuring its usefulness and long-lasting perspective. A complete list of relevant stakeholders has been already collected in the phase of primary data collection (see Chap. 5) and a more compact list is emerging from the feedbacks of interviewee partners of the preliminary study (see Chap. 11). Based on this list, and open to integration, the stakeholder group will be invited regularly and asked for feedback – also through direct emailing of documents and proposals.

It should be noted here that some data providers – for example the national statistics office or the Bank of Italy – might not join the stakeholder working group at local level. Nevertheless, their major contribution in data provision remains fundamental for the development of the Observatory.

Once collected, analyzed and related to policies, data will be made available publicly to different **target groups**, including policy makers, private businesses, and the general public. Data is going to be downloadable through an interactive and continuously updated dashboard and it will be interpreted through regular monitoring reports, occurring at least once a year. If possible, data will be provided on LAU 2 geographical level, with the help of maps and figures.

The different target groups, together with the stakeholder working group will constantly provide feedbacks, to ensure a proactive monitoring and an increasing coverage of sustainability issues through adequate indicators.
11 Relevant Stakeholders in the Destination

This chapter provides an overview of relevant South Tyrolean stakeholders from the private, public, civil and scientific sectors who are involved or interested in tourism, play a role in the sustainable development of the region and may accompany or support the future monitoring process of the Observatory.

The methodology for identifying relevant stakeholders was based on a desktop analysis and on the analysis of qualitative interviews that were conducted with 18 experts (15 local and 3 international) from the social, cultural, environmental and economic sectors.

To the question which stakeholders may accompany the future monitoring process, the interviewed experts came up with an array of possible actors. The below depicted “word cloud” shows the compressed outcomes of the answers. The dimension of the font is proportional to the frequency of mentions per stakeholder.

Figure 24. Word cloud
Source: own elaboration through https://www.jasondavies.com/wordcloud/
The “word cloud” shows that **IDM**, the regional development agency of Bolzano Province and Bolzano Chamber of Commerce, ranges amongst the most mentioned stakeholders.

The important role of **politics and public administration** is also evident – represented by relevant provincial departments, agencies and offices, including the Provincial Institute of Statistics (ASTAT) and the Provincial Department of Economy with the tourism sub-division (“Funktionsbereich Tourismus”). Further departments that were referred to by the interviewees were the Provincial Mobility Department, the Provincial Department of Nature, Landscape and Spatial Planning, the Provincial Forestry Department, as well as the Provincial Agriculture Department. Public administrative bodies responsible for nature, landscape and biodiversity protection as well as for environment protection and energy were also listed. Administrative institutions responsible for social and cultural affairs, employment, social inclusion, culture and arts, youth policies, child and youth protection completed the list, followed by Measuring and Monitoring Services (traffic, ...).

**Research, academia and educational institutions** were also mentioned, in particular:

- Eurac Research;
- Free University of Bolzano.

The **private sector** is another major stakeholder group according to the interview partners, including **associations**, such as:

- Chamber of Commerce, Bolzano;
- HGV (South Tyrolean Hotels and Restaurants Association);
- VPS (South Tyrolean Non-commercial Accommodation Providers Association);
- SBB (South Tyrolean Farmers’ Association), agro-tourism;
- LTS (South Tyrolean Tourism Organizations Association);
- VCS (South Tyrolean Campsite Operators Association);
- Association of mountain huts/shelters;
- Trades associations (e.g. HDS, South Tyrolean Trades and Services Association);
- Crafts associations (e.g. LVH, South Tyrolean Crafts and Services Association).

**Further relevant stakeholders** mentioned included:

- Non-governmental representatives of the environmental sector, with focus on environmental associations;
- Consumer organisations, representing the interests of the guests;
- Labour unions and social co-operatives;
- The counties (Bezirksgemeinschaften) and municipalities (Gemeinden) – the latter were considered particularly important as they are the ones which concretely implement strategies;
- Environmental experts, experts in resources efficiency, sustainable production and consumption, etc.

Some interview partners stated that it might make sense - at some stage of the consolidation process of the Observatory – to test ways of involving the local population into the monitoring process, also the local
communities (municipalities). Furthermore, the involvement of young people and artists is perceived as a wishful innovative element for the future monitoring process.

The above described interview outcomes were complemented by an additional desktop research in order to identify those stakeholders who can play a specific role in ensuring participatory decision making regarding the Observatory’s monitoring issues, indicators, processes, methodologies and monitoring results. In other words those who can be regarded as having an interest in becoming members of the Observatory’s Stakeholder Working Group (SWG) or in taking part in the yearly Stakeholder Workshops being organized by the Observatory.

On this basis, local stakeholders were invited to an information exchange and feedback round organized by Eurac Research and IDM on 1 June 2018. The participants were informed and gave feedback on the project idea, possible key monitoring issue areas and on possible objectives of the future observatory.

The following table shows those organizations that enrolled to the meeting and can be as such interpreted as stakeholders with a potentially high interest in becoming members of the Observatory’s Working Group:

Table 4. Possible members of the Working Group at regional level.
Source: own elaboration

<table>
<thead>
<tr>
<th>Province</th>
<th>Stakeholder</th>
<th>Description of the main tasks (responsibilities, activities) of the stakeholder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Province</td>
<td>Provincial Department of Economy, Tourism Subdivision</td>
<td>Drafting of provincial laws, which promote and regulate developments in the tourism industry in South Tyrol.</td>
</tr>
<tr>
<td>Province</td>
<td>KlimaHaus Agency</td>
<td>The KlimaHaus agency is an entity of the Province of Bolzano and works as an agency for climate and energy issues in general. It is responsible for the energy certification of buildings in South Tyrol and in the rest of the country, where KlimaHaus is applied as a voluntary quality protocol.</td>
</tr>
<tr>
<td>Province</td>
<td>Provincial Forestry Department</td>
<td>The Department’s main duty is to address and administrate the preservation of the forests and prevent fires. It issues penalties and directives and controls the hydrogeological constraints. It elaborates forestry judgements and authorizations.</td>
</tr>
<tr>
<td>Province</td>
<td>Provincial Nature Parks Office</td>
<td>The Nature Parks Office, an entity of the Province of Bolzano, has the responsibility of planning and managing the natural parks on the territory. It also controls and monitors these parks and provides information and environmental education.</td>
</tr>
<tr>
<td>Province</td>
<td>Provincial Landscape Ecology Office</td>
<td>The Landscape Ecology Office is responsible for the conservation of nature and for the protection of species</td>
</tr>
</tbody>
</table>
and biotopes. It deals with landscape planning, landscape constraints and landscape conservation.

<table>
<thead>
<tr>
<th>Organization</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free University of Bolzano (Tourism, Sport and Event Management)</td>
<td>The Free University of Bolzano offers a bachelor degree in Tourism, Sport and Event Management at its campus in Bruneck-Brunico and organizes research activities around consumer behavior in tourism.</td>
</tr>
<tr>
<td>Technical School for Hospitality and Food Industry, Brixen-Bressanone</td>
<td>The Technical School for Hospitality and Food Industry in Brixen-Bressanone educates students in the hotel and hospitality industry, in particular as waiters, cooks, bakers and butchers.</td>
</tr>
<tr>
<td>Bolzano Chamber of Commerce</td>
<td>The Chamber of Commerce is a public law body of the Province of Bolzano. It contributes to the strengthening of the society’s attitudes towards the economy. It conducts systematic economic research and provides constant updates of economic data. With this, it lays the basis for objective discussion about economic policy and for a connected decision-making process.</td>
</tr>
<tr>
<td>South Tyrolean Hotels and Restaurants Association (HGV)</td>
<td>The Association offers hoteliers and restaurateurs a variety of services with regard to law (specifically in the food industry), online marketing, salaries and employees, management consulting, accounting and education. HGV also offers a set of online room booking portals, like “Booking Südtirol” and “Simple South Tyrol”.</td>
</tr>
<tr>
<td>South Tyrolean Farmers Association (SBB) (Agritourism trade mark Red Rooster)</td>
<td>The Farmers Association represents the interests of South Tyrolean farmers. The main goal of the association is to support farmers in economic, social, cultural and political contexts, not only at a communal and provincial, but also at a national and European level. The association offers a variety of services regarding taxation, law, employment and wages, work safety, funding, entrepreneurship and business, social insurance, marketing, innovation, renewable energies, education and training.</td>
</tr>
<tr>
<td>BikeHotels Consortium</td>
<td>BikeHotels represents a group of hoteliers that decided to give more value to bike holidays in South Tyrol. They offer specialized accommodation dedicated to visitors who want to visit the region by bicycle or mountain bike and offer courses for children, as well as guided tours by bike.</td>
</tr>
<tr>
<td>Italian Alpine Club South Tyrol (CAI)</td>
<td>The Italian Alpine Club mainly organizes hiking excursions around the territory of South Tyrol. The Club and its several branch offices organize hiking excursions, mountaineering and ski mountaineering courses, spelunking and cultural activities.</td>
</tr>
<tr>
<td>South Tyrolean Umbrella Organization for Nature and Environment Protection (Dachverband für Natur- und Umweltschutz)</td>
<td>The Umbrella Organization for Nature and Environment Protection deals with themes in the context of nature and environmental protection. It creates proposals for laws and regulations; negotiates with authorities, politicians and</td>
</tr>
</tbody>
</table>
Pivotal stakeholders at national level are two Italian Ministries – the Ministry of Cultural Heritage and Activities and Tourism as well as the Ministry of the Environment and Protection of Land and Sea. The Tourism Ministry issued a support letter for the Observatory in May 2018 acting as political patron of the Initiative.

Table 5. Possible members of the Working Group at national level.
Source: own elaboration

<table>
<thead>
<tr>
<th>National and International Level</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stakeholder</strong></td>
</tr>
<tr>
<td>Ministry of Cultural Heritage and Activities and Tourism, Italy</td>
</tr>
<tr>
<td>Ministry of the Environment and Protection of Land and Sea, Italy</td>
</tr>
<tr>
<td>Permanent Secretariat of the Alpine Convention</td>
</tr>
</tbody>
</table>

There are several additional stakeholders at provincial level, which are not included in the table above but have to be taken into account (see bullet list below). Some of them may become relevant members of the Stakeholder Working Group or can play a role as participants to the future Stakeholder Workshops:

- Provincial Institute of Statistics (ASTAT)
- DMEs (Destination Management Units under IDM)
- Provincial Department of Nature, Landscape and Spatial Planning
- Provincial Mobility Department
- Provincial Agricultural Department
- Provincial Employment Department
- Provincial Health Department
- Provincial Department of Social Affairs
- Provincial Department of Educational Promotion
- Provincial Department of Italian Culture
- Provincial Department of German Culture
- Provincial Environment Agency (water resources, energy, energy saving) (incorporates the former Energy Saving Office)
- Provincial Mobility Agency
- Labor Market Monitoring Office
- Waste Management Office
- Education and Vocational Guidance Office
- Nature and Landscape Protection Office
- Office for People with Disabilities
- Youth Policy Office
- Child and Youth Protection and Social Inclusion Office
- Crafts and Industrial Parks Office
- Trades and Services Office
- South Tyrolean Transport Structures AG (STA)
- Eurac Research, Institute of Alpine Environment
- Eurac Research, Institute of Earth Observation
- Eurac Research, Institute of Regional Development
- Vocational School for the Hospitality Industry Savoy
- College of Hotel Management Kaiserhof Meran
- College of Hotel Management Bruneck
- South Tyrolean Association of Tourism Organizations (LTS)
- South Tyrolean Non-commercial Accommodation Providers Association (VPS)
- South Tyrolean Campsite Operators Association (VCS)
- South Tyrolean Trades and Services Association (HDS)
- South Tyrolean Crafts and Services Association (LVH)
- South Tyrolean Artists Association
- South Tyrolean Bioland Farmers Association
- South Tyrolean Federation of Trade Unions – Trade and Hospitality Industry (ASGB)
- South Tyrolean Federation of Social and Health Associations
- South Tyrolean Municipalities Association
- South Tyrolean Consumer Assistance Office
- South Tyrol Alpine Club
List of References


Annexes

Annex 1: Pre-selection of Possible Sustainability Criteria and Indicators

The analysis of secondary data in chapter 4 resulted in the preselection of mandatory and possible destination-specific issue areas for the South Tyrol Sustainable Tourism Observatory. Each of these secondary data based issue areas was furthermore subdivided into several criteria (i.e. components) aligned to a set of possible indicators, as shown in the table below.

The table is meant as a pre-selective overview of possible indicators for the future monitoring system of South Tyrol’s tourism Observatory. Out of this list, selected indicators might be chosen during the further establishment process of the Observatory, based on participatory methods.

The criteria and related indicators were taken from the ETIS toolkit, the UNWTO indicators Guidebook, the InRouTe Roadmap, the GSTC Criteria and Performance Indicators as well as the Guidebook for Sustainable Tourism in German Destinations (abbreviation: Guidebook STGD). They include possible additional indicators freely developed based on the Tourism Strategy for South Tyrol (ZTS 2030) and the Sustainable Tourism Report of the Alpine Convention (STR Alpine Convention).

MANDATORY ISSUE AREAS (UNWTO-INSTO)

1) Tourism seasonality

<table>
<thead>
<tr>
<th>Issue Area: “Tourism seasonality”</th>
<th>Criteria (components of the issue area)</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree of seasonality</td>
<td>Tourist arrivals by month or quarter (distribution throughout the year) (UNWTO)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Percentage of annual tourist arrivals occurring in peak month, in peak quarter (UNWTO)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ratio of number of tourists in peak month to lowest month (UNWTO)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Occupancy rates for accommodation by month or quarter (distribution throughout the year) (UNWTO)</td>
<td></td>
</tr>
<tr>
<td>Strengthen shoulder season and low season tourism</td>
<td>Percentage of tourism authority budget spent promoting off-peak and shoulder seasons (UNWTO)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number of facilities offering alternative activities during shoulder and low season (capacity and use levels per activity type) (UNWTO)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Percentage of main attractions open in shoulder/off seasons (UNWTO)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Special events held during peak, shoulder and off seasons (number of events, participants) (UNWTO)</td>
<td></td>
</tr>
<tr>
<td>Provision of sufficient infrastructure, services and products year-round</td>
<td>Percentage of accommodation and tourism related services open all year (UNWTO)</td>
<td></td>
</tr>
<tr>
<td>Seasonality and employment</td>
<td>Percentage of tourism related employment which is full-year, less than 6 months etc. (UNWTO)</td>
<td></td>
</tr>
<tr>
<td>----------------------------</td>
<td>-------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Local unemployment rate in low, off, shoulder and peak seasons (UNWTO)</td>
<td></td>
</tr>
</tbody>
</table>

2) Tourism employment, education and capacity building

<table>
<thead>
<tr>
<th>Issue Area: “Tourism employment, education and capacity building”</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Criteria (components of the issue area)</strong></td>
<td><strong>Number and percentage of tourism employees by industry (accommodation, restaurants, other tourism industries) compared to total employment in the destination (ETIS) (InRouTe)</strong></td>
</tr>
<tr>
<td></td>
<td>Percentage of jobs in tourism that are seasonal (ETIS)</td>
</tr>
<tr>
<td></td>
<td>Ratio of part time to full time employment in tourism (UNWTO)</td>
</tr>
<tr>
<td></td>
<td>Percentage of tourism employees who are locals (UNWTO)</td>
</tr>
<tr>
<td></td>
<td>Percentage of jobs that are full time, full year (UNWTO)</td>
</tr>
<tr>
<td></td>
<td>Local unemployment rate in low, off, shoulder and peak seasons (UNWTO)</td>
</tr>
<tr>
<td></td>
<td>Retention levels of employees in the tourism sector (percentage of turn over) (UNWTO)</td>
</tr>
<tr>
<td></td>
<td>Average tourism wages compared to average wage in the destination (UNWTO) (InRouTe)</td>
</tr>
<tr>
<td></td>
<td>Income levels (absolute and compared with other sectors) (UNWTO)</td>
</tr>
<tr>
<td></td>
<td>Average wages and salary income corresponding to the different job categories in tourism (accommodation, etc.) (InRouTe)</td>
</tr>
<tr>
<td></td>
<td>Employee satisfaction (UNWTO)</td>
</tr>
<tr>
<td></td>
<td>Weekly working hours and work day sequences in tourism jobs (freely based on ZTS 2030)</td>
</tr>
<tr>
<td></td>
<td>Ratio of time dedicated to working in tourism versus income from tourism (income per hour worked) (UNWTO)</td>
</tr>
<tr>
<td></td>
<td>Employment rate of tourism related service jobs: local vs. not local employees (freely based on ZTS 2030)</td>
</tr>
<tr>
<td></td>
<td>Employee satisfaction with tourism related service jobs (freely based on ZTS 2030)</td>
</tr>
<tr>
<td><strong>Gender equality in tourism</strong></td>
<td>Percentage of men and women employed in the tourism sector (ETIS) (UNWTO)</td>
</tr>
<tr>
<td></td>
<td>Percentage of tourism enterprises where the general manager position is held by a woman (ETIS)</td>
</tr>
<tr>
<td></td>
<td>Female average income/male average income in the tourism sector (or: percentage of women/men in different tourism income earning categories) (UNWTO)</td>
</tr>
<tr>
<td></td>
<td>Percentage of women/men in unskilled, semi-skilled and professional positions in the industry (UNWTO)</td>
</tr>
</tbody>
</table>
### Access of tourism employees to health and safety
- Percentage of tourism sector employees receiving free/subsidized health checkups and clinics for staff and family members (UNWTO)
- Percentage of tourism sector employees receiving health insurance sponsored/subsidized by the employer (UNWTO)

### Family support for tourism employees
- Percentage of workplaces in the tourism sector providing child care facilities (UNWTO)
- Percentage of workplaces with family-friendly rostering (work shifts and rotation) (UNWTO)
- Existence of initiatives that focus on family-friendly working conditions (Guidebook STGD)

### Education, training, capacity development in tourism
- Percentage of employees qualified/certified (UNWTO)
- Training funds spent per employee in the tourism sector (UNWTO)
- Number of scholarships and training opportunities in tourism for the youth (UNWTO)
- Number of educational programs/institutions in the destination incorporating sustainable tourism into their curricula (UNWTO)
- Number of qualification programs publicized to tourism stakeholders by the DMO per year (Guidebook STGD)
- Number of training and continuing education courses offered per DMO associate per year and percentage of these on sustainable development (Guidebook STGD)
- Number of educational programs in tourism (for trainees/students) and trainings on the job for lifelong learning (employees/entrepreneurs) incorporating foreign languages (apart from English), regional knowledge and digital capacity in their curricula (freely based on ZTS 2030)
- Percentage of tourism enterprises with employees receiving trainings (freely based on STR Alpine Convention)
- Percentage of labor force trained in higher tourism-related quality services, in fields such as health treatments or nature experience (freely based on STR Alpine Convention)

### Economic benefits at destination level

<table>
<thead>
<tr>
<th>Issue Area: “economic benefits at destination level”</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Criteria (components of the issue area)</strong></td>
<td><strong>Indicators</strong></td>
</tr>
<tr>
<td>Tourism flow</td>
<td>Number of tourist nights per month (distinguishing domestic and international tourists classified by main countries of residence) (ETIS) (InRouTe)</td>
</tr>
<tr>
<td></td>
<td>Number of same-day visitors per month (ETIS)</td>
</tr>
<tr>
<td>Revenues generated by tourism</td>
<td>Relative contribution of tourism to the destination’s economy (% GDP) (ETIS) (UNWTO)</td>
</tr>
<tr>
<td>------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>Daily spending per overnight tourist (ETIS)</td>
</tr>
<tr>
<td></td>
<td>Daily average expenditure by tourists (InRouTe)</td>
</tr>
<tr>
<td></td>
<td>Daily spending per same-day visitor (ETIS)</td>
</tr>
<tr>
<td></td>
<td>Total fees collected by the destination for the access and use of attractions (UNWTO)</td>
</tr>
<tr>
<td></td>
<td>Public revenue from tourism business permits, licenses, concessions and taxation compared to visitor arrivals (UNWTO)</td>
</tr>
<tr>
<td>Tourism enterprise(s)</td>
<td>Average length of stay of tourists (nights) (ETIS) (InRouTe)</td>
</tr>
<tr>
<td>performance</td>
<td>Occupancy rate in commercial accommodation per month and average for the year (ETIS)</td>
</tr>
<tr>
<td></td>
<td>Occupancy rates in accommodation establishments (UNWTO)</td>
</tr>
<tr>
<td>Vitality of the local tourism industry</td>
<td>Number of tourism-related enterprises (establishments) (categorized by size and type) (UNWTO) (InRouTe)</td>
</tr>
<tr>
<td></td>
<td>Percentage of tourism involved businesses owned locally/externally (UNWTO)</td>
</tr>
<tr>
<td></td>
<td>Asset value of tourism businesses and percentage owned locally (UNWTO)</td>
</tr>
<tr>
<td></td>
<td>Birth rate of enterprises/establishments in the tourism sector (InRouTe)</td>
</tr>
<tr>
<td></td>
<td>Longevity of tourism businesses (rate of turnover) (UNWTO)</td>
</tr>
<tr>
<td></td>
<td>Annual profits of tourism businesses (UNWTO)</td>
</tr>
<tr>
<td></td>
<td>Tourism business revenues (growth rates) (UNWTO)</td>
</tr>
<tr>
<td>Impacts of tourism on local income</td>
<td>Ratio of income attributable to tourism versus other income generating activities (UNWTO)</td>
</tr>
<tr>
<td>Competitiveness of tourism businesses</td>
<td>Cost/price ratios (including gross margin) of tourism businesses (accommodation, attractions, tours, packages, etc.) compared to industry norms or ratios for similar products at other destinations (UNWTO)</td>
</tr>
<tr>
<td></td>
<td>Percentage of tourism businesses participating in cooperative marketing (UNWTO)</td>
</tr>
<tr>
<td></td>
<td>Percentage of marketing expenditures in cooperative initiatives (UNWTO)</td>
</tr>
</tbody>
</table>

4) Tourism governance, destination management

<table>
<thead>
<tr>
<th>Issue Area: “tourism governance, destination management”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Criteria (components of the issue area)</td>
</tr>
<tr>
<td>Strategic planning and implementation</td>
</tr>
<tr>
<td>Category</td>
</tr>
<tr>
<td>----------------------------------------------</td>
</tr>
<tr>
<td>Degree of stakeholder participation</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Environmental and social impact monitoring</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Sustainability certification schemes and</td>
</tr>
<tr>
<td>quality awards</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Branding, image and ranking of the destination</td>
</tr>
<tr>
<td>Information and awareness building on sustainable tourism</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Public support of tourism development</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
5) Local satisfaction, local wellbeing

<table>
<thead>
<tr>
<th>Issue Area: “local satisfaction, local wellbeing”</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Criteria (components of the issue area)</strong></td>
<td></td>
</tr>
<tr>
<td>Visitor – resident ratio</td>
<td>Number of tourists and visitors per 100 residents (ETIS) (InRouTe)</td>
</tr>
<tr>
<td></td>
<td>Number of beds available in commercial accommodation per 100 residents (ETIS)</td>
</tr>
<tr>
<td></td>
<td>Number of second homes per 100 homes (ETIS)</td>
</tr>
<tr>
<td></td>
<td>Number of tourists per km², ratio of tourists to locals (UNWTO)</td>
</tr>
<tr>
<td></td>
<td>Ratio of tourists to locals at events, ceremonies (UNWTO)</td>
</tr>
<tr>
<td>Degree of local satisfaction with tourism</td>
<td>Percentage of residents who are satisfied with tourism in the destination (per month or season) (ETIS)</td>
</tr>
<tr>
<td></td>
<td>Percentage of residents satisfied with the impacts of tourism on the destination’s identity (ETIS)</td>
</tr>
<tr>
<td></td>
<td>Local satisfaction with tourism, local culture, integrity, authenticity and with other specific components of tourism (survey-based) (UNWTO)</td>
</tr>
<tr>
<td></td>
<td>Number of complaints by local residents related to tourism (UNWTO)</td>
</tr>
<tr>
<td>Social benefits associated with tourism</td>
<td>Number of services, infrastructure, architecture preserved, provided for residents attributable to tourism (UNWTO)</td>
</tr>
<tr>
<td>Housing issues</td>
<td>Price of real estate in the destination (UNWTO)</td>
</tr>
<tr>
<td></td>
<td>Percentage of housing affordable for residents (UNWTO)</td>
</tr>
<tr>
<td></td>
<td>Percentage of increase/decrease in land and housing prices over time (UNWTO)</td>
</tr>
<tr>
<td></td>
<td>Percentage of construction and new housing available for living purposes (for local population) (UNWTO)</td>
</tr>
<tr>
<td></td>
<td>Percentage of construction and new housing available for tourism (UNWTO)</td>
</tr>
<tr>
<td>Economic barriers</td>
<td>Availability and access to goods and services (health, water, transport, food, accommodation etc.) for residents/availability and access to goods and services for tourists (UNWTO)</td>
</tr>
<tr>
<td></td>
<td>Cost of access (entry) to important attraction sites expressed in hours work at local wage (UNWTO)</td>
</tr>
<tr>
<td>Quality of neighborhoods</td>
<td>Noise and congestion levels caused by tourism near residential areas (UNWTO)</td>
</tr>
</tbody>
</table>

6) Energy management, climate neutrality

<table>
<thead>
<tr>
<th>Issue Area: “energy management, climate neutrality”</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Criteria (components of the issue area)</strong></td>
<td></td>
</tr>
<tr>
<td>Climate change mitigation measures</td>
<td>Percentage of tourism enterprises involved in climate change mitigation/energy conservation schemes/programs – such as CO₂ offset, low energy systems etc. (ETIS, UNWTO)</td>
</tr>
<tr>
<td>Criteria (components of the issue area)</td>
<td>Indicators</td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>------------</td>
</tr>
<tr>
<td>Water use/ water consumption</td>
<td>Water consumption per tourist night compared to general population water consumption per resident night (ETIS) and Total volume consumed and liters per tourist per day (UNWTO) Percentage of tourism enterprises taking action to reduce water consumption (ETIS) Percentage of tourism enterprises using recycled water (ETIS) Percentage of water saved (reduced, recaptured or recycled) (UNWTO) Total water use by each sector (tourism as percentage of all user sectors) (UNWTO) Program assisting tourism enterprises to measure, monitor, reduce and publicly report water usage (GSTC)</td>
</tr>
<tr>
<td>Water Security</td>
<td>Management system ensuring that water use by tourism enterprises and requirements of the communities in the destination are balanced and compatible (GSTC)</td>
</tr>
<tr>
<td>Water Quality</td>
<td>Management system to monitor and publicly report on drinking and recreational water quality (monitoring results are publicly available and the system responds in timely manner to water quality issues) (GSTC)</td>
</tr>
</tbody>
</table>

7) Water management
## 8) Wastewater management

<table>
<thead>
<tr>
<th>Issue Area: “wastewater management”</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Criteria (components of the issue area)</strong></td>
<td><strong>Percentage of sewage from the destination treated to at least secondary level prior to discharge (ETIS)</strong></td>
</tr>
<tr>
<td><strong>Sewage treatment systems</strong></td>
<td><strong>Percentage of sewage from key sites which receives treatment to meet standards (UNWTO)</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Percentage of tourism establishments on suitable treatment systems (UNWTO)</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Number of reported pollution or contamination events per annum in watercourses receiving effluents (UNWTO)</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Wastewater Regulations</strong></th>
<th>Regulations for the siting, maintenance, and testing of discharge from septic tanks and wastewater treatment systems, and evidence of their enforcement (GSTC)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Wastewater Regulations</strong></td>
<td>Regulations to ensure that size and type of waste water treatment is adequate for the location, and evidence of their enforcement (GSTC)</td>
</tr>
<tr>
<td><strong>Program</strong></td>
<td>Program to assist tourism enterprises to properly treat and safely reuse wastewater with minimal adverse effects to the local population and environment (GSTC)</td>
</tr>
</tbody>
</table>

## 9) Solid waste management

<table>
<thead>
<tr>
<th>Issue Area: “solid waste management”</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Criteria (components of the issue area)</strong></td>
<td><strong>Waste production per tourist night compared to general population waste production per person (kg) (ETIS)</strong></td>
</tr>
<tr>
<td><strong>Solid waste management</strong></td>
<td><strong>Percentage of tourism enterprises separating different types of waste (ETIS) (UNWTO)</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Percentage of total waste recycled per tourist compared to total waste recycled per resident per year (ETIS)</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Solid waste reduction</strong></th>
<th><strong>Waste volume produced by the destination (tons), percentage of waste attributable to tourism (UNWTO)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Volume of waste recycled (m³)/total volume of waste (specified by different types) (UNWTO)</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Number of tourism establishments recycling their own waste (UNWTO)</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Volume of hazardous substances in use (volume of use over time), attributable to tourism (UNWTO)</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Waste collection system that maintains public records on the amount of waste generated (GSTC)</strong></td>
</tr>
</tbody>
</table>
Solid waste management plan that is implemented and has quantitative goals to minimize and ensure safe disposal of waste (GSTC)

Program assisting tourism enterprises to reduce, reuse and recycle waste (GSTC)

Program reducing the use of bottled water by tourism enterprises and visitors (GSTC)

Maintaining clean image for the destination

Quantity of waste strewn in public (garbage counts) (UNWTO)

Visitor and local perception of level of litter attributable to tourism (questionnaire based) (UNWTO)

Image of cleanliness of destination (questionnaire based) (UNWTO)

DESTINATION-SPECIFIC ISSUE AREAS (potential issue areas)

10) Innovation

**Issue Area: “innovation”**

<table>
<thead>
<tr>
<th>Criteria (components of the issue area)</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Related indicators could not be identified in existing frameworks.</td>
<td></td>
</tr>
</tbody>
</table>

11) Sustainable production and consumption

**Issue Area: “sustainable production and consumption”**

<table>
<thead>
<tr>
<th>Criteria (components of the issue area)</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supporting local entrepreneurs</td>
<td>Existence of program provided by the destination that encourages tourism-related enterprises to purchase goods and services locally (GSTC)</td>
</tr>
<tr>
<td></td>
<td>Existence of program provided by the destination that encourages local enterprises to produce sustainable local products (based on nature and culture, etc.) (GSTC)</td>
</tr>
<tr>
<td></td>
<td>Number (percentage) of products/service components that are promoted as sustainable, on the basis of sustainable performance evaluation of tourism service providers (Guidebook STGD)</td>
</tr>
<tr>
<td>Tourism supply chain</td>
<td>Percentage of locally produced food, drinks, goods and services sourced by the destinations tourism enterprises (ETIS)</td>
</tr>
<tr>
<td>Sustainable tourism and sustainability aspects</td>
<td>Percentage of tourism enterprises and establishments in the destination using a voluntary sustainability or CSR certification or label (ETIS)</td>
</tr>
<tr>
<td></td>
<td>Number (percentage) of tourism businesses certified by a sustainability scheme (UNWTO)</td>
</tr>
<tr>
<td></td>
<td>Percentage of establishments and operators marketing sustainable, sensitive or green products or experiences (UNWTO)</td>
</tr>
</tbody>
</table>
### 12) Ski tourism and other nature based outdoor sports

**Issue Area:** “ski tourism and other nature based outdoor sports”

<table>
<thead>
<tr>
<th>Criteria (components of the issue area)</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Landscape and biodiversity protection</strong></td>
<td>Percentage of local enterprises in the tourism sector actively supporting protection, conservation and management of biodiversity and landscapes in the destination (ETIS) <strong>Percentage of tourism related businesses in the destination contributing to nature conservation (UNWTO)</strong></td>
</tr>
<tr>
<td><strong>Sustainability of key species</strong></td>
<td>Counts for key species in the destination (flora/fauna) (UNWTO)</td>
</tr>
<tr>
<td><strong>Biodiversity conservation and maintenance of protected areas</strong></td>
<td>Area protected (km²) classified by the different IUCN levels of protection (UNWTO) <strong>Percentage of the Protected Area System/Conservation budget originated from tourism (UNWTO)</strong> <strong>Percentage of tourism products (tours etc.) with specific contributions for biodiversity and nature conservation built into the price or surcharges (UNWTO)</strong> <strong>Percentage of tourists aware of the importance of biodiversity protection and conservation sites in the destination (UNWTO)</strong> <strong>Existence of codes of conduct for ecosystem sites (protected areas) open to visitors (UNWTO)</strong></td>
</tr>
</tbody>
</table>

**Related indicators could not be identified in existing frameworks.**

### 13) Biodiversity, nature protection

**Issue Area:** “biodiversity, nature protection”

<table>
<thead>
<tr>
<th>Criteria (components of the issue area)</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Landscape and biodiversity protection</strong></td>
<td>Percentage of local enterprises in the tourism sector actively supporting protection, conservation and management of biodiversity and landscapes in the destination (ETIS) <strong>Percentage of tourism related businesses in the destination contributing to nature conservation (UNWTO)</strong></td>
</tr>
<tr>
<td><strong>Sustainability of key species</strong></td>
<td>Counts for key species in the destination (flora/fauna) (UNWTO)</td>
</tr>
<tr>
<td><strong>Biodiversity conservation and maintenance of protected areas</strong></td>
<td>Area protected (km²) classified by the different IUCN levels of protection (UNWTO) <strong>Percentage of the Protected Area System/Conservation budget originated from tourism (UNWTO)</strong> <strong>Percentage of tourism products (tours etc.) with specific contributions for biodiversity and nature conservation built into the price or surcharges (UNWTO)</strong> <strong>Percentage of tourists aware of the importance of biodiversity protection and conservation sites in the destination (UNWTO)</strong> <strong>Existence of codes of conduct for ecosystem sites (protected areas) open to visitors (UNWTO)</strong></td>
</tr>
<tr>
<td>Relationship between tourism and protected environments</td>
<td>Number of cooperation meetings between tourism decision-makers and nature conservation and environmental protection representatives (Guidebook STGD)</td>
</tr>
<tr>
<td>--------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>Tourism decision-makers are integrated into a panel association related to special protection areas (Guidebook STGD)</td>
</tr>
<tr>
<td></td>
<td>Number of joint projects between DMO and environmental protection and nature conservation stakeholders (Guidebook STGD)</td>
</tr>
<tr>
<td></td>
<td>Number of product components and communication materials from the DMO that promote experiences and raise awareness of biological diversity (Guidebook STGD)</td>
</tr>
<tr>
<td></td>
<td>Number of protected area (nature protection) staff in the counties (communities) related to the number of visitors and tourism development initiatives (freely developed indicator)</td>
</tr>
<tr>
<td>Protection of sensitive environments</td>
<td>Maintained and updated inventory of sensitive and threatened species and habitats (GSTC)</td>
</tr>
<tr>
<td></td>
<td>Management system monitoring impacts and protecting ecosystems, sensitive environments and species (GSTC)</td>
</tr>
<tr>
<td></td>
<td>Sustainability assessment within the last five years, identifying environmental risks. System in place to address identified risks (GSTC)</td>
</tr>
<tr>
<td></td>
<td>Cooperation between local authorities and nature conservation authorities in connection with projects related to landscapes and townscapes (Guidebook STGD)</td>
</tr>
</tbody>
</table>

### 14) Cultural heritage and traditions

**Issue Area: “cultural heritage, regional traditions”**

<table>
<thead>
<tr>
<th>Criteria (components of the issue area)</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legislative basis for protection</td>
<td>Number and type of legislation or amendments introduced to preserve built heritage (UNWTO)</td>
</tr>
<tr>
<td></td>
<td>Number and type of designation under which historic structures, monuments and districts are recognized, percentage of eligible sites and structures receiving designation (UNWTO)</td>
</tr>
<tr>
<td>Conserving built heritage</td>
<td>Tourism contribution to the preservation of built heritage (UNWTO)</td>
</tr>
<tr>
<td></td>
<td>Increase/decrease in threats to the original purpose and use of built heritage sites (UNWTO)</td>
</tr>
<tr>
<td></td>
<td>Number of regular dialogue between the DMO and the institutions that plan the preservation of cultural heritage (Guidebook STGD)</td>
</tr>
</tbody>
</table>
### Heritage promotion
- Existence of a list of the destination’s examples of cultural heritage and its most noteworthy attractions (Guidebook STGD)
- Number/percentage of communication material presenting the destination’s intangible cultural heritage and of activities publicized by the DMO that focus on cultural heritage and regional traditions (Guidebook STGD)

### Enhancing cultural heritage
- Percentage of the destination’s events that are focused on traditional/local culture and heritage (ETIS)

### Attraction protection
- Management system to protect natural and cultural sites, including build heritage and rural and urban scenic views (GSTC)
- Management system to monitor, measure, and mitigate tourism impacts on sites and attractions (GSTC)

### Visitor management
- Administrative mechanism responsible for implementing visitor management plans and operations that include measures to protect and enhance natural and cultural assets (GSTC)

### Visitor behavior
- Cultural and environmental guidelines for visitor behavior in sensitive cultural and natural sites. Interpretive information available to visitors in tourist offices and at natural and cultural sites (GSTC)
- Code of practice for tour guides and tour operators how to behave in sensitive cultural and natural sites (GSTC)

### Cultural heritage protection
- Program to protect and celebrate intangible cultural heritage (e.g. songs, music, drama, skills and crafts) (GSTC)

### 15) Mobility

#### Issue Area: “mobility”

<table>
<thead>
<tr>
<th>Criteria (components of the issue area)</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reducing transport impact</td>
<td>Percentage of different modes of transport used by tourists and same-day visitors to arrive at the destination (ETIS) (UNWTO)</td>
</tr>
<tr>
<td></td>
<td>Percentage of tourists and same-day visitors using soft mobility or public transport services to get around the destination (ETIS)</td>
</tr>
<tr>
<td></td>
<td>Average km by tourists and same-day visitors from home to the destination (ETIS) (UNWTO)</td>
</tr>
<tr>
<td></td>
<td>Average carbon footprint of tourists and same-day visitors travelling from home to the destination (ETIS)</td>
</tr>
<tr>
<td>Standards of fossil fuels consumption, air quality and noise in the destination</td>
<td>Consumption of fossil fuels for tourist transportation within the destination (categorized by transport type) (UNWTO)</td>
</tr>
<tr>
<td></td>
<td>Number of days exceeding standards of air quality in the destination (UNWTO)</td>
</tr>
<tr>
<td></td>
<td>Noise levels at critical sites in decibel in the destination (UNWTO)</td>
</tr>
<tr>
<td></td>
<td>Visitor perception of air quality and traffic noise in the destination (UNWTO)</td>
</tr>
<tr>
<td>Transport services and mobility in the destination</td>
<td>State of accessibility of the destination by public transport: frequency, capacity of services and use levels towards/from the destination (UNWTO)</td>
</tr>
<tr>
<td></td>
<td>Level of facilitation (services) of information regarding transport and mobility in the destination (UNWTO)</td>
</tr>
<tr>
<td></td>
<td>Existence and implementation of an integrated sustainable mobility concept (UNWTO) (Guidebook STGD)</td>
</tr>
<tr>
<td></td>
<td>Visitors’ perception and demand of transport services to/from/within the destination (UNWTO)</td>
</tr>
<tr>
<td></td>
<td>Number of passengers transported within the destination by local public transport for tourism/leisure purposes compared to number of visitors using individual transport (UNWTO)</td>
</tr>
<tr>
<td></td>
<td>Percentage of accommodations, tourism facilities and other tourist attractions accessible by public transport (less than 10 minutes walking distance to nearest stop) (UNWTO)</td>
</tr>
<tr>
<td></td>
<td>Visitor satisfaction with integrated public transport services (UNWTO)</td>
</tr>
<tr>
<td></td>
<td>Extent and capacity of public transport within the destination (UNWTO)</td>
</tr>
<tr>
<td></td>
<td>Percentage of visitors using alternative/soft mobility (bicycles, walking, other low energy use options) to get around the destination (UNWTO)</td>
</tr>
<tr>
<td></td>
<td>Percentage of DMO informational materials that prominently promote public transport options. Percentage of services advertised for tourists by the DMO that integrate environmentally friendly leisure-time mobility (Guidebook STGD)</td>
</tr>
<tr>
<td></td>
<td>Percentage of each category of transport in the destination that is accessible, i.e. public transport and private hire coaches, minibuses, taxis or minicabs (ETIS)</td>
</tr>
<tr>
<td>Parking spaces</td>
<td>Parking capacities and use levels (UNWTO)</td>
</tr>
<tr>
<td></td>
<td>Number and type of measures restricting car access or parking spaces (UNWTO)</td>
</tr>
</tbody>
</table>

16) Land use, spatial planning and tourism development control

<p>| Issue Area: “land use, spatial planning and tourism development control” | Criteria (components of the issue area) | Indicators |
| | Planning regulations | The destination has planning or zoning guidelines and/or regulations that protect natural and cultural resources and require environmental, economic, and social impact assessment (GSTC) |
| | Erosion | Percentage of surface in eroded state due to tourist activities and tourism related clear cutting and road construction (UNWTO) |</p>
<table>
<thead>
<tr>
<th>Indicator</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of surface without tree or shrub cover due to tourism related</td>
<td>development (UNWTO)</td>
</tr>
<tr>
<td>Visual pollution</td>
<td>Percentage of visible slopes without tree or shrub cover (UNWTO)</td>
</tr>
<tr>
<td></td>
<td>Tourist opinion of state of vistas, visual pollution, perception of visual destination quality (UNWTO)</td>
</tr>
<tr>
<td></td>
<td>Total length of roads, ski slopes and cable cars (rope ways) (UNWTO)</td>
</tr>
<tr>
<td></td>
<td>Change in visual pollution through night lighting (change over time)</td>
</tr>
<tr>
<td>Integration with the landscape</td>
<td>Percentage of sites cleared for development (UNWTO)</td>
</tr>
<tr>
<td>Physical form</td>
<td>Density of buildings per hectare (footprint and floor space per unit area) (UNWTO)</td>
</tr>
<tr>
<td>Siting and orientation</td>
<td>Percentage of infrastructure built on slopes (change over time) (UNWTO)</td>
</tr>
<tr>
<td>Development planning plan explicitly incorporating tourism</td>
<td>Percentage of area designated for tourism and other land use purposes in the plan (UNWTO)</td>
</tr>
<tr>
<td></td>
<td>Percentage of the destination with an accessible tourism strategy/action plan, with agreed monitoring, developed control and evaluation</td>
</tr>
<tr>
<td></td>
<td>arrangements (ETIS)</td>
</tr>
<tr>
<td>Extent and effectiveness of monitoring and control processes</td>
<td>Existence of zones and criteria for tourism development control in land use plan (e.g. maximum numbers of hotels or beds, density standards,</td>
</tr>
<tr>
<td></td>
<td>design control, environmental and social criteria) (UNWTO)</td>
</tr>
<tr>
<td></td>
<td>Percentage of tourism related building proposals undergoing environmental impact assessment (EIA) (UNWTO)</td>
</tr>
<tr>
<td></td>
<td>Percentage of tourism related building proposals denied or sent for revision (UNWTO)</td>
</tr>
<tr>
<td></td>
<td>Percentage of sites with regulated zoning/controls, extent of tourism use zones (UNWTO)</td>
</tr>
</tbody>
</table>

17) Visitor management, control of use intensity and territorial distribution

| Issue Area: “visitor management, control of use intensity and territorial   | Distribution”                                                                                                                               |
|                                                                            |                                                                                                                                              |
| Criteria (components of the issue area)                                    | Indicators                                                                                                                                  |
| Carryng capacity                                                          | Total tourist numbers (mean, monthly, peak) categorized by their type of activity (UNWTO)                                                   |
|                                                                            | Number of tourists per km² of the destination – mean number/peak month average/peak day (UNWTO)                                           |
|                                                                            | Density counts for vehicle (e.g. cars per minute on roads to tourist attractions) (UNWTO)                                                   |
|                                                                            | Ratio of number of vehicles per parking space (UNWTO)                                                                                       |
|                                                                            | Percentage of tourists and residents who believe that the destination is too crowded (questionnaire based) (UNWTO)                           |
18) Visitor satisfaction and behavior

<table>
<thead>
<tr>
<th>Issue Area: “visitor satisfaction and behavior”</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Criteria</strong> (components of the issue area)</td>
<td></td>
</tr>
<tr>
<td>Customer satisfaction</td>
<td>Percentage of tourists and same-day visitors that are satisfied with their overall experience in the destination (ETIS)</td>
</tr>
<tr>
<td></td>
<td>Level of satisfaction by visitors on exit (questionnaire-based survey) (UNWTO)</td>
</tr>
<tr>
<td></td>
<td>Percentage of repeat, return visitors (within 5 years) (ETIS) (UNWTO)</td>
</tr>
<tr>
<td></td>
<td>Number of complaints received (UNWTO)</td>
</tr>
<tr>
<td></td>
<td>Internet Ratings (UNWTO)</td>
</tr>
<tr>
<td>Visitor health, safety and security</td>
<td>Number of illness and death cases of tourists and the cause (UNWTO)</td>
</tr>
<tr>
<td></td>
<td>Number of visits by tourists to local doctors (UNWTO)</td>
</tr>
<tr>
<td></td>
<td>Number, type and cause of accidents/incidents involving tourists (UNWTO)</td>
</tr>
<tr>
<td></td>
<td>Number of tourists harmed (UNWTO)</td>
</tr>
<tr>
<td></td>
<td>Number and percentage of tourism establishments and attractions complying with safety and security standards (UNWTO)</td>
</tr>
<tr>
<td></td>
<td>Number of compulsory inspections of fire, food hygiene, and electricity safety for tourism properties (GSTC)</td>
</tr>
<tr>
<td></td>
<td>Number of first aid stations at tourist attraction sites (GSTC)</td>
</tr>
<tr>
<td></td>
<td>Existence of updated and publicly available crisis and emergency response plan (destination wide) that considers the tourism sector (GSTC)</td>
</tr>
<tr>
<td></td>
<td>Number of tourist harassment incidents reported (UNWTO)</td>
</tr>
<tr>
<td></td>
<td>Percentage of tourists who register a complaint with the police (ETIS)</td>
</tr>
<tr>
<td></td>
<td>Perception of level of harassment or anxiety (part of questionnaire-based survey) (UNWTO)</td>
</tr>
<tr>
<td></td>
<td>Existence and implementation of a destination-wide risk management system with regard to potential risks to visitors’ security and health (Guidebook STGD)</td>
</tr>
<tr>
<td>Quality of experience and services</td>
<td>Perception of variety of experience by tourists (questionnaire) (UNWTO)</td>
</tr>
<tr>
<td></td>
<td>Range of tourist attractions and services available in the destination classified by type (accommodation, catering, transportation, information, guiding, events, etc.) (UNWTO)</td>
</tr>
<tr>
<td>Access for all, low barrier tourism</td>
<td>Existence of policies (guidelines, regulations, etc.) supporting access to tourist sites and facilities for individuals with specific access requirements (including public transport, accommodation establishments, natural and cultural sites) (GSTC)</td>
</tr>
<tr>
<td>Criteria (components of the issue area)</td>
<td>Indicators</td>
</tr>
<tr>
<td>-----------------------------------------</td>
<td>------------</td>
</tr>
<tr>
<td>Climate change adaptation and mitigation strategy</td>
<td>Existence of an analysis on climate action and climate adaptation and mitigation strategy for the destination (Guidebook STGD)</td>
</tr>
<tr>
<td></td>
<td>Percentage of tourism enterprises in contact with the DMO that are involved in climate action and climate adaptation measures (Guidebook STGD)</td>
</tr>
<tr>
<td></td>
<td>Percentage of tourism enterprises involved in climate change mitigation schemes and adaptation responses and actions (ETIS)</td>
</tr>
<tr>
<td>Climate change and exposure to risk</td>
<td>Percentage of tourism accommodation and attraction infrastructure located in “vulnerable zones” (ETIS, UNWTO)</td>
</tr>
<tr>
<td>Degree of planning for climate change impacts</td>
<td>Degree to which key tourist zones are covered by contingency or emergency planning (% or area included) (UNWTO)</td>
</tr>
<tr>
<td>Level of damage related to extreme climatic events</td>
<td>Frequency of extreme climatic events (UNWTO)</td>
</tr>
</tbody>
</table>

19) Adaption to climate change

**Issue Area: “adaption to climate change”**

- Number of rooms in commercial accommodation accessible for people with disabilities (ETIS) (UNWTO)
- Percentage of accommodation establishments participating in recognized accessibility information schemes (ETIS)
- Percentage of public transport that is accessible to people with disabilities and specific access requirements (ETIS) (UNWTO)
- Percentage of tourist attractions that are accessible to people with disabilities and/or participating in recognized accessibility information schemes (ETIS) (UNWTO)