CESBA Alps: Guide to the adoption of territorial assessment tools

Interreg
Alpine Space

EUROPEAN UNION

CESBA Alps
Sustainable Territories

European Regional Development Fund
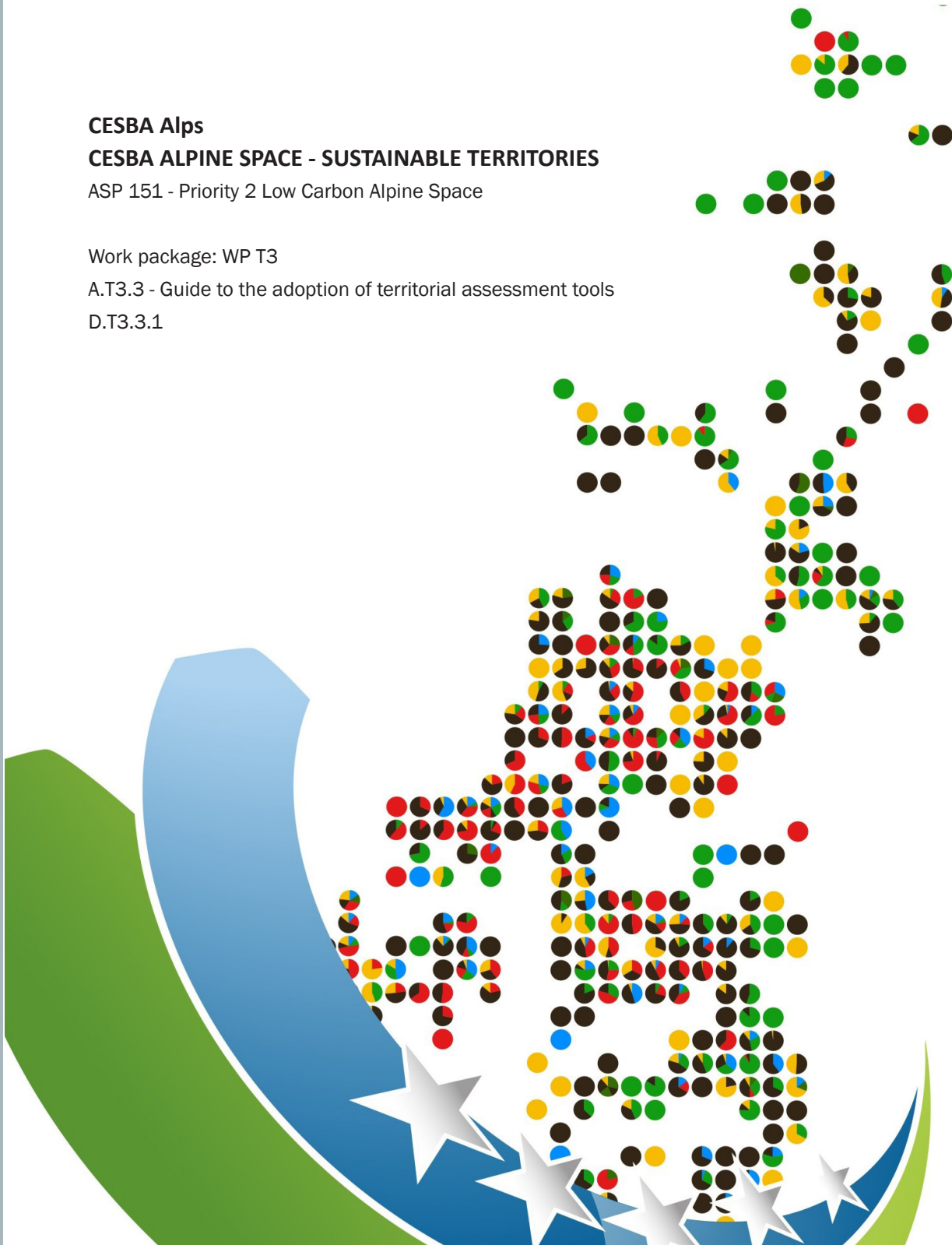
CESBA Alps
CESBA ALPINE SPACE - SUSTAINABLE TERRITORIES
ASP 151 - Priority 2 Low Carbon Alpine Space

Work package: WP T3
A.T3.3 - Guide to the adoption of territorial assessment tools
D.T3.3.1

CESBA Alps -
Guide to the adoption of territorial assessment tools

Contents

Introduction

The guide is aimed at providing policy makers with a support tool for the concrete application of the sustainability assessment methodology developed within the CESBA Alps initiative, with the aim of supporting them:

- in the identification of sustainable development objectives for the main sectors;

- in the participation of specific policies also proposing alternative solutions that promote sustainable development as well as reducing any conflicts between economic and environmental objectives;

- in monitoring and evaluation of the policies in progress and ex post and minimize critical or risk situations in relation to sustainability objectives using the tools provided by CESBA Alps

The guide structure is the following:

- Generic framework in which the project is included (Alpine Space, CESBA Initiative..)

- WHAT? What is CESBA Alps project (ojectives and results)

- WHERE? Where CESBA Alps tool can be implemented

EU Framework

- TA2020 - Territorial Agenda of the European Union 2020 (2011)

- CESBA Initiative - Common European Sustainable Buildings Assessment (2012)

- KITKASP - Key Indicators for Territorial Cohesion and Spatial Planning, ESPON (2013)

- Transforming our world: the 2030 Agenda for Sustainable Development" (2015)

- European Commission Communication: "Next steps for a sustainable European future" (COM (2016)739)

- HOW? How to integrate and use CESBA Alps tool into local policies

- TIPS&TRICKS: Conclusions and recommendations

The CESBA initiative

CESBA stands for Common European Sustainable Building Assessment and represents a bottom-up initiative towards promoting a harmonization of sustainable building assessment throughout Europe.

CESBA started as a loose initiative between sustainability experts in 2012. In 2015, it was formalized by the foundation of an association located in Schwarzenberg in Vorarlberg, Austria.

The vision of CESBA is a Europe where high quality living in a sustainable built environment is the common standard practice. CESBA's mission is to facilitate the diffusion and adoption of sustainable built environment principles among all stakeholders of the built environment sector through the use of harmonized assessment systems in the whole life cycle of the built environment.

Climate Challenges in the Alpine Space

- Temperature in the Alps has risen by almost 2 ° C in the last 120 years - double of the global average

- People living in the Alps consume 10% more energy per capita than the average European

Climate Change in the Alps

The need for a low carbon economy in the Alps is urgent. During the last 120 years, the average temperature in the Alps has risen by almost 2 ° C, which is almost double the global average. The change caused by that endangers many inhabited areas in the Alps – many studies show that global warming increases the risk for floods, avalanches, and landslides.

At the same time, some of the problem is homemade. People living in the Alps consume around 10 % more energy per capita than the average European. This of course has to do with the peculiarities of living in remote rural regions: Less dense housing areas, more need for mobility, less public transport, less joint facilities, and all above that the harsh climate of the Alpine space.

What is CESBA Alps project?

11 project partners successfully handed in an EU Interreg Alpine Space project called "CESBA Alpine Space – Sustainable Territories" (CESBA Alps).

The project started in December 2015 and ended in June 2019. It had a total budget of 2.60 mio. EUR, out of which 2.21 mio. EUR were co-financed by the European Regional Development Fund (ERDF) of the European Union under priority 2 – low carbon Alpine Space. The Lead Partner role was taken over by the Environment and Territorial Government Directorate of Piedmont Region in Italy.

The 11 partners subsequently created CESBA Local Committees (CLC) and tested methods in parts of the 9 following regional entities:

- Piedmont, Lombardy and Veneto regions (Italy),
- Auvergne Rhône-Alpes and Provence-Alpes--Côte d'Azur regions (France),
- Chiemgauer Alpen region (Germany),
- Vorarlberg (Austria),
- and the states of Slovenia and Liechtenstein.

Project Partners

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Bregenzerwälder Bergpanorama / Archiv: BB Diedamskopf

As a first step, CESBA Alps decided to create a common generic framework for future sustainability assessments. Under this framework, the sustainability of territories may be assessed in a way which makes the results comparable amongst each other but at the same time the assessment may be contextualized to the local situation.

For comparability, though, it is important to agree on a shorter and operative list of criteria that are manageable for data collection and calculation and need to be assessed by everybody. These so-called Key Performance Indicators (KPIs) are those criteria that are mandatory or at least recommended to be assessed in order to make the results of the single territorial assessments comparable to each other.

The results of the testing of the KPIs in the nine regional entities showed that all KPIs proposed should be kept, even though some of them could not be properly calculated so far or had to be modified. In the end, the project partners agreed on a list of 19 mandatory and 10 recommended KPIs. All KPIs are part of the territorial performance assessment module.
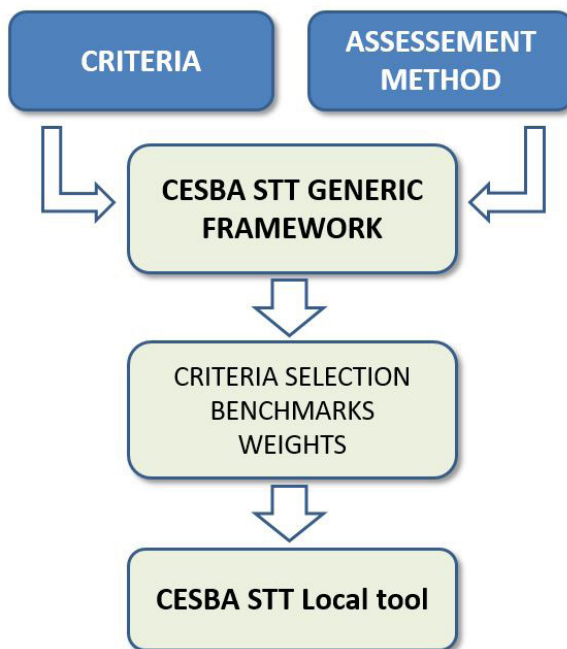
CESBA Alps objective is to facilitate the development and implementation of policies and strategies at territorial level based on common assessment tools. Focus of the tools is the relation between the built environment and low carbon sustainable territories. The tools system developed includes:

- 1 CESBA STT Generic Framework

- 9 CESBA STT Regional evaluation tools (1 per each of the PPs)

- 1 CESBA Passport

The CESBA STT Generic Framework is a transnational, common and generic multi-criteria assessment system designed as a reference system of criteria and indicators to guide the implementation of sector and cross sector policies in any Alpine Space territory. The CESBA STT Generic framework is not an operational tool but through a process of "contextualisation", a specific, harmonized and operational CESBA STT Regional tool can be generated. The contextualisation includes selection and weighting of the criteria contained in Generic Framework.

The CESBA Passport is a core set of criteria and indicators identified by partners within the CESBA STT Generic framework as relevant and applicable at transnational level for the Alpine Space, its Key Performance Indicators (KPIs) set is included in any generated CESBA STT Regional tool.

Following the principle of place-based policy the selected criteria should be able to evaluate the territorial implementation of the strategic objectives and

CESBA Passport and CESBA Atlas

- **The CESBA Passport may easily be generated using an automatized (online) tool creating standardized graphs and tables.**

  Website: https://tool.cesba.eu/login

- **The CESBA Atlas, a tool based on a Geographical Information System (GIS), helps to visualize the results of the territorial assessment on cartographical maps.**

orientations of sector and cross sector policies at local level.

The CESBA STT Generic Framework is organized in three modules:

- Information

- Capacity to Act

- Territorial Performance Assessment

The "Information module" provides context related information useful to understand the key characteristics of the territory under assessment. The module is composed by a set of indicators that describe the territory from the point of view of climate, land characteristics, natural risks, demography and renewable energy potential. All these aspects are in general not modifiable and represent an identity card of the territory. The Information module doesn't produce a rating score.

The "Capacity to Act" module allows to measure and to score the effectiveness and quality of local policies in terms of participation and governance. It contains 28 criteria. Each of them is associated to an indicator, quantitative or qualitative, that allows to measure the performance reached by the territory. Complementary to the indicators of the "Capacity to Act" module is the SHARK methodology that is based on an interview approach and it is targeted to communities.

The"Territorial Performance Assessment" (TPA) module allows to measure the performance reached by a territory concerning 5 main issues and to give a rating to it. The 5 issues are: Territories and Environment, Energy and Resources, Infrastructures and Services, Society, Economy. The module contains more than 250 assessment criteria and relative indicators organized in 31 categories. All criteria measure an objective performance on the base of a specific assessment method. The TPA module basically measures "physical" quantities.

This module hasn't a prescriptive nature but instead it allows to measure the actual sustainability of a territory and its potential future performance on the base of possible scenarios. For this reason, the TPA module is very useful to support decision making processes at territorial level. Its application can make a public authority aware about the actual level of sustainability of the territory and it can support a decision-making process targeted to identify the best

strategies to improve its quality.

CESBA ATLAS, finally, provides an adaptable model for local and regional government and non-government organisations, in order to:

- Visualise sustainable development indicators through geo-referencing the statistics across thematic mapping layers

- Conduct comparisons between regions or local territories

- Link to CESBA Passport for graphical analysis

- Assist local and/or regional planning and inform planning policy

- Conduct public communication – to share and to publish

- Monitor sustainable development trends.

ISSUES

A TERRITORIES AND ENVIRONMENT	B ENERGY AND RESOURCES	C INFRASTRUCTURES AND SERVICES	D SOCIETY	E ECONOMY

CATEGORIES

A	B	C	D	E
A1.Land	B1.Energy Consumption	C1.Mobility	D1.Demography	E1.Local Economy
A2.Water Quality	B2.Sustainable Energy	C2.Leisure services	D2.Socio-Economic Aspects	E2.Actions for innovations
A3.Nature and Biodiversity	B3.Water Consumption	C3.Health services	D3.Cultural Aspects	E3.Tourism
A4.Landscape	B4.Land and Building Stock Use	C4.Education	D4.Land Use	E4.Agriculture
A5.Waste		C5.Efficiency and Security of Infrastructures	D5.Antropogenetic Risks	E5.Industry
A6.Effluents		C6.Information and Communication		E6.Trade commerce
A7.Contamined land		C7. Basis - Infrastructure		
A8.Emissions				
A9.Quality of air				
A10.Exposure to non ionising radiation				
A11.Exposure to ionising radiation				
A12.Exposure to noise				
A13.Industrial azards				

Mandatory KPIs

Issue	Category	Criterion
Territ. and environment	Land	A1.6: CO2 sequestration through bio-sequestration
	Water quality	A2.4: Good ecological status: surface water bodies
	Water quality	A2.7: Good ground water body chemical status: groundwaters
	Nature/biodiv.	A3.1: Green infrastructure
	Landscape	A4.6: Protected natural heritages
	Landscape	A4.7: Protected cultural heritages
	Waste	A5.6: Recycled share of produced waste
	Emissions	A8.1: Greenhouse gas emissions
	Quality of air	A9.1: Exposure to air pollution
Energy/resources	Energy consumption	B1.1: Final energy consumption
	Energy consumption	B1.8: Primary energy consumption
	Energy consumption	B1.20: Degree of renewable energy consumed
	Water consumption	B3.1: Consumption of water
	Land/building stock	B4.6: Intensity of land use
Infrastructures/Service	Mobility	C1.11: Modal split of public transport
Society	Socio-economic aspects	D2.3: Poverty and social exclusion
	Socio-economic aspects	D2.19 Occupation by gender
	Socio-economic aspects	D2.20 Gross income
Economy	Agriculture	E4.2 Organic farming

Recommended KPIs

Issue	Category	Criterion
Territ. and environment	Exposure to noise	A12.1 Exposure of households to noise
Energy/resources	Land/build. stock	B4.1 Efficiency in the use of existing residential buildings
	Land/build. stock	B4.2 Efficiency in the use of existing non-residential buildings
	Land/build. stock	B4.16 Recycled share of construction waste
Infrastructures/Service	Mobility	C1.2 Performance of the public transport
Society	Demography	D1.1 Population balance
	Demography	D2.27 Employment rate (15-64 year olds)
	Demography	D2.29 Design for all
	Local Economy	E1.17 Assessed sustainable standard
Economy	Tourism	E3.16 Sustainable tourism

Where CESBA Alps STTool can be implemented?

A screening of existing regional policies – both special and sectoral development, like for energy or mobility – in the nine Alpine regions represented by the project partners has shown that all deal with sustainability issues and goals. This is why the CESBA Alps STTool has the potential to become an important strategic tool for local and regional policy makers to get a holistic picture of the state of sustainability of their municipalities and regions. This is why it would be desirable to make the CESBA Alps STT part of the monitoring schedule of those regional plans.

The key decisions that need to be taken for this are to provide the regional authorities with sufficient resources to monitor the development of the tool, both in terms of staff and finances. It is necessary to make sure that the necessary data may be collected and updated continuously. Most of all, regions working with the CESBA Alps STTool need sufficient staff resources to do and coordinate the work, financial resources to set up and maintain data collection – also creating ways to collect data that are so far not available but are considered important for the tool itself– and political and legal support to overcome
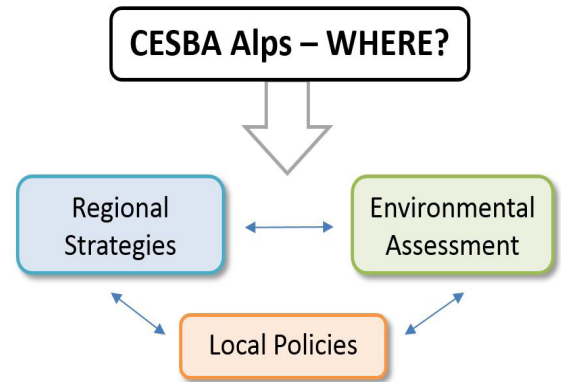
problems with ownership of certain data or data protection issues.

CESBA Alps is also open to certifying territories in terms of sustainability.

Examples of implementation in partner regions:

1. Support and monitor of _Regional Strategies_ on Sustainable Development, Climate Change, Energy, Environment, Social-economy and Transportation at regional level.

2. Monitor territorial implementation of Regional strategies at local/municipal level, creating a _link between Regional and Local_ levels; CESBA could be the common tool to evaluate sustainability aspect in policies of different levels.

3. Support and monitor _Local Plans_, for example:

   - Local energy plans (SEAP)

   - Touristic policies

   - Connectivity plans for rural areas

   - Territorial plans for mountain areas (alpine space)

4. Improve/update of _Environmental Assessment_ instrument (SEA, IEA, EIA) and their indicators set.

Territorial Needs

- **Sufficient resources to monitor the development of CESBA Alps STTool and KPIs implementation:**

     - **Staff resources**

     - **Financial resources**

- **Creating ways to collect data that are not available so far;**

- **Updating data more frequently;**

- **Political and legal support for overcoming ownership or data protection issues.**

How to integrate CESBA Alps STT into local policies?

Policy makers and technicians can integrate this system into their local policies to orient planning and strategic choices, in two different ways:
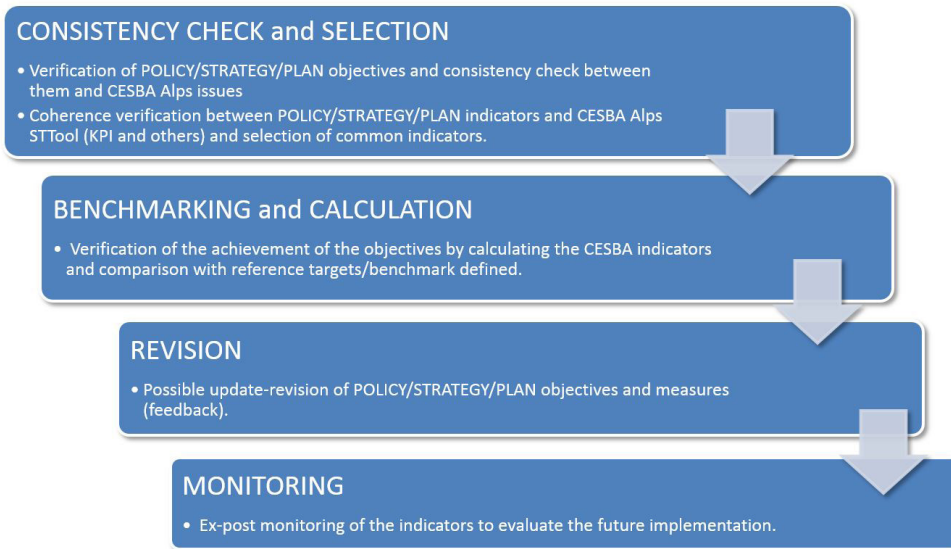
1. Integrate CESBA STTool in existing indicator systems.

2. Create new indicators system/tool in order to evaluate policies and sustainable objectives in any sector (Energy, Environment, Economy, Transport etc..)

Contextualisation in local context is really the most important added value of CESBA STT with many benefits.

This is the process to follow in order to implement the STTool in your policies.

The first step consists into a *Consistency check and a Selection of criteria* to input in the online tool (https://tool.cesba.eu/login).

A consistency check between the objectives of the specific policy to which the CESBA STTool and the CESBA strategies will be carried out through the compilation of a matrix with an analytical approach, aimed at transparently summarizing the estimate of consistency between sustainability policies and the CESBA Alps issues.

CONSISTENCY CHECK and SELECTION
- Verification of POLICY/STRATEGY/PLAN objectives and consistency check between them and CESBA Alps issues
- Coherence verification between POLICY/STRATEGY/PLAN indicators and CESBA Alps STTool (KPI and others) and selection of common indicators.

BENCHMARKING and CALCULATION
- Verification of the achievement of the objectives by calculating the CESBA indicators and comparison with reference targets/benchmark defined.

REVISION
- Possible update-revision of POLICY/STRATEGY/PLAN objectives and measures (feedback).

MONITORING
- Ex-post monitoring of the indicators to evaluate the future implementation.

It allows the possibility for territories (whatever their size) to adapt the set of criterias to their specific needs and policies by :

- selecting criterias related to local situations

- normalizing the results to obtain comparable results between territories

- assignating weights to take into account priorities

The pilot test on 11 various territories selected by the partners demonstrates the capacity of the CESBA Alps STT to be adapted to the multiple situations that can be found around the Alpine Space.

The verification can result in a summary judgment of:

- coherence with the strategies implemented by the reference instruments;

- possible inconsistency with the strategies implemented by the reference instruments;

- non-applicability of CESBA Alps strategies to reference policies.

The criteria will be selected from the whole list of the "Information", "Capacity to act" and "Territorial Performance Assessment" modules (more than 250). Each regional authority or third party can freely select the active criteria on the base of its needs and

objectives. There isn't a minimum number of criteria to be selected. The local systems can widely vary from this point of view.

In order to select criteria and indicators, it's recommended to proceed with a new consistency check between CESBA Alps indicators of selected issues and your policy objectives.

The second step provides the _Benchmarking and Calculation_ of the so-selected indicators through the online tool (for more information see deliverables D.T1.4.1 - STT Generic Framework Software - USER GUIDE).

It's necessary to calculate the single indicators before proceeding with the input into the online tool, afterwards it is possible to perform two different, but fundamental, procedures:

- Weighting

- Benchmarking

The benchmarking phase consists in the definition of the scoring scale for each selected criterion. The benchmark is a quantification of the indicator's value corresponding to the minimum acceptable performance and the one that is considered the best at regional level. Benchmarks can't be the same at transnational level because the local conditions of each region are different (climate, building practice, standards, level of advancement in the sustainability field, etc..). The scoring scale used in the CESBA STTool ranges from -1 to 5. Where 0 represent the minimum acceptable performance, 5 the excellence, 3 the best practice and -1 a negative performance.

The weighting, instead, consists in the assignment of a weight to each criterion, category and issue. The weight is expressed as a percentage. This process allows to align the assessment tool to local environmental, social and economic priorities, giving different weights to policies based on phenomenon entity, level of importance and contextualization.

The sources of benchmarks and weights are: (in order of relevance)

1. National / International / Regional regulations that set threshold not to be crossed (limits);

2. Regional strategies and policies;

3. Experts/stakeholders suggestion;

4. Regional minimum and maximum value obtained from calculation.

It's recommended to involve citizens and stakeholders (participation process) in order to contextualize weights or benchmarks to the real needs of a territory.

Through the CESBA STT Generic Framework all regions in the alpine space can share common assessment methodologies, criteria and indicators. It means to speak the same language. The results of all local assessments will have the same meaning. This aspect will facilitate the transnational cooperation. In the same time, the assignment of local benchmarks and weight allows to reflect the local conditions.

Below, an example of matrix is reported in order to facilitate the comprehension. This is the example for the consistency check phase and criteria selection.

CESBA Alps Strategy (ISSUES) Objectives of Policy/ Strategy/Plan		A – TERRITORIES AND ENVIRONMENT	B – ENERGY / RESOURCES CONSUMPTION	C – INFRASTRUCT URES / SERVICES	D – SOCIETY	E – ECONOMY
THEMES	OX.X					
	OX.X					
	OX.X					
	OX.X					
	OX.X					
ETC.	ETC.	ETC.				

After the contextualization and and setting of benchmarks and weights, the real assessment could be executed. The results, as already mentioned are scores between -1 and 5. Furthermore, the online system is giving back some relevant graphs and info to support the numeric results.

The last steps – _Revision and Monitoring_ – allow to update/review policies objectives and measures.

The CESBA STTool will be integrated as a mechanism to control the effects of policies in relation to the objectives of sustainability and low carbon. In other words, the tool will be used to monitor the performance of policies/strategies in terms of sustainability, mitigation, adaptation and resilience.

The support tool for the monitoring stage will be a matrix which will compare the effective performances of the planning tool/local evaluation mechanism with the CESBA STTool indicators' benchmarks.
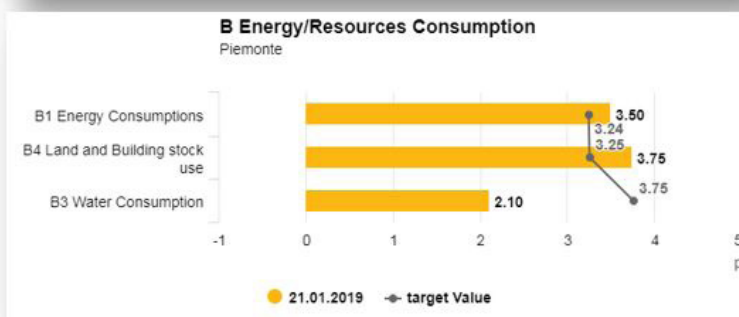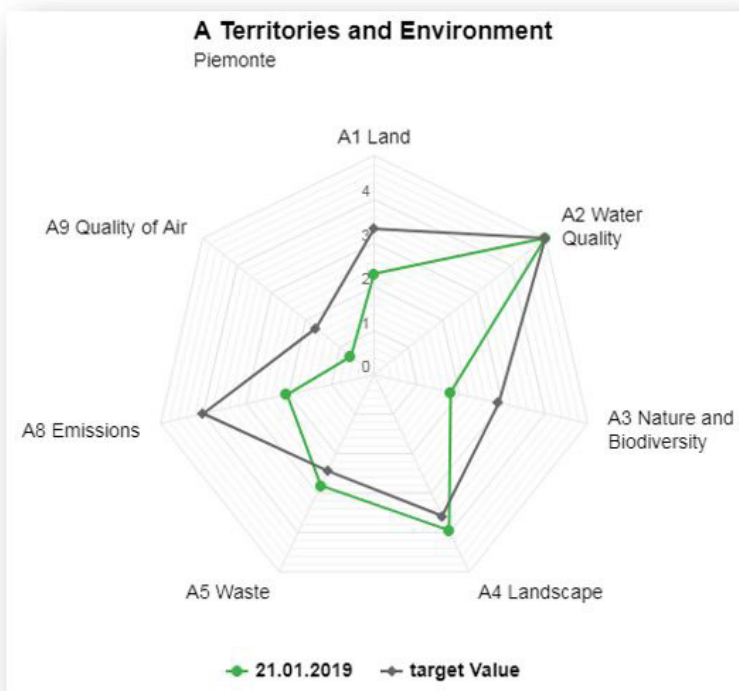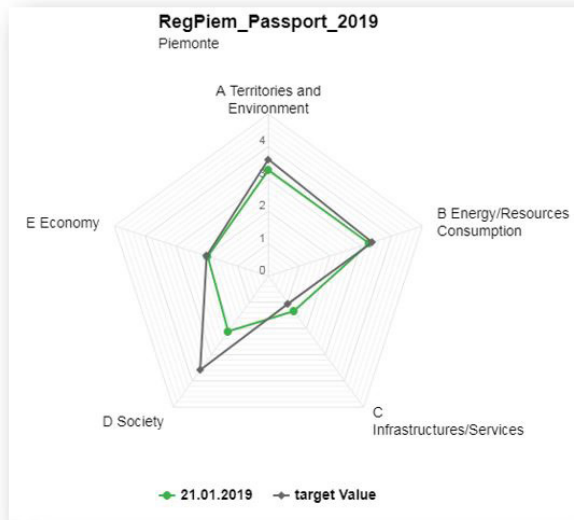
Conclusions and recommendations

CESBA Alps STTool suggests a system of criteria and indicators to help territories in order to assess/define their priorities and elaborate better strategies or measures focusing on sustainability.

The implementation of this instrument could help to check the sustainability of a Region and its planning systems but also of local context such as Municipality, focusing on regional priorities and how it aligns with the regional vision.

Moreover, a constant use of the tool in different years could bring the users to a better observation of the regional/territorial performance, analysing previous results and define new target values for the future (periodic assessment).

The STTool provides the opportunity to diagnose deficits and to develop new sustainable measures. It should facilitate the communication between stakeholders and public system, improving collaboration.

Finally, the public authority can provide more transparency for political decisions through a correct and steady reporting phase.

However, the project partners recognize some relevant issue that have to be improved in order to use the tool in everyday work.

- Indicators: too global for local level, update frequency/periodic assessment, data privacy and management

- Human and economic resources: additional workload, initial training.

- Communication and Integration with existing indicators framework: results too technical.

- Online tool use: too rigid and slow; it has to be more user frienldy, self-explanatory and intuitive.

Tips & Tricks

From partners experience gained and from CESBA Alps pilot testing, here are some basic tips and suggestions that can be useful to anyone who wants to approach the method and STTool introduced in the framework of CESBA Alps project:

- Choose CRITERIA/INDICATORS easy to calculate, in limited number and with higher update frequency (annually is the best option) in order to make useful the implementation of the online tool and avoid waste of time and money;

- Choose also a limited number of CATEGORIES in order to focus your effort and reach strong results;

- Try to standardize the SOURCES of Indicators in order to make the data as homogeneous and comparable as possible;

- Involve stakeholders of territories in the implementation process (PARTICIPATION PROCESS) especially in weighting and contextualization phase;

- Define BENCHMARKS that are clear, understandable and shared by all stakeholders (realistic thresholds);

- Use CESBA Alps STTool to help territories to establish a common state of sustainability, share it in an easy way with their stakeholders, benchmark it with other territories and use it to define objectives and measures to improve their sustainability.

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The opinions expressed are those of the author(s) only and should not be considered as representative of the Interreg Alpine Space Programm.

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