



Self-Audit, Resource-Mapping and Ideation Tools

Guidance to Self-Assessment of Sustainability Performance, Identification of
Resources for Improvement and Development of Sustainability Initiatives

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Sustainable Tourism through Networking and Collaboration

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Sustainability Self-Audit Tool

Target Group and Objectives

Sustainability Self-Audit Tool is designed for tourism micro and small enterprises. The objective of the Tool is to help tourism MSEs determine their performance across the major areas of sustainable tourism. It focuses on the enterprise's internal policies and practices. It reveals where existing practices support sustainable tourism and where improvement is needed.

The Tool is based on the Global Sustainable Tourism Council (GSTC) Industry Criteria (Hotels & Tour Operators, V3 - 21 December 2016). These criteria provide common understanding of what "sustainable tourism" means and represent the minimal requirements which any tourism enterprise should inspire to meet. According to the GSTC Criteria, the Self-Audit Tool is structured around the following four sections:

- Sustainability planning and sustainable management in the tourism sector
- Maximizing social and economic benefits of sustainable tourism to local communities
- Maximizing sustainable tourism benefits to cultural heritage
- Reducing negative impacts of tourism on the environment

The criteria and indicators in each section are adapted to be more usable for tourism micro and small enterprises.

The Tool represents a questionnaire, in which every question (based on the GSTC criteria and indicators) is associated with the following metrics:

Scale	Metric	Description
4	Yes	Sufficient progress is made towards completing this task
3	To a large extent	Solid progress is made in implementing this task
2	To a small extent	Initial conceptual and planning work related to this task has just started
1	No	Implementation of this task has not been started yet
0	Not applicable	This task is not related to my operations

Self-Assessment of Sustainability Performance

The Self-Audit Tool may be used both as part of the Sustain-T training, and in the context of real-life operations of tourism micro and small enterprises. The Sustain-T curriculum foresees carrying out self-assessment of sustainability performance as a first step of the training. It aims to help learners reflect on sustainability of their enterprise, identify areas of underperformance, and focus the following



learning activities on exploration of potential solutions for sustainability improvement. The Sustain-T modules 1 to 4 correlate with the areas of self-assessment and explain in a clear and concise way various possibilities for integrating sustainable practices in business operation of tourism enterprises. Beyond the scope of the training, the Self-Audit Tool could be used any time by any tourism enterprise for evaluating its sustainability performance and planning potential improvements.

Carrying out the self-assessment involves the following steps:

1. Read carefully the criteria and indicators in the Self-Audit Tool.
2. Answer the questions by choosing the most appropriate metric – the degree to which your organization complies with the indicator (see the table above).
3. Think about the evidence you have available to support your responses. Evidence may include any document which proves your compliance with the indicator.
4. If you use the paper version of the Tool, calculate your score and read the assessment feedback, related to the score received. If you use the online version of the Tool, just click on the relevant response options, submit your responses and read the feedback, the system will generate for you.
5. If the self-assessment results show that you underperform in certain areas of sustainability, follow the suggestions in the feedback and engage with the learning materials to gain ideas on possible improvement of sustainability performance of your enterprise.
6. Set priorities and plan improvement actions which you can implement in a definite period of time (short-, medium- or long-term). Some criteria for setting priorities may include:
 - importance of the action;
 - urgency of the action;
 - resources you have available to invest in the action.

Use the Sustain-T *Resource-Mapping Tool* to help you identify available resource.

7. Develop an action plan with objectives, activities, budget, schedule and responsibilities and put your plan into action. Monitor and measure the results of your improvement actions. Use the Sustain-T *Ideation Tool* for collaborative development of sustainability improvement initiatives.
8. Undertake the second self-assessment to see how you have managed to improve your sustainability performance.



Self-Assessment Questionnaire

CRITERIA	INDICATORS	METRICS					
		Yes	To a large extent	To a small extent	No	N/A	
SECTION A:							
SUSTAINABILITY PLANNING AND SUSTAINABLE MANAGEMENT							
A1 Sustainability management system	Has your company implemented a Sustainability Management System? A good system should address environmental, social, cultural and economic issues, as well as quality of services, human rights, health and safety, risk and crisis management. It should also include a process for monitoring continuous improvement.						
A2 Staff engagement	Does your company provide employees with guidance and training regarding their roles and responsibilities in the implementation of the Sustainability Management System?						
A3 Reporting and communication	Does your company communicate its sustainability policy, actions and performance to customers and other stakeholders and seek to encourage their support?						
A4 Customer experience	Does your company monitor customer satisfaction with its products and services, including sustainability aspects, and keep record of corrective actions?						
A5 Accurate promotion	Does your company provide accurate and transparent information regarding its products and services, including sustainability claims, in its promotional materials and marketing communications?						
A6 Impact of buildings on the surroundings	Has your company considered landscape, when selecting the site, designing, planning access to and/ or operating its buildings and infrastructure?						

CRITERIA	INDICATORS	METRICS				
		Yes	To a large extent	To a small extent	No	N/A
A7 Sustainable practices and materials	Has your company used locally appropriate and sustainable materials, practices and crafts in construction, design and/ or decoration of its buildings and premises?					
A8 Accessibility	Are the sites and buildings your company owns, operates or has influence on accessible for all, including people with special needs?					
	Are the tourist activities offered by your company accessible for all, including people with special needs?					
	Does your company provide clear and accurate information on the level of accessibility of its offers?					
A9 Information and interpretation	Does your company provide customers with information about the natural surroundings, culture and heritage of the local/ visited area?					
	Does your company inform customers about appropriate behaviour in the local/ visited area?					
A10 Destination engagement	Is your company involved with sustainable tourism planning and management in the destination, where such opportunities exist?					
SECTION B: MAXIMIZING SOCIAL AND ECONOMIC BENEFITS OF SUSTAINABLE TOURISM TO LOCAL COMMUNITIES						
B1 Community support	Does your company support any initiatives/ projects related to infrastructure or social development of the local community?					

CRITERIA	INDICATORS	METRICS				
		Yes	To a large extent	To a small extent	No	N/A
B2 Local employment	Does your company employ preferably local residents?					
B3 Local purchasing	Does your company purchase goods and services mainly from locally owned businesses?					
B4 Local entrepreneurs	Does your company partner with local entrepreneurs for marketing and sale of sustainable products and services?					
B5 Exploitation and harassment	Does your company implement a policy against all forms of exploitation, discrimination and harassment?					
B6 Equal opportunities	Does your company offer equal employment opportunities for all?					
B7 Decent work	Does your company respect the labour rights, standards and working regulations?					
	Does your company provide regular training to its employees?					
B8 Community services	Has your company established a feedback/complaints mechanism for local communities?					
B9 Local livelihoods	Does your company take in account local access to livelihoods in its decision-making processes (water resources, access to places, etc.)?					
SECTION C:	MAXIMIZING SUSTAINABLE TOURISM BENEFITS TO CULTURAL HERITAGE					
C1 Cultural interactions	Does your company manage and promote visits to cultural sites and indigenous communities in compliance with accepted guidelines and existing good practices?					

CRITERIA	INDICATORS	METRICS				
		Yes	To a large extent	To a small extent	No	N/A
C2 Protecting cultural heritage	Does your company support the protection of the local cultural heritage?					
C3 Presenting culture and heritage	Does your company incorporate local art, craft, cultural heritage and traditions in its offer?					
C4 Use of artefacts	Does your company pay due attention that historical and archaeological artefacts are not sold, traded, or displayed, except as permitted by law?					
SECTION D: REDUCING NEGATIVE IMPACT OF TOURISM ON THE ENVIRONMENT						
D1 Conserving resources						
D1.1 Environmentally preferable purchasing	Does your company have a written purchasing policy and actual purchases of food, beverages, consumables and other materials that clearly favour local and/or ecologically sustainable products?					
D1.2 Efficient purchasing	Does the purchasing policy of your company favour reusable, returnable and recycled goods, where available, and require to avoid packaging as much as possible?					
D1.3 Energy conservation	Does your company carry out regular monitoring of the total energy consumed per source per specific tourist activity (guest-night, visitors, etc.)?					
D1.4 Water conservation	Does your company carry out regular monitoring of the total volume of water consumed per source per specific tourist activity (guest-night, visitors, etc.)?					
D2 Reducing pollution						

CRITERIA	INDICATORS	METRICS				
		Yes	To a large extent	To a small extent	No	N/A
D2.1 Greenhouse gas emissions	Does your company calculate the total direct and indirect greenhouse gas emissions and monitor the carbon footprint (emissions vs offsets) per tourist activity or guest-night?					
	Does your company implement measures to reduce or avoid increase in annual greenhouse gas emissions from controlled sources?					
D2.2 Transport	Does your company inform customers, staff and suppliers about practical measures/opportunities to reduce transport related greenhouse gas emissions?					
D2.3 Wastewater	Is wastewater disposed either to a municipal or to a government approved treatment system?					
D2.4 Solid waste	Does your company measure and record type and amounts of solid waste disposed and recycled?					
D2.5 Harmful substances	Does your company try to minimize the use of harmful chemicals by substituting them with environmentally friendly alternatives?					
	Are the chemicals, used in/by your company, stored and handled in accordance with appropriate standards?					
D2.6 Reduction of pollution	Does your company have a specific policy in place that promotes minimization of noise, light, water and air pollution, runoff, erosion, and soil contamination?					
D3 Conserving biodiversity, ecosystems and landscapes						

CRITERIA	INDICATORS	METRICS				
		Yes	To a large extent	To a small extent	No	N/A
D3.1 Biodiversity conservation	Does your company allocate a percentage of its annual budget to support any project/initiative related to the protection of natural areas or biodiversity conservation?					
D3.2 Invasive species	If there are weeds, feral animals, or pathogens (invasive alien species) present on site where your company operates, is your company participating in a program to restrict their spread and preferably control or eradicate them? Review landscaping of site and consider feasibility and use of native species.					
D3.3 Visits to natural sites	If your company operates on natural ecosystems, does it have a program in place to minimize impacts and if necessary rehabilitate the disturbance of its activity?					
D3.4 Wildlife harvesting and trade	Does your company comply with local to international laws for any harvesting, consumption, display, sale, or trade of wildlife?					

Online Self-Audit Tool

The online version of the Self-Audit Tool is accessible through the project website and e-learning platform. The Tool is structured in four sections, as shown in the questionnaire. It contains all questions from the text version and offers response options similar to the metrics in the table above.

In order to undertake self-assessment with the help of the Tool, you should just tick a relevant response to each question. The system does not allow to move to the next section without answering all questions in the current section.

The online tool automatically calculates the self-assessment score and gives it as a percentage of the maximum score per section and for the whole questionnaire. Not applicable questions are not counted in the total number questions, used for the calculation of the self-assessment score.

The self-assessment results are shown in a form of a diagram, clearly indicating your performance in each area of sustainability. The quantitative results are complemented with a narrative feedback, which points out the aspects for potential improvement and provides links to respective learning materials.

Feedback on Self-Assessment Results

Overall evaluation and recommendations

Your organisation is a sustainability <*champion / achiever / follower / beginner / novice*>. You have scored ...% in sustainability self-assessment. <*continued with the related text below*>

Score range	Level of performance	Description
100% - 90%	Excellent	<i>Champion</i>
89% - 70%	Good	<i>Achiever</i>
69% - 50%	Average	<i>Follower</i>
49% - 30%	Fair	<i>Beginner</i>
29% - 0%	Poor	<i>Novice</i>

Novice (0-29%)

Overall evaluation:

There is a clear need for your company to improve prerequisites for sustainable performance. You are in the very beginning of the middle- to long-term process of developing your internal policies and practices towards increased sustainability. At this point, it may be helpful for you to seek an external advice about improving sustainability of your company.



Recommendations:

The sustainability improvement steps may differ from company to company. In the list below, we have gathered some recommendations, which have helped other micro- and small tourism enterprises that had a comparable level of sustainability performance.

- ▶ **Short-term: What your company can do right away**
 - Ensure right competences: Assess which competencies your company is equipped with in the areas of: sustainability planning and management; minimizing impacts and maximizing benefits of your tourism activity on the natural and social environment; and ensuring economic sustainability of your enterprise.
 - Network on a local, regional and/or national level: Engage with your local destination management organisation or tourism networks/ associations that promote tourism sustainability. Seek their advice, learn from their experience, and explore possibilities for sustainability improvement.
 - Assess resources: Use Sustain-T resource-mapping tool to assess enterprise resources, which your company has available to invest in sustainability improvement.
- ▶ **Middle- and long-term: What your company can do within one to three years**
 - Develop a strategy: Start your internal process of change towards sustainability improvement with a project "Our sustainable tourism goals".
 - Adhere to a tourism sustainability standard: Implement a certification scheme, which would help your company improve your performance and promote sustainability.
 - Educate your staff: Provide periodic on-the-job training in relevant sustainability issues to your new and existing employees.

In addition, we would like to suggest you engaging with the Sustain-T learning modules, offering a brief presentation of theoretical concepts, best practices and case studies related to sustainability of a tourism enterprise.

Beginner (30-49%)

Overall evaluation:

You company has made a few initial steps towards sustainable performance. However, there is still a lot of room for improvement. You are in the beginning of the middle- to long-term process of developing your internal policies and practices towards increased sustainability. At this point, you should think whether it would be useful for your company to work together with an external advisor who could suggest ways for improving sustainability of your tourism enterprise.

Recommendations:



The sustainability improvement steps may differ from company to company. In the list below, we have gathered some recommendations, which have helped other micro- and small tourism enterprises that had a comparable level of sustainability performance.

- ▶ **Short-term: What your company can do right away**
 - **Ascertain your competences:** Assess which competencies your company is equipped with in the areas of sustainability planning and management, minimizing impacts and maximizing benefits of your tourism activity on the natural and social environment, ensuring economic sustainability of your enterprise.
 - **Network on a local, regional and/or national level:** Assess the contacts and links your company has with the local destination management bodies or tourism networks/ associations that promote tourism sustainability. Try to build on the existing relationships or establish new contact with relevant networks with a view to exploring possibilities for sustainability improvement.
 - **Assess resources:** Use Sustain-T resource-mapping tool to assess enterprise resources, which your company has available to invest in sustainability improvement.
- ▶ **Middle- and long-term: What your company can do within one to three years**
 - **Further develop your strategy:** Reinforce your internal process of change towards sustainability improvement with a project "Our sustainable tourism goals".
 - **Adhere to a tourism sustainability standard:** Improve your performance and promote sustainability through implementation or further development of a certification scheme.
 - **Educate your staff:** Provide periodic on-the-job training in relevant sustainability issues to your new and existing employees.

In addition, we would like to suggest you engaging with the Sustain-T learning modules, offering a brief presentation of theoretical concepts, best practices and case studies related to sustainability of a tourism enterprise.

Follower (50-69%)

Overall evaluation:

Your company has already made important steps towards sustainable performance. You are going through the middle- to long-term process of developing your internal policies and practices towards increased sustainability. However, you will have to deal with even more challenges in this process. At this point, you should think whether it would be useful for your company to work together with an external advisor who could give ideas for improving sustainability of your tourism enterprise.

Recommendations:

The sustainability improvement steps may differ from company to company. In the list below, we have gathered some recommendations, which have helped other micro- and small tourism enterprises that had a comparable level of sustainability performance.



- ▶ **Short-term: What your company can do right away**
 - **Ascertain your competences:** Assess which competencies your company is equipped with in the areas of sustainability planning and management, minimizing impacts and maximizing benefits of your tourism activity on the natural and social environment, ensuring economic sustainability of your enterprise.
 - **Network on a local, regional and/or national level:** Enhance your cooperation and engagement with the local destination management bodies, tourism networks and associations that promote tourism sustainability. Try to get involved in joint initiatives and projects for sustainability improvement.
 - **Evaluate your potential:** Use Sustain-T resource-mapping tool to assess the resources your company can access and use for sustainability improvement. Consider both internal enterprise resources, and external natural and cultural resources. Use your resource map as a source of inspiration for new sustainability initiatives.
- ▶ **Middle- and long-term: What your company can do within one to three years**
 - **Further develop your strategy:** Reinforce your internal process of change towards sustainability improvement with a project “Our sustainable tourism goals”.
 - **Further develop your staff competences:** Ensure that on-the-job training provided to employees contributes to your company’s sustainability goals. If you hire new staff, purposefully select those who could close the gaps in competence required for sustainability improvement.
 - **Further develop your project management:** Use recognized project management methods for the development and implementation of sole or joint sustainability initiatives.

In addition, we would like to suggest you engaging with the Sustain-T learning modules, offering a brief presentation of theoretical concepts, best practices and case studies related to sustainability of a tourism enterprise. You can also use the Sustain-T Ideation Tool to plan sustainability initiatives.

Achiever (70-89%)

Overall evaluation:

Your company has already built a strong foundation for sustainable performance. Your internal sustainability policies and practices are advanced. However, some further improvements are needed. At this point, you should decide the improvement of which specific areas of sustainability may require collaboration with an external advisor equipped with relevant knowledge and skills.

Recommendations:

The sustainability improvement steps may differ from company to company. In the list below, we have gathered some recommendations, which have helped other micro- and small tourism enterprises that had a comparable level of sustainability performance.

- ▶ **Short-term: What your company can do right away**



- Expand your networks: Enhance your cooperation and engagement with local, regional, national and international networks and associations that promote tourism sustainability. Try to get involved in joint initiatives and projects for sustainability improvement.
- Capitalize on your successes: Assess your achievements and think what new opportunities for your company they can instigate.
- Support individual initiative: Organise a competition among the members of your team for gathering ideas for new sustainability initiatives (motto it “Our contribution to tourism sustainability”).

► Middle- and long-term: What your company can do within one to three years

- Enhance your project management: Use recognized project management methods for the development and implementation of sole or joint sustainability initiatives.
- Plan budget strategically: Reassess all budgeted activities for the upcoming business year with a view to their contribution to the achievement of your “sustainable tourism goals”.
- Use your reputation: Enhance the image of your company by the idea of being an enterprise respecting the principles of sustainable tourism. Profit from your good name and purposefully engage with funding bodies to create new opportunities for sustainability improvement.

In addition, we would like to suggest you looking through the Sustain-T learning modules, offering a brief presentation of theoretical concepts, best practices and case studies related to sustainability of a tourism enterprise. You can also use the Sustain-T Resource-Mapping and Ideation Tool to plan new sustainability initiatives.

Champion (90-100%)

Overall evaluation:

Your company has a robust foundation for sustainable performance. Your internal sustainability policies and practices are well advanced. Nonetheless, evaluate in which areas your company can improve its current position. Consider collaborating with an external advisor who could suggest solutions for further sustainability improvement.

Recommendations:

The sustainability improvement steps may differ from company to company. In the list below, we have gathered some recommendations, which have helped other micro- and small tourism enterprises that had a comparable level of sustainability performance.

► Short-term: What your company can do right away

- Expand your networks: Enhance your cooperation and engagement with local, regional, national and international networks and associations that promote tourism sustainability. Try to get involved in joint initiatives and projects for sustainability improvement.
- Capitalize on your successes: Assess your achievements and think what new opportunities for your company they can instigate.



- Support individual initiative: Organise a competition among the members of your team for gathering ideas for new sustainability initiatives (motto it “Our contribution to tourism sustainability”).
- ▶ Middle- and long-term: What your company can do within one to three years
 - Plan budget strategically: Reassess all budgeted activities for the upcoming business year with a view to their contribution to the achievement of your “sustainable tourism goals”.
 - Use your reputation: Enhance the image of your company by positioning it as an enterprise respecting the principles of sustainable tourism. Profit from your good name and purposefully engage with funding bodies to create new opportunities for sustainability improvement.

In addition, we would like to suggest you looking through the Sustain-T learning modules, offering a brief presentation of theoretical concepts, best practices and case studies related to sustainability of a tourism enterprise. You can also use the Sustain-T Resource-Mapping and Ideation Tool to plan new sustainability initiatives.



Resource-Mapping Tool

Target Group and Objectives

The Resource-Mapping Tool aims to assist tourism MSEs in identifying available resources for improving their sustainability performance. It provides a possibility to visualize individual resources at the disposal of an enterprise, and to see a complete resource map of all collaborating enterprises.

The specific objectives of the tool are to help tourism MSEs:

- Reflect on resources they possess or can access and use for developing and implementing a specific sole or joint sustainability initiative;
- Visualize available resources in a form of a table;
- Spark ideas for sustainability initiatives;
- Analyse the resources and determine those which could be invested in or used for improving sustainability performance;
- Merge resources of collaborating organizations (in case a few entities decide to work together) with the aim of sharing resources needed for the development and implementation of a sustainability initiative.

By sustainability initiative we understand any initiative that aims to contribute to sustainable operation of a tourism enterprise (sustainable business practices) and/or to deliver sustainable tourism products (experiences) to customers. A sustainability initiative should benefit a tourism enterprise by ensuring return on investment in this initiative, and the host community – by supporting the livelihood of local people and protecting the natural environment and culture for future generations.

Usage of the Tool

The Resource-Mapping Tool is a valuable instrument both in the context of the Sustain-T training, and in the context of real-life operations of tourism micro and small enterprises.

As part of the Sustain-T training, the mapping of resources should facilitate the attainment of the intended learning outcomes (as stipulated in the Sustain-R curriculum). This exercise should be preceded by:

- self-assessment of MSEs' sustainability performance (implemented with the help of the Self-Audit Tool);
- an introductory workshop to the Sustain-T course;
- distant learning of modules 1-4, covering all pillars of sustainable tourism.

The resource-mapping exercise should be implemented in the middle of the training, when learners are prepared to reflect on the resources their enterprise possesses and can invest in sustainability measures for bridging the gaps identified at the self-audit stage.



The mapping of resources is followed by:

- onsite and online brainstorming sessions dedicated to generation of ideas and development of relevant sole or joint sustainability initiatives;
- distant learning of modules 5 and 6, covering the issues of innovation, collaboration and networking in tourism;
- final self-assessment of MSEs' sustainability performance aimed at continuous monitoring of the achieved results.

The Resource-Mapping Tool may also be used out of the context of the Sustain-T training. There is no any obligation to fulfil the self-assessment or to study the modules, in order to access the Tool. After registering on the Sustain-T platform, any user will have a free and direct access to all elements of the platform, including the Resource-Mapping Tool. A user may opt to create a resource map without engaging with the other project materials.

Conceptual Basis: Classification of Resources

The Resource-Mapping Tool presents a “tree” of resources, relevant for sustainability improvement. The resources are divided into “enterprise resources” – those that an enterprise has, and “natural resources” & “cultural resources” – those that an enterprise can access and use for implementing a sustainability initiative.

Enterprise resources may be classified into assets and human capital. Assets include such resources as funds, land, buildings, vehicles, equipment, raw materials, finished goods, intellectual property rights etc. Human resources are built upon knowledge, skills and competences of personnel employed by an enterprise. The competences relevant for sustainability improvement most generally may include organizational management, environmental management, operation and management of tourism attractions.

Some sustainability initiatives utilize enterprise resources only. For example, a rural family hotel decides to use some part of its revenue (funds, tangible enterprise assets) to buy a few bikes and rent them to their guests for cycling around and discovering the local area. By doing so, the hotel would encourage customers to use a cleaner mode of transport, thus promoting environmentally friendly behaviour. If a member of the hotel staff knows well the surroundings and could accompany their guests on picturesque cycling routes, the implementation of this initiative would rely on the intangible resource of the enterprise, specifically on the local knowledge of the employee.

Let's further imagine, that the hotel owner or manager knows that a nearby forest, conveniently located at a relatively close cycling distance, is a natural habitat for rare birds. The hotel owner could liaise with the local destination management body (local administration) to valorise this tourist attraction. The hotel owners could contribute to reservation of the habitat by, for example, collecting waste and creating bird feeders and baths. This would provide incentives for more birds to settle there, thus increasing the population of the species in the area. The local administration, in its turn, could



recommend a local person – biologist or ornithologist, who could provide more information on the bird population, as well as on non-invasive behaviour patterns of prospective visitors.

By undertaking such initiative, the hotel would contribute to conservation of biodiversity in the local area and get return on investment by taking tourists to this site. In addition to enterprise resources, such as funds, materials, labour and skills, the implementation of this initiative would require access to natural resources (woodland, bird species), infrastructure (cycling routes), competences of external professionals (e.g. ornithologists).

Since many sustainability initiatives in the tourism sector may rely on the access to natural and cultural resources of the local area, the Resource-Mapping Tool includes these categories of resources too. **Natural resources**, featured by the Tool, include: landscape, water, energy, flora and fauna, eco-food production and protected natural heritage. **Cultural resources** include: cultural and historic heritage, ethno-social and artistic resources, infrastructure and equipment. These resources are further divided into tourism attractions (e.g. mountains, coasts, parks) and associated recreational activities (e.g. hiking, swimming, wildlife spotting). This list of natural and cultural resources could be used by tourism MSEs' owners and managers as a catalyst for developing new sustainability initiatives and for offering new sustainable experiences to tourists.

Resource Tree

A. Enterprise resources:

A.1. Assets

A.1.1. Funds

A.1.1.a. Cash and cash equivalents	Please, specify ¹
A.1.1.b. Short-term deposits	<...> ²
A.1.1.c. Investments	<...>
A.1.1.d. Grants and donations	<...>
A.1.1.e. Other resources	<...>

A.1.2. Inventory

A.1.2.a. Raw materials	Please, specify
A.1.2.b. Work-in-progress	<...>
A.1.2.c. Finished goods	<...>
A.1.2.d. Other resources	<...>

A.1.3. Other assets

A.1.3.a. Land	<...>
A.1.3.b. Buildings	<...>
A.1.3.c. Plant (machinery) and equipment	<...>

¹ The Tool allows users to specify the resources within the categories or sub-categories, e.g. to mention the amount of cash resources which a tourism MSE could allocate for a sustainability initiative, to specify the raw materials possessed, to mention the specific sites under the sub-categories of "natural" and "cultural resources".

² The sign <...> is used to repeat Please, specify



- A.I.3.d. Vehicles <...>
- A.I.3.e. Intellectual property (copywrites, trademarks, trade secrets, brands) <...>
- A.I.3.f. Other resources <...>

A.II. Human capital (knowledge and skills of personnel, related to:)

A.II.1. Organizational management and planning

- A.II.1.a. Laws and regulations (incl. health, safety, labour, and environmental aspects)
- A.II.1.b. Accessibility of products and services
- A.II.1.c. Organizational change
- A.II.1.d. Marketing and promotion
- A.II.1.e. Networking with destination management bodies and other stakeholders
- A.II.1.f. Other resources <...>

A.II.2. Environmental management

- A.II.2.a. Sustainability management systems
- A.II.2.b. Conservation of natural resources
- A.II.2.c. Reduction of pollution
- A.II.2.d. Conservation of biodiversity, ecosystems and landscapes
- A.II.2.e. Other resources <...>

A.II.3. Operation and management of tourism attractions

- A.II.3.a. Cultural and historic tours guide
- A.II.3.b. Mountain guide (hiking, cycling, horseback riding)
- A.II.3.c. Wellness instructor (SPA & fitness)
- A.II.3.d. Gastronomy and wine tour guide
- A.II.3.e. Other resources <...>

B. Natural resources (including associated recreational activities):

B.I. Landscape

B.I.1. Heights and mountains

- B.I.1.a. Camping
- B.I.1.b. Hiking
- B.I.1.c. Cycling
- B.I.1.d. Rock climbing
- B.I.1.e. Paragliding
- B.I.1.f. Karsts and caves / Speleology
- B.I.1.g. Skiing
- B.I.1.h. Other resources / activities <...>

B.I.2. Coasts and coastlines

- B.I.2.a. Beaches (sunbathing and swimming)
- B.I.2.b. Seabed (snorkelling and diving)
- B.I.2.c. Sand dunes (sand boarding, sand sledding)
- B.I.2.d. Other resources / activities <...>



<i>B.I.3. Lowlands</i>	Please, specify
B.I.3.a. Community-based ecotourism	
B.I.3.b. Other resources / activities	<...>
<i>B.I.4. Wetlands</i>	<...>
B.I.4.a. Wildlife spotting	
B.I.4.b. Bird watching	
B.I.4.c. Other resources / activities	<...>
<i>B.II. Water</i>	
<i>B.II.1. Ocean and seas</i>	<...>
B.II.1.a. Surfing	
B.II.1.b. Yachting	
B.II.1.c. Other resources/ activities	<...>
<i>B.II.2. Rivers and streams</i>	<...>
B.II.2.a. Rowing and rafting	
B.II.2.b. Kayaking and canoeing	
B.II.2.c. Fishing	
B.II.2.d. Other resources/ activities	<...>
<i>B.II.3. Lakes and ponds</i>	<...>
B.II.3.a. Rowing, kayaking, canoeing	
B.II.3.b. Fishing	
B.II.3.c. Other resources/ activities	<...>
<i>B.II.4. Mineral (hot) springs and wells</i>	<...>
B.II.4.a. SPA activities (bathing & mud wraps)	
B.II.4.b. Other resources/ activities	<...>
<i>B.II.5. Rain water</i>	<...>
B.II.5.a. Rain water harvesting for second use (garden watering, car washing, topping-up swimming pools or spa, flushing toilets)	
B.II.5.b. Other resources/ activities	<...>
<i>B.III. Energy</i>	
<i>B.III.1. Renewable energy</i>	
B.III.1.a. Biomass and biofuels	
B.III.1.b. Solar energy	
B.III.1.c. Wind energy	
B.III.1.d. Hydropower energy	
B.III.1.e. Geothermal energy	
B.III.1.f. Tidal and wave energy	
B.III.1.f.i. Popularizing renewable energy (e.g. through information brochures available in your premises)	
B.III.1.f.ii. Demonstrating (your) renewable energy installations to tourists	



B.III.1.f.iii. Educating tourists on how they could contribute to energy conservation

B.III.1.f.iii. Other resources/ activities <...>

B.III.2. Non-renewable energy

B.III.2.a. Oil (petroleum)

B.III.2.b. Natural gas

B.III.2.c. Coal

B.III.2.d. Nuclear energy

B.III.2.e. Other resources/ activities <...>

B.IV. Flora and fauna

B.IV.1. Native and endemic floral species

(forests, parks, botanical gardens)

Please, specify

B.IV.1.a. Educational tours

B.IV.1.b. Wildlife spotting

B.IV.1.c. Other resources/ activities <...>

B.IV.2. Domestic and wild animals, including indigenous breeds

(forests, parks, farms, fisheries)

<...>

B.IV.2.a. Wildlife spotting

B.IV.2.b. Bird watching

B.IV.2.c. Maintenance or construction of water or food troughs for wildlife or domestic animals

B.IV.2.d. Animal / fish feeding

B.IV.2.e. Community-based eco-tourism

B.IV.2.f. Other resources/ activities <...>

B.V. Eco-food production

B.V.1. Plant cultivation

B.V.1.a. Orchards

Please, specify

B.V.1.b. Vineyards

<...>

B.V.1.c. Vegetable-growing gardens

<...>

B.V.1.d. Other resources/ activities <...>

B.V.2. Animal husbandry

<...>

B.V.2.a. Raw milk & Dairy products

B.V.2.b. Raw meat & Meat products

B.V.2.c. Eggs

B.V.2.c.i. Breeding of endemic crops and species

B.V.2.c.ii. Providing local products to tourists (tasting of products)

B.V.2.c.iii. Offering farming & gardening experience to tourists

B.V.2.c.iiii. Other resources/ activities <...>

B.VI. Protected natural heritage

B.VI.1. Parks, Landscapes and monuments

B.VI.1.a. National parks

Please, specify



- B.VI.1.b. Nature parks* <...>
- B.VI.1.c. Strict reserves* <...>
- B.VI.1.d. Protected landscapes* <...>
- B.VI.1.e. Natural monuments* <...>
- B.VI.1.f. Other resources/ activities* <...>

B.VI.2. Learning, Contemplating and Participation

- B.VI.2.a. Learning about the natural heritage* <...>
- B.VI.2.b. Contemplating nature while hiking or cycling* <...>
- B.VI.2.c. Participation in waste collection campaigns* <...>
- B.VI.2.d. Harvesting herbs, berries and mushrooms (if allowed)* <...>
- B.VI.2.e. Other resources/ activities* <...>

C. Cultural resources:

C.I. Cultural and historic heritage

C.I.1 Buildings and Landscape

- C.I.1a. Monumental units* Please, specify
- C.I.1.b Archaeological sites* <...>
- C.I.1.c. Memorial areas and buildings* <...>
- C.I.1.d. Sacral buildings* <...>
- C.I.1.e. Landscape/ garden architecture* <...>
- C.I.1.f. Other resources* <...>

C.I.2 learning and Contemplating

- C.I.2.a. Learning about local culture and history*
- C.I.2.b. Contemplating or participating in sacred rites*
- C.I.2.c. Contemplating or participating in reconstructions of historical events*
- C.I.2.d. Other activities* <...>

C.II. Ethno-social resources

C.II.1. Folklore

- C.II.1.a. Learning to dance (traditional dances)*
- C.II.1.b. Learning about traditional music (traditional concerts: music & songs)*
- C.II.1.c. Contemplating or participating in reconstructions of folklore stories*
- C.II.1.d. Other resources/ activities* <...>

C.II.2. National costumes

- C.II.2.a. Photography in national costumes* <...>
- C.II.2.b. Other resources/ activities* <...>

C.II.3. Handicrafts

- C.II.3.a. Learning about and experiencing traditional crafts* <...>
- C.II.3.b. Souveniring*
- C.II.3.c. Other resources/ activities* <...>

C.II.4. Gastronomy

<...>



- C.II.4.a. Tasting traditional cuisine and drinks
- C.II.4.b. Experiencing cooking
- C.II.4.c. Other resources/ activities <...>

C.III. Artistic resources

C.III.1. The Arts

- C.III.1. Music (Concert halls) <...>
- C.III.2. Drama (Theatres) <...>
- C.III.3. Literature (Libraries) <...>
- C.III.4. Painting and sculpture (Galleries and museums) <...>
- C.III.5. Other resources/ activities <...>

C.III.2. Architecture

- C.III.2.a. Visiting theatres, museums, etc. <...>
- C.III.2.b. Walking routes <...>
- C.III.2.c. Other resources/ activities <...>

C.IV. Infrastructure and equipment

C.IV.1. Housing, meals, sacral and sports facilities

- C.IV.1.a. Hotels and guest houses <...>
- C.IV.1.b. Green lodges and eco-villages <...>
- C.IV.1.c. Traditional restaurants, cafes, bars <...>
- C.IV.1.d. Religious temples (churches, mosques, etc.), monasteries, religious sites <...>
- C.IV.1.e. Sport parks, arenas, horse racing venues, ice arenas, bullrings, gyms <...>
- C.IV.1.f. Other resources/ activities <...>

C.IV.2. Industrial facilities

- C.IV.2.a. Renewable energy suppliers <...>
- C.IV.2.b. Repair, reuse, remanufacturing, refurbishing, recycling services and facilities <...>
- C.IV.2.c. Wastewater treatment systems <...>
- C.IV.2.d. Waste disposal facility <...>
- C.IV.2.e. Other resources/ activities <...>

C.IV.3. Transportation

- C.IV.3.a. Public transport <...>
- C.IV.3.b. Clean transport (electrical vehicles, bikes) <...>
- C.IV.3.b.a. Rent-a-car or a-bike; parking slots for bikes; bike repair services
- C.IV.3.b.b. Other resources/ activities <...>

C.IV.4. Routes

- C.IV.4.a. Hiking and cycling routes in different areas <...>
- C.IV.4.b. Religious routes <...>

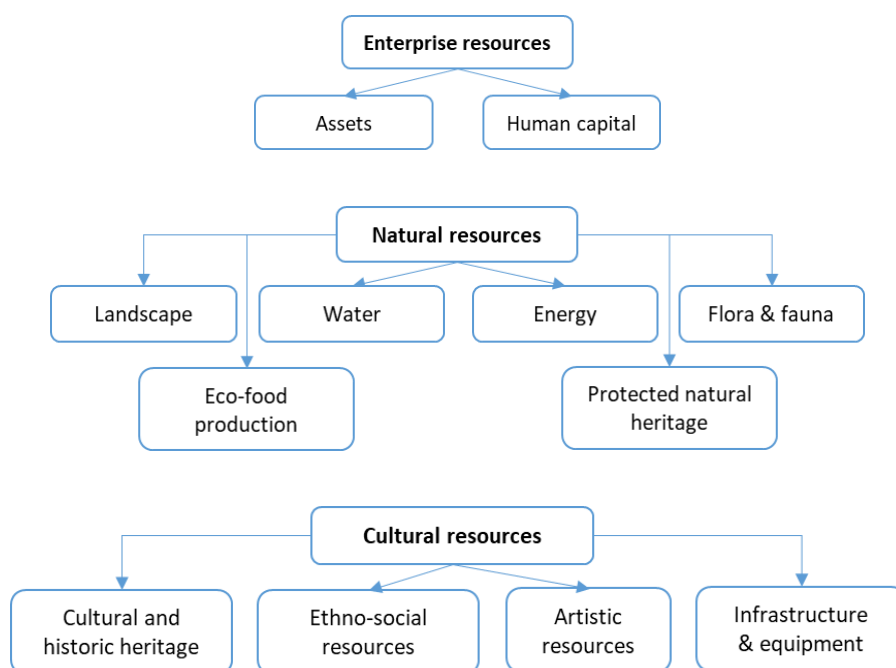


C.IV.4.d. Other resources/ activities

<...>

Online Resource-Mapping Tool

The interactive Resource-Mapping Tool could help you create a mind-map of resources, which your enterprise has or can potentially access and use for sustainability improvement. It allows you to select available resources by clicking on the suggested items under the categories. The starting page of the tool shows only the major resource categories (picture 1). The other categories unfold in a dropdown menu and appear on the resource map of an enterprise only if selected.



Picture.1 Major categories of the resource tree

Although the Tool includes a list of generic resource categories and items (as shown in the previous section), it allows you to personalize your resource map by mentioning particular resources your company has or can access. That is, the system foresees a possibility to specify the resources. For example, if you choose a “green lodge” as a resource, you may indicate what specific lodge you have in mind by mentioning its name and location in a separate field.

So, in order to create your own resource map, as a first step you should select and specify the resources available to your enterprise. The system would generate a mind-map in a form of table, structured in accordance with the resource categories and including selected resource items.

The mind-map would provide you with a comprehensive list of resources your enterprise has or can access. On the one hand, it may serve as a source of inspiration for conceiving ideas for sustainability initiatives. On the other hand, it may represent a good planning tool helping to double check what resources you have available to invest in a particular initiative and what you need to solicit from



elsewhere, for example, through building green alliances and collaborating with other enterprises, local destination management bodies, or other entities.

If you collaborate with other companies or organization in developing a joint sustainability initiative, you may need to analyse all resources available to your alliance. In order to facilitate this process, the Tool allows for merging individual resource maps of collaborating MSEs into a collective map. Reflecting on such a map would enable you to take decisions about resource-sharing, thus increasing feasibility and efficiency of joint sustainability projects.

The key features and functions of the interactive Tool include:

- Showing the major categories of the resource-tree scheme on the starting page;
- Unfolding the categories in a dropdown menu and showing subcategories, when a user clicks on a major category;
- Allowing for selection of resources by clicking on the suggested items under the resource categories included in the resource-tree scheme;
- Allowing users to personalize the resource map by providing a space for entering the name of a particular resource item (a box for typing in a text, next to a resource item);
- Generating a mind-map of resource in a form of a nicely designed table;
- Allowing users to download their maps;
- Allowing users to save their maps in their personal profiles;
- Allowing a user to merge his/her resource map with the map(s) of (an)other selected user(s) (overlap the maps; show all resource items which these users have; indicate the owner of a particular resource with the help of colour-coding and YES/NO mark);
- Redirecting users to the Self-Audit Tool and the Ideation Tool.



Ideation Tool

Target Group & Objectives

The Ideation Tool aims to help tourism MSEs match the self-audit results with the produced resource map. It should lead to understanding how the sustainability areas where the enterprise is underperforming could be improved using available resources. This tool should also facilitate MSEs' collaboration in the process of coming up with ideas for joint sustainable tourism initiatives.

The specific objectives of the tool are to support tourism MSEs in:

- Conceiving ideas for sole or joint sustainability initiatives;
- Formulating sustainable tourism challenges, they could solve using the resources they have;
- Developing, refining, evaluating and eventually implementing initiatives, addressing identified challenges and aimed at sustainability improvement;
- Collaborating with other tourism enterprises (or other relevant stakeholders) in developing and undertaking joint sustainability initiatives.

Conceptual Basis: Problem-Solving Process

A guide through the process of developing a sustainability initiative, the Ideation Tool is structured around the major steps of the problem-solving process. It explains each step through reflective questions a tourism company should try to answer in the pursuit of improving its sustainability performance.

Step.1 Identifying the gap between the current and desired situation

As a first step, you should comprehend the current situation and assess the existing level of sustainability performance of your company. A good way to do it is to use the *Sustain-T Self-Audit Tool*. This tool helps analyse the strengths and weaknesses of a tourism enterprise related to sustainability management and impacts of tourism activity on the community, cultural heritage and natural environment. The self-assessment exercise could trigger the understanding of the contrast between the current and desired situation and serve as a starting point for improvement.

The understanding of the current situation should help you define the objective and pose a challenge for improving sustainability performance of your company. The objective should indicate the scope of the result your company wants to achieve. The challenge should represent a question, answering which would help you generate a variety of solutions for achieving your objective.

Reflective questions for Step.1

- Are there any drawbacks in sustainability management or in the way your company engages with the local community, the cultural heritage and/or the natural environment?



- What are these drawbacks? What are the causes of your underperformance in this (these) sustainability area(s)?
- What would you like to improve? What would your customers want you to improve?
- What could you do in order to improve your customers' experience with your product or service, at the same time contributing to sustainable tourism objectives?
- What result do you want to achieve by improving your sustainability performance? What is the objective of the intended improvement?

Try to formulate a **SMART* objective**:

* Specific	<i>What do you want to accomplish?</i>
Measurable	<i>How will you know that it is accomplished?</i>
Achievable	<i>How can you accomplish it?</i>
Relevant	<i>Is it worthwhile?</i>
Time-bound	<i>When can you accomplish it?</i>

Step.2 Generating and selecting ideas

As the next step, you should generate ideas which could offer potential solutions to your challenge. There is a huge variety of idea generation techniques³: brainstorming, mind mapping, attribute listing, and many others. No matter what technique is used, you should list all ideas that come to your mind, because even ridiculous thoughts can sometimes lead to excellent solutions. It may be useful to involve external stakeholders -your customers, suppliers, experts, etc.- in your idea generation process. These people are likely to bring a fresh perspective, thus enhancing the flow of creative ideas.

When the list of ideas is ready, you should evaluate them. You may consider the extent to which the ideas: are likely to resolve your challenge; are likely to be implemented; are accepted by the members of your team; fit the organizational constraints. You should take each idea, match it to your criteria, and see how well it meets them. The ideas could be scored, for instance, from 0 to 3, with three indicating a perfect match. Once you have finished, select the idea with the highest score. The idea which best meets your criteria, would best solve your problem and let you achieve your objective.

Reflective questions for Step.2

- What could help you resolve your problem (challenge)?
 - Generate as many ideas as possible
 - Involve other people in the process: your colleagues, customers, partners, etc.
 - Jot down all ideas you have

³ [iCreate](#) project /2011-1-BG1-LEO05-05031/ offers a collection of idea generation techniques, supplemented with implementation guidelines and case studies. The material is available in Bulgarian, German, English, Slovenian and Spanish.



- What is the best option that would help you achieve your objective?
 - Get back to your objective and develop criteria for evaluating your ideas
 - Score your ideas to see how well they meet your criteria
 - Select the idea with the highest score

Step.3 Validating the selected idea

Validating the selected idea involves performing a financial analysis. This analysis suggests juxtaposing incurred investment cost and upkeep cost with expected net profit from the new generated revenue stream. The result of such analysis could be expressed as a payback period, i.e. the time it takes to recoup the funds expended in the investment.

Costs should include the costs of plant and equipment, materials and resources, labour, and capital needed for the idea implementation. It is important to think about as many related costs as possible. For example, if your idea involves any technological or process change, would it require training of your personnel? How much the training would cost? What is the cost of a decreased productivity during the training period? What costs will be incurred when the idea is implemented, e.g. will additional staff need to be employed?

To calculate net profits, you should take into account any additional revenues, the idea would generate both directly and indirectly. As an example of direct revenue, you may think about additional foot traffic specifically related to the sale of a new or improved tourist offer. Indirect additional revenue could emerge if customers, who already bought the new offer, decide to also try out some of your traditional products or services.

Apart from estimating the net profits, you should make efforts to estimate any other benefits your company could gain from the implementation of the selected idea. Benefits could be both financial (e.g. additional revenue streams, reduced costs) and non-financial (e.g. improved brand equity through positive impact on the community and the environment).

Finally, you should compare the value of the costs to the value of the benefits, and take a decision to implement the idea if the benefits outweigh the costs. If the costs appear significantly higher than the benefits, or if the payback period is unacceptably long, the idea may be regarded as invalid. If so, another idea from Step.2 should be chosen and validated.

Reflective questions for Step.3

- What resources do you need in order to implement your idea / accomplish your goal?
- Out of this resource list, what do you have and what do you need to solicit from elsewhere?
 - *The Sustain-T Resource-Mapping Tool* would help you identify enterprise resources you possess and cultural and natural resources you can access, in order to implement your sustainability initiative



- What is the cost of resources needed for the implementation of your idea?
- What benefits would you gain as a result of implementing your ideas? What is the estimated value of these benefits?
- How feasible is it to implement your idea within the time frame you set in your objective and using the resources you have?
- Is the payback period acceptable for your company?

Step.4 Implementing the idea

Once the decision to implement the idea is taken, you should develop a comprehensive action plan. Representing a list of tasks, the action plan provides a framework for completing the problem-solving process. It helps to structure and execute the necessary activities in a sensible order. The action plan should specify the resources (time, material, labour, capital) needed for executing each task, the estimated deadline for tasks completion, and indicators evidencing the fulfilment of the tasks.

Finally, you should evaluate the extent to which the implementation of the idea has helped your company achieve its objective and improve its sustainability performance.

Reflective questions for Step.4

- What activities do you need to undertake and what tasks do you need to accomplish in order to implement your idea?
- What resources are required in order to execute each task?
- What is the timeframe for implementing each task?
- What indicators would help you measure the quality of implemented activities / tasks and achieved results?
- How would you measure the impact of the implemented initiative on the sustainability performance of your enterprise?

Consider such impacts as, for instance, improved business operation, improved employee and customer satisfaction, improved brand equity through reduced negative impact on the community and the environment, accelerated acquisition of new customers, and increased revenue.

Let's see how this problem-solving process works through the following case study.



Exemplary Case Study

The Case of the Illusive Garden: Finding Water in the Mountains⁴

Background and objectives

Imagine a nice and quiet rustic restaurant, housed in a 300-year-old chalet, made out of stone, old beautifully aged logs, and slate shingles for the roof. Perched on a rock, overlooking a scenic and rather famous white water rafting valley, this family run establishment has it all. A cosy eating hall full of old memories, a garden filled with mountain scents, a newly renovated kitchen boasting a great chef, and a buzzing team of four young cooks. It is a great place for families and hikers who mostly come to have lunch, and a magnet for those weary with adventure after a day of white water rafting city slickers who mostly come to have early dinner. The occasional love couple completes the typical clientele, who frequents this trendy spot.

The restaurant has been in the possession of Peter and Margaret Tomeo for over 5 years. And already it has made a name for itself. It is a self-service place where people order at the bar, get their food and drinks and more often than not, go sit in the garden, so they can enjoy the picturesque view - the one thing classifying this place as a must for tourists coming to this area. The lush and well-manicured garden is Margaret's pride. During spring, summer and autumn all tables in the garden are usually full.

Off-season, in winter, when getting to the top of the hill becomes somewhat cumbersome, the restaurant turns into one of those lonely, out-of-a-fairy-tale looking mountain chalets, nestled at the feet of the dramatic peaks surrounding it. Tourists, who come, are of the lonesome type. They are mostly couples, who enjoy the quiet of the winter scenery. At this time of the year the garden is covered with a specially designed glass house. Clients can still visit it and take a short stroll, but there are no tables. During this time, they have to eat in the hall.

Tending to the garden is the main duty of Margaret, her two younger daughters, Victoria and Maria, and her brother, Martin. They started working on the garden only three years ago, but have already built a great team. Margaret takes care of the plants and Martin uses his truck to procure all that's needed from the city: fertilizer, seeds, garden equipment etc. Victoria and Maria are invaluable as promoters. They feed the social networks pictures of smiling faces and beautiful home-grown plants, thus drawing in more tourists, when business runs slow. If only they could increase the garden footage and have it open all year long, this would definitely draw much more people and significantly improve their earnings.

Increasing the space of the garden would mean bringing in more plants. And this is their one real problem. Since the chalet is located in the inner protected zone of the nearby city's water catchment area, sourcing water from the environment is strictly forbidden. So, the garden team has been watering the plants with fresh water from the pipes. This has been a rather expensive proposition, because water

⁴ This case study is fictional. It is not based on a case of a real enterprise. Names, characters, businesses, places, events, and incidents are the products of the authors' imagination.



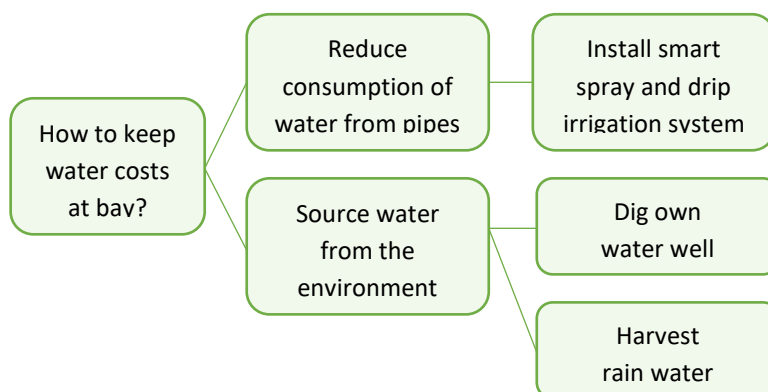
up there can only come with the help of a water pump, running on electricity. And the only way, they can get electricity is by running the diesel generator. So, the time has come for them to figure out how to deal with this issue.

They want to try to source more water, so they could irrigate a bigger area, which would allow them to increase the footage of the garden and leave their main source of competitive advantage, the dinner tables, in the garden all year long. At the same time, they know their company is short on working capital and cash is tight at the moment. Spending significant amounts of money is not economically viable. So, they set the following objective:

- Objective:
By the end of winter increase garden footage twofold, but keep water costs at bay.
- Challenge:
How to keep water costs to a minimum, while increasing the footage of the garden twofold?

Generating ideas

Once the family gathered around a dinner table to think how they could respond to the challenge. They came up with a few ideas.



Selecting an idea

Installing a smart irrigation system is expensive. The system alone would cost around EUR 4000. The installation would cost another EUR 1200 and the classes, Margaret has to take in order to learn how to operate it, would run them another EUR 630. The irrigation system will increase the effective watering area by approximately 80% and they would still have to have their diesel generator running, so it could produce electricity for the water pump. The installation time is 5 days. During this time, the garden would have to be closed for guests.

If they choose to dig their own water well, it will give them an independent water source. Since the water table in the mountains is at relative shallow depths, the well would only have to be 6 feet deep. They could dig up the well on their own without the use of heavy equipment. Lining the well walls with



premade concrete cast rings will cost them around EUR 1500. Digging and lining the well would take several weeks of work. During this time Peter and his brother-in-law would have to completely give up their other work tasks. The restaurant would have to work at low capacity and only serve drinks. In addition, digging water well in the protected area, the chalet stands on, is against regulations, because it would put at risk of contamination the water supply of the city.

Harvesting rain water is a proven technology. A harvesting system, complete with roof gutters, pipes and a 4200 litre non-potable water tank would cost around EUR 3500. Installation cost would be around EUR 800. It can be put in place in 3 to 4 days, with business still running as usual.

Selection criteria Rating: 0-3	Ideas		
	Irrigation system	Water well	Rain water
Compliance with laws and regulations	3	0	3
Affordability	1	-	2
Cost-effectiveness	2	-	3
Total:	6		8
Decision:	Harvest rain water		

Validating the idea

It certainly rains a lot in the mountain. With an average of 150 rainy days in their area, rain water would be a reliable water source. Harvesting rain water, if done correctly, would not disturb the fragile ecosystem that surrounds the chalet. It would save money to the Tomeo family, but it would also help them keep their environment cleaner and allow them to expand their business. If they could gather rainwater before it falls on the ground and becomes the property of the city water works, they should have plenty of supply.

If they can do that, they would need at least 200 litres of water for the garden alone each day. Another great place, where they could use it, is for the toilets. Flushing and sanitizing them, especially during season, has also been raising their costs significantly. The average amount of water, used per guest in-season, is around 4 litres. Off-season it goes up to 5 litres. In-season the chalet boasts around 90 guests per day, whereas off-season this number drops down to 40 on average. The team figures with the expansion of the garden they would be able to attract another 10 people during off-season. The peak usage of the system would be during summer, when it rains only once every 6 days. That means per week in-season they would need 1400 litres for irrigation and 2520 litres for sanitizing and toilet use. This makes a total of 3920 litres in-season and 3150 litres off-season. Considering the tank dead storage capacity is 80 litres, this would give them reserve of between 200 and 970 litres. It would be enough to water the garden even if there's no rain during summer for a period of 8 days. In winter, the additional water could be used for defrosting outside areas.



Since the system uses gravity to irrigate and flush the toilettes, the upkeep costs per year would be rather low. The water tank comes with a 10-year guarantee and its life span is 20 years. Pipes and gutters would have to be renewed every 5-6 years and hoses every 3 years. Total annual upkeep cost, including the build up of a reinvestment fund for the water tank comes down to EUR 440.

The off-season takes up only one third of the year. Peter and Margaret built a great team and would not want to lose their employees to competitors. The restaurant owners keep their staff fully employed even in winter, when the number of guests is significantly lower. Therefore, accommodating the additional business of 10 guests per day during off-season will not require the use of additional personnel.

Keeping in mind the cost per cubic meter of fresh water of EUR 1.8, the average fuel consumption of the diesel electric generator of 0.6 litres per working hour and its everyday needed two-hour application, as well as the annual upkeep cost of 80 Euros, the number of in-season weeks of 35 and off-season weeks of 17, given the average net profit margin per guest in-season of EUR 3.20 and off-season of 3.80 as well as a peak diesel price of EUR 1.50, the savings potential of the rain water harvesting system is as follows:

Additional annual net profit (off-season):

17 Weeks x 7 days x 10 guests x EUR 3.8 = EUR 4522

Cost savings for not using fresh water supply:

52 Weeks x (1.4 m3 x EUR 1.8 + 14 hours x 0.6 litres x EUR 1.50) + EUR 80 upkeep = EUR 866

Total annual financial benefit: EUR 4522 + EUR 866 = EUR 5388

Initial investment in rain water harvesting system and first year upkeep cost:

EUR 4300 + EUR 440 = EUR 4740

=> The rain water harvesting system will pay for itself within the first year of operation.

Additional benefits would include: conservation of fresh pipe water, increased brand equity through projecting a positive sustainable company image

Implementing the idea

Building up the water harvesting system would require the Tomeo family to implement the following activities:

Task	Resources	Deadline	Indicators
Buy and install rain water harvesting system	Financial: EUR 4740 Time: 4 days	XX.XX.XXXX	System is installed and is fully operational



	Labour: outsourced, installation cost included in the amount of initial investment		
Teach personnel how to use the system	Time: 2 days Responsible: Peter and Margaret	XX.XX.XXXX	Properly operating system
Put sufficient controls in place in order to monitor investment and cost savings	Time: ongoing Responsible: Peter and Margaret	end of 12 months	Investment expenditure is recouped within 12 months
Put tables and chairs in the garden	Time: 1 day Responsible: Martin	XX.XX.XXXX	Tables and chairs are in the garden and are prepared to accommodate guests
Build up social media clout	Time: on-going task requiring 1-hour commitment per day Responsible: Victoria and Maria	XX.XX.XXXX	Increased number of visitors to social network pages; increased number of off-season guests

Joint sustainability initiatives

The case study above illustrates how a tourism company could conceive, plan and implement a sole initiative, which aims to contribute to a more sustainable operation of the company and entails the investment of only enterprise resources. Other types of sustainability initiatives, particularly those aiming to provide a complete tourism experience to customers, may require collaboration with other tourism enterprises throughout the tourism supply chain, destination management bodies, NGOs and local community.

For example, put yourself in the shoes of a small enterprise owner, operating a bike rental point in a rural area. You have sufficient number of bicycles with an average occupancy of two hours per day. Tourists coming to the area usually rent bikes for a short ride through the countryside. You want to increase the occupancy rate of your vehicles threefold by encouraging customers to use your bikes for at least six hours per day. Offering a cycling excursion to the nearby village would be a good solution. But how would you do that by yourself?

The implementation of such initiative may require cooperating with a variety of stakeholders. The route signage may need to be approved by the local authority. You may need to employ a local guide for group tours, involve local hotels and the tourist information office in the promotion of your new offer, agree with a restaurant at the destination village to accommodate your clients for a specially prepared traditional dinner and, let's say, a master class in bread making. The cooperation with the restaurant



would be mutually beneficial, as it would help you deliver a nearly day-long excursion to your customers and help the restaurant increase the number of their guests. In addition, you may agree to share resources needed for route marking and for the promotion of this new offer.

Such initiative would also bring benefits to the community and the environment. Encouraging and supporting cycling in the rural area would make tourists use an eco-friendlier mode of transport, thus reducing greenhouse gas emissions. Hiring a local tour guide would support local employment, and presenting breadmaking techniques would contribute to the preservation of local traditions and culture.

This example illustrates cooperation in a joint sustainability initiative involving different stakeholders spread along the tourism supply chain: hotels, restaurant, bike rental point, tourist information office, local authority. Partnering with other tourism enterprises or organizations in your destination, whose services would nicely complement your own offers, makes sense, because it opens opportunities for co-creation and co-promotion of tourism products, which could offer customers authentic, high-quality experience.

Depending on the type of sustainability initiative, participation in a joint undertaking could help your company: reduce transaction costs and gain economies of scale and scope; secure access to complementary resources; share the costs of production, distribution and marketing; share knowledge, resulting in an improved understanding of the market, new trends and new patterns of tourist behaviours, and in the creation of competitive new services (Borodako & Kožić, 2016).

In addition to benefits individual enterprises could gain from cooperation, involving tourism stakeholders in joint sustainability initiatives could have a positive impact on the image of the destination, in which partners operate. This would eventually increase the attractiveness of the destination for tourists, thus benefiting all local businesses.

If you would like to undertake a joint sustainability initiative, you should incorporate another dimension to the problem-solving process we described above. Try to reflect on the following questions:

Reflective questions for Join Sustainability Initiatives

- What companies, organizations or institutions do you need to engage with in order to implement your idea? Do they play different roles (than you do) in the tourism supply chain?
- If you need to engage with businesses operating in the same tourism sub-sector as you do (i.e. your direct competitors), could you ensure that the benefits of collaboration are higher than potential risks of losing your competitive advantage?
- What contribution would you seek for from their side?
- What benefits would the implementation of your idea offer you and your potential partners?
- How would you approach your potential partners?
- Would you need to sign an agreement regulating the involvement of partners in the initiative?



- How would you coordinate/ manage/ facilitate joint development and implementation of the initiative? What communication and conflict resolution strategies would you put in place?

Online Ideation Tool

The interactive Ideation Tool, accessible through the Sustain-T website and e-learning platform, could facilitate your collaboration with other enterprises in the process of developing or implementing a sustainability initiative. It allows registered users to post a challenge or idea and crowdsource potential solutions, which could be implemented either by an enterprise alone, or in cooperation with other industry stakeholders. The tool also provides a possibility for commenting on ideas, thus facilitating the process of taking a decision about what idea(s) / initiative(s) to undertake. So, the Tool provides the three key functions: Browse new ideas; View idea archive; and Share a new idea.

The “Share a new idea” section allows you to create and post your challenge or idea by filling in a simple template: idea title, idea description, idea needs/wants, end date, status and applicable countries. You can also create here a resource map, showing the resources you have available to invest in implementing your initiative.

The “Browse new ideas” section gives a list of all new, active ideas. When you click on an idea, you can see its full description and comment on it. For example, provide feedback, share your own thoughts on idea implementation, or offer collaboration. You can also compare your own resource map with the one shared by the idea author in order to identify complementary resources needed for implementation of this idea.

The Idea Archive contains all closed challenges and ideas. You can view them to get an understanding of what other micro- and small tourism enterprises aspire to implement to enhance their sustainability performance.



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