

# ASTUS

## transnational conclusions report and recommendations



**Interreg**  
Alpine Space



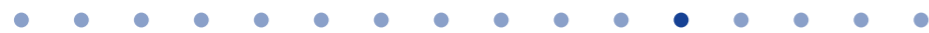
EUROPEAN UNION



RÉGION  
BOURGOGNE  
FRANCHE

**SYSTRA**

# INTRODUCTION



## 1.1. What is the ASTUS Project?

ASTUS aims to help local authorities to identify and implement long term solutions in both mobility and spatial planning to reduce the CO2 impacts linked to daily trips in the Alps.

Alpine territories are very attractive for touristic, economic, and housing reasons. An increase in traffic volume, established mobility behaviour using the private car, over-saturated road networks and higher levels of CO2 emissions are challenges of the future. The spreading of housing and car dependent structures often compels inhabitants to use their own car for daily trips. This has negative consequences from an environmental, economic, spatial and social perspective, and contradicts the sustainable development of alpine space. ASTUS assisted local authorities in identifying and adopting an adequate local low CO2 strategy and action plan, in order to foster long term low CO2 options. By working on different Pilots Sites as a sample, project partners defined transnational solutions, as ASTUS covered smart options from a sustainable perspective fitting to different alpine territorial types. Transferable instruments were created for any alpine region willing to evaluate and improve its CO2 footprint.

A transnational approach, cross-sectoral competencies, skills and experiences were needed to improve the current situation and meet the objective. Main target groups are local authorities and multipliers acting at all governance levels which enabled Project Partners to reach ASTUS beneficiaries (citizen). Transnational bodies are also targeted and were observers. Target Groups benefited from the project through decision making tools, expertises, exposure to best practice examples and education (ASTUS schools). Main outputs were:

- ✓ ASTUS territorial alpine space typology representing different alpine territories regarding transport and settlement planning
- ✓ A toolset of "ASTUS CO2 minimizers" estimating CO2 effects and costs of potential mobility and spatial planning solutions
- ✓ A transnational methodology for building low CO2 scenarios : the ASTUS Low CO2 methodology
- ✓ Local scenarios-strategies-action plans built by the Pilot Sites following the ASTUS Low CO2 methodology
- ✓ ASTUS Transnational recommendations.

## 1.2. Document purpose



The purpose of this document is to present the ASTUS Low CO2 methodology principles and to share conclusions and recommendations drawn from the experiences of the 13 Pilot Sites who applied this methodology from 2017 to 2019, during the course of the ASTUS Project.

It is set to guide and help you in the application of this methodology and the production of solutions, using these previous experiences. It presents recommendations based on these multiple experiences, and highlights if the Pilot Site's Region type has an impact on the solutions.



## 1.3. Who is this document intended for?

### 1.3.1 / Target groups of the ASTUS project

The target groups of the ASTUS project were local public authorities, involving both technicians and elected representatives in a cross-sectoral approach of spatial planning and transport experts. It also targeted multipliers at local (e.g. mobility agencies), regional (e.g. regional institutions), national (State bodies) and transnational levels (e.g. EUSALP, CIPRA NGO), as well as European networks (NECTAR, EPOMM). Citizens are not a target group but beneficiaries of ASTUS.

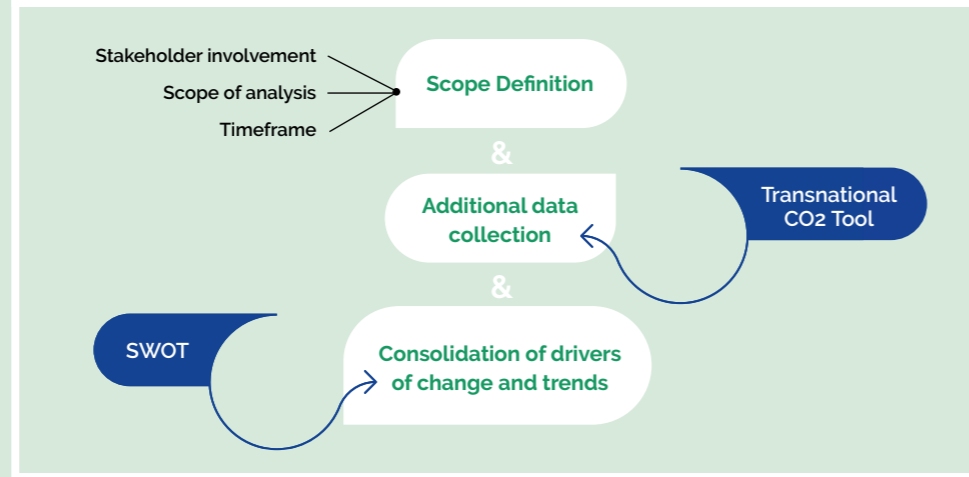
### 1.3.2 / Target groups of this document

This document is intended for any individual or entity acting on an Alpine Space territory whose profile is the same as that of the target groups' of the ASTUS project, wanting to reproduce the methodology which was used during the ASTUS project for its own territory.

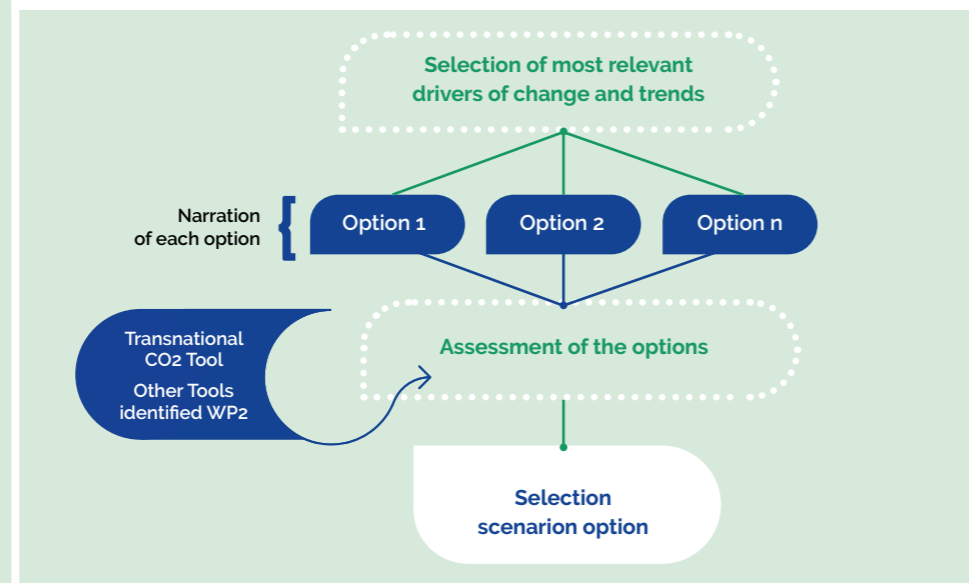


The ASTUS Low CO<sub>2</sub> methodology paper presents the key concepts (scenario, strategy and action plan) which is followed by the methodological framework and output frame sheets. A methodological proceeding to carry out the local low CO<sub>2</sub> scenario – strategy – action plan process with working sheets can be found in the appendices of the paper.

### PRELIMINARY WORK



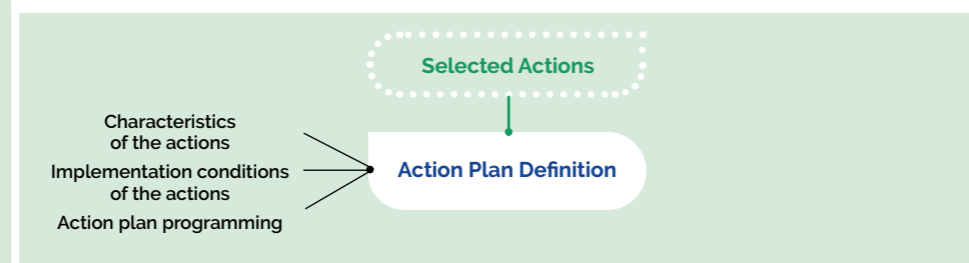
### LOCAL LOW CO<sub>2</sub> SCENARIO BUILDING



### LOW CO<sub>2</sub> STRATEGY



### LOW CO<sub>2</sub> ACTION PLAN



The components and templates of the methodology help to plan and document the process.

✓ The ASTUS Low CO<sub>2</sub> methodology Paper: "Elaboration of Local Low CO<sub>2</sub> Scenarios & Identification of ASTUS Low CO<sub>2</sub> Strategies and Elaboration of Action Plans" is available ([see "external resources"](#)).



ASTUS low CO<sub>2</sub> methodology detailed framework from the ASTUS paper "Elaboration of Local Low CO<sub>2</sub> Scenarios & Identification of ASTUS Low CO<sub>2</sub> Strategies and Elaboration of Action Plans"



## 1.4. What is the ASTUS Low CO<sub>2</sub> methodology?

The purpose of the ASTUS Low CO<sub>2</sub> methodology is to build low CO<sub>2</sub> scenarios, strategies and action plans. The aim was to develop a support to help alpine local authorities in defining and implementing relevant long-term solutions for a low CO<sub>2</sub> approach of mobility, combining transport and spatial planning solutions.

The scenario-based approach is an open approach that considers multiple strategy options and takes multiple perspectives into account. It allows to develop a mid- and long-term vision of what the future might look like. It helps the local stakeholders to consider the range of plausible

futures, to articulate preferred visions of the future, to develop a strategy to attain the desired future and to find solutions to prevent unwanted phenomenon. The method helps in the decision-making process.

The ASTUS Low CO<sub>2</sub> methodology is based on the implication of local stakeholders, through workshops. They define together a scenario of the future of their Pilot Site, then the global strategy to implement to reach this desired future and finally they detail the actions to realize to achieve this strategy.



# CAN MY TERRITORY USE THIS METHODOLOGY AND HOW?



## What type of process is to be used?

A collaborative approach is strongly recommended to make local stakeholders join the conversation. Various measures can help in that purpose such as meetings, workshops, surveys. The ASTUS Low CO2 methodology is based on a collaborative approach and can be freely adapted to suit your needs.

A territory or Pilot Site can be divided into several other sites where to implement the ASTUS Low CO2 methodology. In one Pilot Site case, after some initial coordination meetings with the managing director, some initial workshops were held with several regional and local stakeholders (such as mayors) in the Pilot Region. In this way concrete regional and local issues emerged as interesting Pilot Site topics and as a result local stakeholders involved themselves actively in the ASTUS Pilot Site activities. After the process at the Pilot Site scale, two issues arose at local scale which were specifically developed.

## Can my territory use this methodology?

The methodology can be **used freely by any kind of territory**. It is a tool set to help you in the development of your sustainable mobility strategy.

Your territory doesn't need to have clear transport competences or a precise transport governance hierarchy. Local stakeholders can also gather around an entity without a decisional power regarding transport and mobility (such as a national park). It will still **allow them to start a conversation regarding low CO2 transport and mobility** and can help them get a new and fruitful perspective on their territory.

## Are there any examples or tools to guide me in the process?

You can compare your methodology and results to Pilot Sites who used this methodology during the course of the ASTUS project.

The ASTUS Low CO2 methodology paper "Elaboration of Local Low CO2 Scenarios & Identification of ASTUS Low CO2 Strategies and Elaboration of Action Plans" will guide you, together with the rest of the ASTUS products, including the examples of ASTUS Scenarios, Strategies and Pilot Sites produced by the Pilot Sites during the course of the ASTUS project.

Available resources are linked below [\(see "external resources"\)](#).





# RECOMMENDATIONS REGARDING THE USE OF THE ASTUS LOW CO2 METHODOLOGY

Thirteen Pilot Sites from Austria, France, Germany, Italy and Slovenia, used the ASTUS Low CO2 methodology during the three years of the ASTUS project. The main conclusions and recommendations of their work are here summarized.

## How can I consider my territory's specificities?

A planning horizon is proposed in the methodology (2025, 2030, 2035) but **it is recommended you adapt it to your needs and local planning strategies.**

This is a transnational methodology, meaning that some expressions can also refer to different local planning expressions (e.g. "action plan" can imply a specific governance involvement). If any of these expressions locally trigger a meaning different from what is intended, it is recommended you adjust and adapt them to a more suitable local expression.

## What if the methodology asks for an approach that is more detailed than what my territory can provide?

**The methodology is set to guide and help you. You do not have to answer every step of the methodology** (for instance: reference scenario, assessments, detailed feasibility,

etc.). These steps are recommended for a general and complete approach, but none are compulsory.

**Still, it is recommended to follow the steps of scenario-strategy-action plan to help define concrete actions later.** Some French ASTUS partners noticed that some stakeholders tended to focus directly on the definition of concrete actions, without working on the scenarios and strategies. Nevertheless, the participants were encouraged to focus on the scenarios and strategies first. Indeed, one of the benefits of the ASTUS methodology that was revealed by the project experience is to raise issues and questions before constructing the action plan, through a clearly structured preparatory work.

The ASTUS Low CO2 methodology provides an output frame for an action plan for which each action is rather detailed. During the course of the ASTUS project, it was noted that stakeholders' knowledge was often not sufficient enough to develop and specify all of the possible details. **The output frame is set to guide you through filling in what can be filled in but no item is compulsory.**

## What kind of stakeholders can I involve and how ?

You can involve as many local stakeholders as you want. **The type of stakeholders to involve are at your own choice as you are the most aware of the necessities.** The results and outcomes of a productive involvement process are not dependent on the number of stakeholders, but rather on the type of stakeholder. Some Pilot Sites predefined the type of stakeholders they wanted to involve while others involved a larger audience. Some German ASTUS partners chose to involve mainly the Pilot Site responsables / planners to come up with concrete solutions, as in their context they were assumed to serve as a bridge between the elected representatives and citizens.

The **participative process allows stakeholders to interact and progressively build trust.** It is also an opportunity for them to gain knowledge and expertise. In the case of the Novo Mesto Pilot Site, it was noted that the ASTUS process, contributed to strengthened communication and collaboration between municipal departments as well as to bringing closer, and in some cases upgrading, of the existing strategic documents and their implementation.

Depending on the context, a process independent of elected representatives involvement can make it harder for the results to be shared and later implemented.

It can also be interesting to mobilize stakeholders from neighbouring areas or from larger areas in which the Pilot Site is included.

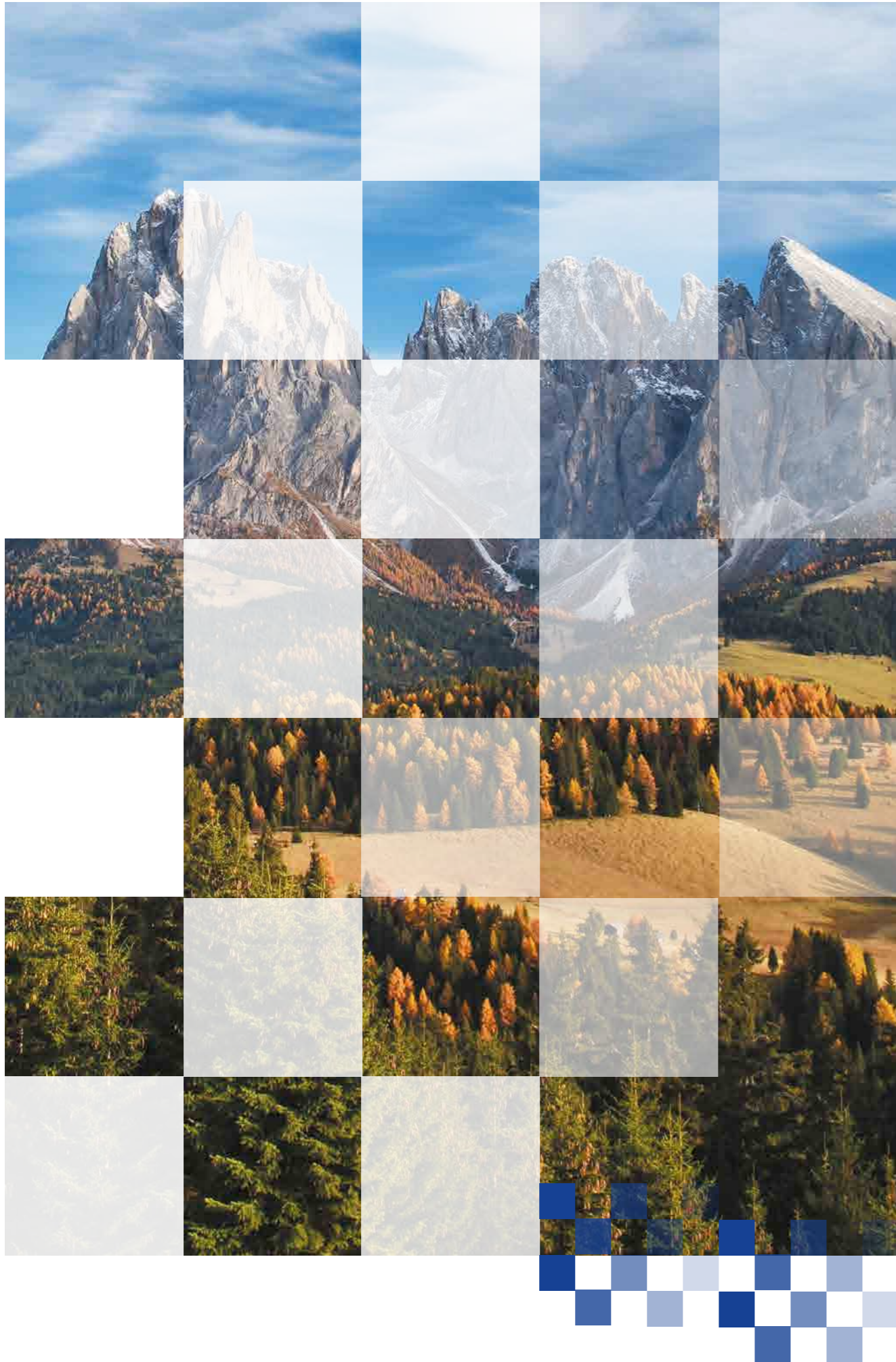
From these different perspectives, diverse types of action plans were produced, some

more general and others with a more concrete and closer approach in the explored themes. The second ones are believed to be a step closer to the implementation but both approaches are valid in the sense that they **both allow for stakeholders to share their views on a territory and build together an action plan to improve what is at stake.**

Two Pilot Sites obtained political support through the presentation and validation of action plans during city councils. Involvement of a contact point in each Pilot Site and the participation of elected representatives in the workshops is very important in achieving this support.

Watch out for a too high number of stakeholders which can make the workshops more complicated and less productive.

**It is recommended that for each Pilot Site, a contact point, involved in the project, coordinate your activities and ensure the mobilization of local stakeholders.**



## What kind of format and animation methods can I use for the workshops ?

Many kinds of formats and collaborative organization methods are possible (Metaplan, World café, etc.). Examples of format and animation methods are presented in the ASTUS Low CO<sub>2</sub> methodology paper and in the Pilot Sites' outputs. Animation methods shall be prepared ahead of the workshops. **They shall aim to get to a productive output but also to allow stakeholders to express themselves freely and to make them want to come** to the next workshop. Appropriate animation techniques during the meeting are a key element to facilitate dialogues and exchanges between participants and foster brainstorming activities, without participants losing interest in the topic.

Some effort and research can be necessary beforehand, for instance to connect the components of the ASTUS Low CO<sub>2</sub> methodology with existing local, regional and national strategies, planning objectives and masterplans, so as to develop a good starting point or discussion material to discuss the components of the methodology with the stakeholders. Therefore, it is recommended to invest some extra time to put your project's aims and potential activities in context with local and larger planning objectives and directives before the workshops. This preparation time can also be used to produce specific territorial or mobility analysis which can help raise interest from the workshops' participants and guide them towards the proposal of solutions with a better understanding of the context.

**A technical assistance can provide real input** to the approach, by working between workshops on several subjects: for instance, making specific research on a tech-

nical topic or a topic whose leader cannot take part into one of the workshops, etc.

Workshops can be held with bigger or smaller groups of stakeholders. If the work is shared between several small groups, a time shall be dedicated to synthesizing, eliminating duplicates, identifying a common vision etc.

The workshops allow many ideas to be expressed, but the immediate result can feel a bit disorganized for lack of a precise formulation, lack of time etc. Time was generally required after the workshops to consolidate the ideas expressed by the group into a solid and cohesive output.

The number of workshops and their duration shall be appropriate to the ASTUS Low CO<sub>2</sub> methodology (scenario/strategy/action plan framework). The number and duration of workshops may vary according to your local culture or circumstances, animation method and the technical preparation but it is important to keep a realistic number and duration of workshops, in accordance with the stakeholders' availability and schedule, as well as your own. For instance, some Austrian ASTUS partners recommend organizing 3-5 workshops in maximum, focused on the topics and lasting not longer than 2h, in part because the contribution in the ASTUS project is voluntary and because many of the local stakeholders of their Pilot Site were unsalaried.

**You have to find the right balance between an extensive study and a realistic work organization and duration, in line with the stakeholders' possibilities and aspirations.**

How can I deal with governance challenges ?



The ASTUS Low CO2 methodology voluntarily **doesn't give specifics** regarding the types of governance to involve. Every Pilot Site was differently advanced in mobility and spatial planning issues.

For instance, some French ASTUS Pilot Sites had mobility governance responsibilities divided between several stakeholders or the responsibilities had been changed recently due to new legislations. The differing agendas of the various stakeholders can become a source of complexity. This situation can complicate the formulation of a shared vision and goal but the process also provides an opportunity for **the stakeholders to exchange on topics they may sometimes not be sharing.**

Mobility and transport planning being rather politically sensitive topics, their implementation can be challenged by elections and

the resulting change of stakeholders. One shall be aware of the possibility of such impacts.

Some ASTUS partners noted that in some cases, the term "action plan" has been questioned. Indeed, the term may suggest that ASTUS results are turnkey solutions, that are valid and can be implemented. On the contrary, the intention of the document was to survey the range of low CO2 mobility solutions. In the case of one Pilot Site, the term "action plan" was thus changed to "Catalogue of actions", which was more suitable to participants.

It is recommended, if possible, to link the process to similar activities that are already underway in the territorial unit (planning documents / planning strategies already set up).



## RECOMMENDATIONS REGARDING LOW CO2 SOLUTIONS, INCLUDING THE IMPACT OF SITES' REGION TYPES, CONCLUSIONS AND EXAMPLES



### 4.1. Recommendations

Should actions only be directly related to transport and mobility planning ?

**It is recommended that you keep an open mindset regarding what is possible and available to reduce the mobility-related CO2 emissions from your territory.** Actions can be of various types as long as the main goal is to reduce transport related CO2 emissions. For instance, an action plan can include the action of realizing an internet website for mobility management, to promote housing densification, etc. In the case of the Novo Mesto Pilot Site, it was noted that the added value of the ASTUS project was an explicit joint consideration of mobility and settlement development issues.

To that extent it can be interesting to involve stakeholders having varying specialities (not only transport and mobility-oriented stakeholders).

Some French ASTUS partners noted that, in their Pilot Sites cases, it appeared that the workshops participants spontaneously had a vision focused on «actions» rather than on «needs» and «problems to be solved». They sometimes wanted to define action plans with little or no consideration to the geographic and socio-economic features of the territory. The workshops have nevertheless permitted to consider the issues on the basis of the inhabitants needs; but maybe the proposed method and the elements provided in the first instance were more «solutions oriented» than «problems oriented».

### How can I integrate the issue of the reduction of CO2 emissions ?

In Regional Association Pongau Pilot Site case, where two approaches were used at a local scale, the issue of reducing CO2 emissions was not the most important topic on this local scale. The local stakeholders were mainly interested in developing concrete solutions, approaches and actions. These actions can of course still contribute to the reduction of CO2 emissions, but the approach is more practice-oriented than theory-oriented.

### Is it necessary to assess the impact of solutions?

Scenarios with concrete numbers can be very helpful to structure and to objectify issues, to measure effects of actions and discuss about it.

**It is recommended to assess the impact of solutions either quantitatively or qualitatively.** Four Pilot Sites proceeded to a quantitative assessment of the impact of actions on CO2 emissions:

- ✓ County of Munich
- ✓ County of Fürstenfeldbruck and county of Starnberg (for their Flexible, intermodal mobility for the region strategy)
- ✓ Unione dei Comuni del Biellese Orientale (for the short-term strategy)
- ✓ Regional Association Pongau (St.Veit Pilot Site)

Almost all other Pilot Sites had a qualitative impact assessment though the level of detail varies.

### In case of an external technical assistance what kind of repartition of production between experts and stakeholders should I expect?

As mentioned before, assisting technical experts can help in preparing the workshops, providing inputs to guide reflexions and producing outputs of the workshops. Nevertheless, the goal of the CO2 methodology remains to involve the local stakeholders in the process and **make them actors of the chosen solutions.** The methodology is based on a participative process so as to arouse interest from those concerned locally. To that extent it is recommended to keep a working process which actively involves stakeholders because they shall be able to relate to the chosen solutions, which are chosen through consensus.

For instance, in the Regional Association Pongau Pilot Site case, suggestions for strategies had been elaborated by ASTUS project partners/experts beforehand according to existing national and regional strategies. The local stakeholders had a positive attitude towards the proposals and discussed them. In contrast, most of the actions in other Pilot Sites have been proposed by the stakeholders, a few have been proposed by experts. The process contributed to a selection, grouping and clearly structuring of the actions.

### What happens after the action plan is defined ?

The definition of a detailed action plan is the last step of the ASTUS Low CO2 methodology. Its **future implementation will rely on the commitment of the stakeholders, which is why their inclusion and the research of a consensus is important.**



## 4.2. Promising ASTUS Low CO2 Solutions : examples of strategies and actions

**Solutions were generally rather well-known and based on existing models of development. They were personalised and considered the individuality of each Pilot Site.**

### Strategies

**Titled strategies were the following:**

- ✓ "Low emission vehicles "
- ✓ "Local low CO2 strategy and action plan for the City Municipality of Novo mesto"
- ✓ "More mobility with less traffic "
- ✓ "Bus rapid transit, orbital lines and prioritization"
- ✓ "Flexible, intermodal mobility for the region"
- ✓ "Integrated and sustainable mobility in the region"
- ✓ "Froggy mobility".
- ✓ "A valuation of the existing urbanism for a territory that is made of short distances and that is opened on the outside by a voluntarist policy of mobility"
- ✓ "Sustainable urban planning and experimentation for everyday mobility "
- ✓ "Attractive low CO2 mobility solutions for trip to work "
- ✓ "Fostering low carbon mobility by spatial planning, strengthening the town center"

### Actions

There was no typical set of actions for a same Region type. Every Pilot Site developed its own very specific strategy. A total of 129 actions for the 13 Pilot Sites was noted. The same action was almost never counted twice for a same site Region type and there is no action shared by every Pilot Site.

**Actions were of various types:**

- ✓ Regarding public transport and alter-

native modes development. For instance: "Make company cars available for carsharing in the evening or on weekends", "Improve the various mobility services to business parks", etc.

- ✓ Regarding spatial and social planning. For instance: "Reviving the main extra-urban centres", "Better localization of equipment in relation to housing areas for local services", etc.

- ✓ Regarding pricing and funding. For instance: "Find a European/National/Regional project to finance the project activation", "Attractive pricing scheme without basic fees", etc.

- ✓ Regarding communication / marketing. For instance: "Implementation of innovative methods of consultation with mobility users", "Promoting the use of private vehicles in shared form", etc.

- ✓ Regarding institution and long-term governance. For instance: "Take charge of mobility and set up a unified governance of mobility on a broader scale", "Convince decision makers", etc.

- ✓ Regarding ticketing and digital solutions. For instance: "Provide routing information for intermodal connections in the public transport app", "Develop the area's digital resources", etc.

- ✓ Regarding specific home-work trips planning and management. For instance: "Develop voluntary home working initiatives within local authorities", "Corporate mobility management", etc.

**All example of solutions are available in the Pilot Sites' outputs and general analysis of such products (see "external resources").**







## 4.3. Impact of Sites' Region types

Based on a comparative analysis of 17 Pilot Sites in five countries (SI, IT, AUT, D, F) as representatives for the alpine space and referring to pre-existing alpine space typologies, a transnational typology was developed, addressing the field of low CO<sub>2</sub> solutions against the background of integrated transport and settlement planning. To ensure the

transferability of the designed ASTUS typology (Region type) to any area in the Alpine Space, the results of the comparative analysis were aligned to existing Alpine Space typologies. The Pilot Sites were divided into these various Region types, which can be seen in the table below.

Region type	Description
Metropolitan core area	<ul style="list-style-type: none"> <li>✓ 750.000 inhabitants OR 1.500 inh./km<sup>2</sup> (population density) OR high settlement density with &gt; 3000 inh./km<sup>2</sup></li> <li>✓ excellent or very good public transport supply (public transport quality: I or II)</li> <li>✓ among the leading European regions in terms of connections to high speed transport networks (train / motorways / international airports) and ICT endowment</li> <li>✓ extensive suburban area with several hubs and significant commuter flows</li> <li>✓ R&amp;D centres of global significance</li> </ul>
Cities	<ul style="list-style-type: none"> <li>✓ &gt; 50.000 inhabitants OR &gt; 300 inh./km<sup>2</sup> (population density) and high settlement density within the city</li> <li>✓ at least very good public transport supply (public transport quality: II) with an inner-city transport system</li> <li>✓ connection to high speed transport networks (railways/motorways)</li> <li>✓ suburban area with relevant commuting share</li> <li>✓ R&amp;D centres</li> </ul>

Towns	<ul style="list-style-type: none"> <li>✓ 20.000 inhabitants OR &gt; 150 inh./km<sup>2</sup> (population density) within the town</li> <li>✓ compact settlement pattern in the core, scattered settlement patterns in suburbs</li> <li>✓ supra-regional functions</li> <li>✓ at least good public transport supply (public transport quality: III) without any real inner-city transport system</li> <li>✓ high commuter volume</li> </ul>
Growing regions bordering on a metropolitan core	<ul style="list-style-type: none"> <li>✓ &gt; 250 inhabitants/km<sup>2</sup> (population density) OR high settlement density (&gt;1500 inhabitants/km<sup>2</sup>)</li> <li>✓ stable or growing population</li> <li>✓ suburban characteristics</li> <li>✓ access to local or regional transport network with good service quality (at least public transport quality: III), good to very good connectivity to a metropolis or city</li> <li>✓ GDP per capita 80%-100% of average</li> <li>✓ significant share of workers employed in cities and metropolis, high ratio of out-commuters</li> <li>✓ strong interlinkages to the neighbouring metro region including transport axis</li> </ul>
Stable rural regions (with functional centres)	<ul style="list-style-type: none"> <li>✓ moderate settlement density (&gt; 500 inhab./km<sup>2</sup>) OR moderate population density (&gt; 75 inhab./km<sup>2</sup>)</li> <li>✓ predominantly rural area characterized by urban sprawl, functional centres in between</li> <li>✓ constant population development, above-average ageing</li> <li>✓ access to local or regional transport network with good service quality (at least public transport quality: III)</li> <li>✓ high ratio of out-commuters to regional/supra-regional centres/workplaces</li> </ul>
Rural regions with declining development	<ul style="list-style-type: none"> <li>✓ low settlement density (&lt; 500 inhab./km<sup>2</sup>) OR low population density (&lt; 75 inhabitants/km<sup>2</sup>)</li> <li>✓ declining population</li> <li>✓ above-average ageing population</li> <li>✓ GDP/capita below 80% of average</li> <li>✓ small ratio of employees working outside the region</li> <li>✓ good or basic public transport supply (public transport quality: III or IV), poor transport connection to towns and cities</li> <li>✓ weak connectivity to next city or metropolis</li> </ul>
Touristic regions	<ul style="list-style-type: none"> <li>✓ tourism is one of the main economic sectors (overnight stays / inhabitants &gt; 100 OR beds / inhabitants &gt; 0,6)</li> <li>✓ high land/property prices</li> <li>✓ immigration of elder and outmigration of younger people</li> <li>✓ highly seasonal activity</li> </ul>

ASTUS territorial typology –  
Types and description from Project Output  
O.T1.1 : “ A territorial alpine space typology”

Nevertheless, a same typology of site didn't lead to the same type of solutions. Solutions were varied and diverse.

For instance, regarding the final action plans, the number of detailed actions went from 2 to 20 for each Pilot Site. For Pilot Sites in the same region type, the number of detailed actions varied significantly, whereas the specific actions delineate similar fields of action. The number of detailed actions seemed to depend more on the way the workshops were carried out and on the specific vision for each Pilot Site rather than on a Region type.

Some Pilot Sites carried out the ASTUS Low CO2 methodology focusing on a specific objective / theme / local partner / stake defined from the beginning, while others had a broader approach considering various typologies of strategic goals and actions.

For instance, in the « Growing regions bordering on a metropolitan core » region type, the County of Ebersberg Pilot Site action

plan focuses specifically on carsharing, whereas the Inter-municipality Thononles-Bains Pilot Site has a more global and diverse action plan, taking into account 17 actions of various themes (transport, spatial and social planning, etc.).

Both used the ASTUS Low CO2 methodology but the answers to local problematics are very different, based on the fact that the partners involved were different.

- ✓ The detailed process used for the typology definitions are available (see “external resources”) in the Project Output O.T.1.1 the ASTUS “ A territorial alpine space typology” and Deliverable D.T.1.2.1, “SWOT analysis regarding the implementation of low CO2 solutions” (with appendix)
- ✓ Detailed analysis of the ASTUS Pilot Sites' productions are available in the following outputs (see “external resources”):
- ✓ “Assessment of low CO2 Scenarios”;
- ✓ “Assessment of low CO2 Strategies and action plans”.



## 4.4. Conclusions regarding Low CO2 solutions and Sites' Region types

Local settlement/ transport structures and infrastructures have an impact on the framing conditions for developing the solutions but each type of solution (either a scenario, a strategy or an action plan) are specific to each Pilot Site. As stated above, a same typology of site doesn't lead to the same type of solutions. The individualization of the process for each site leads to solutions which are customized to each local context, regardless of the site typology. Solutions are highly dependent on local conditions and therefore need to be analysed on an individual basis. Solutions also depend on the current advancement of local stakeholders regarding mobility issues and territory development which shapes the type of solutions. Every region has its specific organization and potentials. Therefore, the transferability of actions has to be assessed in each specific case separately. The pilot activities

developed during the ASTUS project (scenario, action plan) may help to support territories with similar challenges and aims by providing inspiration and examples. The profile of stakeholders, the “history” of the territory, the relations with neighbouring territories also have an impact on the outputs. The most important is to define actions adapted to the territory, and to avoid imposing ready-made solutions (not adapted to territorial needs, specificities, users' habits etc). The scenarios, strategies and action plans produced by the Pilot Sites in the ASTUS project should be seen as a toolbox to inspire other territories willing to implement low carbon mobility solutions.

- ✓ Detailed outputs of the Pilot Sites who used the ASTUT Low CO2 methodology are available (see “external resources”).



## Project Output O.T3.1

# EXTERNAL RESOURCES



All of the ASTUS products and toolbox is available at <https://www.alpine-space.eu/projects/astus/en/home>

- ✓ The ASTUS Low CO2 methodology Paper: "Elaboration of Local Low CO2 Scenarios & Identification of ASTUS Low CO2 Strategies and Elaboration of Action Plans"
- ✓ Project Output O.T1.1: the ASTUS "A territorial alpine space typology" paper
- ✓ Project Output O.T2.2: the "ASTUS transnational methodology for low CO2 scenarios" (with CO2L\_Calculation, CO2L\_Data and CO2L\_Measures spreadsheets).
- ✓ Deliverable D.T1.2.1, "SWOT analysis regarding the implementation of low CO2 solutions" (with appendix)

All of the Pilot Sites' outputs produced following the ASTUS Low CO2 methodology are also available, as well as general analysis of such products : "Assessment of Low CO2 scenarios" and "Assessment of Low CO2 strategies and action plans".

## Project partners



# Interreg Alpine Space



This project is co-financed by the European Regional Development Fund through the Interreg Alpine Space programme