

Recommendations on sustainable tourism training for policy and practice.

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Executive Summary

This report is the **final deliverable of the project "Sustainable Tourism: Training for Tomorrow"**, funded by Erasmus+, the European Union programme for education, training, youth and sport. More specifically, the project is funded under Key Action 2 (KA2) of Erasmus+, "Cooperation for Innovation and the Exchange of Good Practices", and the KA202 stream "Strategic Partnerships for vocational education and training".

The project brought together partners representing educational institutions, membership bodies and networks from the areas of natural resource management and ecotourism, and representatives of Protected Areas (PAs) authorities. Partners involved were: Hasselt University (Belgium); University of Hull (United Kingdom); EUROPARC Federation (Germany), the largest network of European PAs; the network of ecotourism professionals in Spain, Asociacion de Ecoturismo en Espana (Spain); and 2 PA authorities: Ente di Gestione per i Parchi e la Biodiversità Emilia Occidentale (Italy) and Montagne de Reims Nature Regional Park (France).

The aim of this project was to jointly develop a **European standard for Sustainable Tourism Training in Protected Areas**, with the following objectives:

- to significantly increase the quality, supply and accessibility of training in sustainable tourism for PA stakeholders across Europe;
- to develop an innovative, open access, online training platform which will enable access to sustainable tourism training for PA staff, businesses, local/regional authorities and others;
- to provide high quality e-learning and 'blended learning' opportunities, through the creation of a new, up-to-date curriculum, and supported by a training toolkit, based on end users' needs;
- to disseminate the training curriculum across European and national networks through a comprehensive programme of multiplier events and dissemination initiatives.

The key **target groups** for the project's outputs are:

- staff of PA authorities across Europe;
- local businesses operating in and around Protected Areas (e.g. hotels, restaurants, tour operators) who are collaborating with PAs (or aim to) in driving sustainable tourism;
- staff of local authorities, development groups, business associations, conservation groups etc. who aim to partner with PAs in the development of sustainable destinations;
- trainers/facilitators involved in supporting PAs and their partners in driving sustainable tourism at business and PA destination level.

This final report provides a summary of the outputs, insights and lessons learned throughout the project. These aim to serve as recommendations for practitioners and policy-makers, that can then build on the project's deliverables to continue to develop skills for sustainable tourism in European PAs and beyond.

The report is structured along the following main sections, that aim to answer the corresponding key questions:

- **Why** the need for this project;
- **What** are the training needs on sustainable tourism in PAs;
- **How** to accelerate the development of sustainable tourism skills in PAs;
- **What recommendations** can be made, from this project.

A brief summary of the content of these sections and answers to such questions is presented next. These are then expanded in more detail on the main body of the report.

Need for the project

Protected Areas (PAs) have an important role not just in conservation, but in many cases they can also be important destinations as places of visitation and recreation, acting as net contributors to regional and national tourism economies. However, it is widely recognised that one of the biggest challenges for tourism is the sustainable conservation and management of the natural resources that support it. This is even more pertinent for the case of PAs, as tourism can be both a factor of appreciation and support for these, but also a significant pressure factor that can threaten their conservation goals and the natural and cultural resources which make them special places.

The EUROPARC Federation (representative body of Europe's Protected Areas) has long recognised such tensions, and the need to take care of both the land and the people who live and work there, and often derive their livelihoods from those who come to appreciate these special places. In 1993 EUROPARC published the ground breaking report "Loving them to death", which called for sustainable tourism in Europe's Protected Areas. Further in 1995, EUROPARC took the initiative to set up the European Charter for Sustainable Tourism in Protected Areas (henceforth referred to as the Charter), a practical management tool that enables PAs to develop tourism sustainably in partnership with local stakeholders. Now, more than 25 years later, the "Charter network" has grown into the biggest and most successful sustainable tourism network in the world. Over the years, more than 160 PAs, 4000+ stakeholder partners and some 500 businesses have engaged with the Charter process. Together, these have accumulated a wealth of knowledge on best practices in sustainable tourism which can inform policy, practice and skills development. Part of this project's aims is to facilitate the sharing and dissemination of that accumulated experience through the medium of training resources.

The Charter has been one of the most successful tools contributing to the EU policy aim "to promote the development of sustainable, responsible, and high-quality tourism" (EC, 2010). This was one of the four EU tourism policy axes and priorities, set in the European Commission's Communication "Europe, the world's No. 1 tourist destination – a new political framework for tourism in Europe" (EC, 2010). The remaining three priorities include i) the consolidation of Europe's profile as home to sustainable destinations; ii) the stimulation of competitiveness in the European tourism sector (including through skills' improvement), and iii) the maximization of EU financial instruments for such purposes (including Erasmus). This project directly addresses all four priorities, focusing on skills development as an instrument to deliver those.

Several previous EU reports have highlighted "skills for sustainability" as a skills gap in the sector, both at destination and business level. Within this wider acknowledgement, there is also the recognition that this gap can be even greater in PAs' contexts. Even though 'sustainable tourism' is now commonly recognized as the desirable model for managing tourism in PAs, this is not necessarily a subject area many PA managers are comfortable with as it was not traditionally part of their professional training. Therefore, the need for guidance and training on the subject specifically for the contexts of PAs - not just for PA managers, but also for local businesses and other relevant stakeholders - has also been repeatedly highlighted at EU and wider international level. If anything, the COVID-19 pandemic has only accelerated such need, as visitation to Protected Areas has actually increased due to travel restrictions and the public's desire to be away from highly populated destinations. This is bringing new audiences to PAs, that are (re)discovering these special places, but at the same time adding new levels of pressure that require more than ever more sustainable management approaches that need to be supported by appropriate sustainability upskilling of stakeholders in these regions.

Sustainable Tourism Training Needs in Protected Areas

Various different professionals and organisations are involved in managing sustainable tourism in or around PAs, from PA managers to local businesses, to staff of local authorities, local NGOs and others. To identify the key training needs of such professionals, a training needs analysis (TNA) was carried out as one of the project's first outputs. This included a review of previously published literature, and a survey of Protected Area stakeholders across Europe.

A list of 22 training themes was produced as statements in response to which respondents were asked to assess both the *relative level of importance* of that theme for their work, as well as their own

relative personal level of knowledge on the subject. This allowed for the identification of: i) areas considered most important; ii) areas where respondents lacked most knowledge; and iii) an analysis of the gap between both, that could help determine priority areas of need. 158 respondents completed the full questionnaire, uncovering a variety of important knowledge and skills areas, gaps and training needs.

There were some variations per country and across different profiles of respondents, and a fuller summary of this analysis is available in section 2 of this report. However, when taking into consideration all the different analysis in perceived importance, perceived levels of knowledge and gaps in those, the following areas below stood out as main training needs deserving close attention:

- Knowledge on how to develop a communication strategy and engaging communication tools.
- Methods and tools for measuring sustainable tourism indicators, and monitoring of tourism impacts on environment, economy and communities.
- Methods to influence and encourage support for conservation funding by visitors and businesses.
- Best practices on partnerships/formal agreements that can support economically local tourism businesses, e.g., permits, licensing and concession schemes, commissions, supporting procurement practices.
- Best practice on creating sustainable transportation offers and alternatives.
- Approaches to minimize and solve conflicts between activities linked to tourism in Protected Areas.
- Knowledge of national and international initiatives, networks and specialist groups that support professionals developing sustainable tourism and recreation in and around PAs, including how to more actively engage with the wider network of the European Charter for Sustainable Tourism in Protected Areas.

The list above provides a very useful indication of training priorities for current and future capacity-building programmes in PA contexts. The outputs of this project directly address several of these, and provide useful resources to help managers, decision-makers, trainers and facilitators wanting to develop those areas in more depth within specific territories. A summary of these is presented next.

Accelerating the development of sustainable tourism skills in PAs

A key aim of this project was to significantly increase the availability and accessibility of training in sustainable tourism for PA stakeholders across Europe through the provision of a free, open access online training platform, complemented by accompanying resources to support its dissemination and use. There is an important role for traditional presential training and in adult learning, with important advantages that can be difficult to replicate in other formats (depending on the subject). However, that traditional format can also have significant limitations, particularly in terms of reach, availability, time and resource requirements.

The focus on online training resources was considered a key priority from the start (even before the COVID-19 pandemic and consequent lockdowns), as this alternative format makes it particularly suitable for the context of PAs. Many PAs and natural spaces tend to be in remote rural areas, often with low population densities and reduced availability of services. Availability of more traditional capacity-building and training structures in many PAs is far from guaranteed. As such, an online training platform, available to anyone with a computer and an internet connection, was considered from the beginning as one of the best solutions to increase access to vocational training for these often geographically isolated individuals or communities of professionals.

The **online training platform** developed in the project is available at sustainabletourismtraining.eu. The content of the platform is available in four languages: English, French, Spanish and Italian. The platform is addressed to all types of stakeholders with an interest in sustainable tourism development in PAs, such as PA staff, local businesses, local governments, and others. Its learning programme is structured around the principles of the Charter. This was the first time that sustainable tourism training

content (including case studies and best practices) on all key principles and actions of the Charter was developed and made available in a single platform aimed at all key tourism stakeholder groups working in European PAs.

From Dec 2019 to June 2021, 1168 users registered on the platform, generating almost 44000 page views, and continuing to increase. These figures validate the project's aim of adopting this format as an efficient way of substantially increase the reach and availability of sustainable tourism training materials across Europe. Section 3 of this report provides a more detailed presentation of the platform's content and usage data.

To complement the content on the project's online training platform, a Training Toolkit has also been created, equally available in four languages (English, Spanish, French and Italian). The toolkit provides additional supporting materials and resources for those who wish to build on the online platform's contents and develop practical learning experiences around those. 40 Activity Outlines were produced, that can be used to support face-to-face, online or 'blended' learning formats. The toolkit was designed to support different levels of experience in training, facilitation or capacity-building, providing both introductory guidance for those who have never designed, developed or delivered training, as well as a collection of resources and training activities that both experienced and inexperienced trainers can use.

Finally, a "Train the Trainer" course was also produced and delivered by the EUROPARC Federation. The course consisted of 7 course units in which pedagogical skills, and tips and advice, were provided on using the online curriculum in a 'blended learning' and/or 'flipped learning' context. Although originally planned for a 2-day face-to-face workshop, due to COVID-19 this training event was adapted into an online training course, which will become permanently available as part of EUROPARC's training resources.

Final recommendations

The outputs of this project aim to provide a starting point and invitation for PA managers, business owners, public officers, policy-makers, trainers, facilitators and any other relevant stakeholders to engage in and promote continuing development of shared sustainable tourism skills and knowledge. The online training platform offers contents that allow users to obtain a good introduction to a variety of sustainable tourism themes, and instruments like the Training Toolkit or 'Train the Trainer' online course serve as an excellent set of supporting tools to then develop more in-depth and tailored capacity-building activities for the areas of most relevance to each territory.

Significant learning has been gained throughout the development of the project, which has only increased further with the start of the global COVID-19 pandemic and the quick transformation of training and educational practices everywhere. Reflecting on this learning and experiences, section 4 of the final report outlines a set of recommendations for practitioners and policy-makers, which are summarised below:

Capitalise on the opportunities provided by digital transformation for sustainability eLearning

Many of the previous psychological barriers to engage with online training have faded during the COVID-19 pandemic, as virtual communications became commonplace. This provides significant opportunities for eLearning, as the format can have obvious advantages in terms of reach, availability, convenience, flexibility and cost-effectiveness, only to name a few. However, there are also important 'digital divides' between rural areas and urban ones that need to be urgently addressed, to be able to fully take advantage of these possibilities. Likewise, there remains significant value in presential peer-to-peer learning and sharing of experiences between practitioners. This can be even more relevant on topics of sustainable tourism in PAs, where there is a strong focus on community engagement. Ideally, eLearning should be seen as a complement, rather than full replacement to presential learning, as both approaches have pros and cons.

Turn skills gaps into intervention opportunities

The project's Training Needs Analysis (TNA) highlighted several important skills' gaps that constitute future opportunities for capacity-building initiatives. But every PA is unique in its characteristics and stakeholder networks, so it is good practice to run locally-focused TNA exercises to identify context-specific needs. The methodology used in the project is simple enough to be replicated at

local/regional level, and managers are invited to use it in their own contexts. Running locally-relevant TNAs is also an important step to strengthen stakeholder collaboration and develop a common sustainability development culture at local level. Local collaborations can have an important role to help develop new skills through peer-to-peer learning between very different stakeholders.

Use the project's resources as a lever to drive public policy

As a transversal activity with large multiplier effects and systemic impacts, tourism can have a key role to play in delivering a wide range of public policy goals. Given the wider focus of this project on sustainable tourism in Protected Areas' contexts, its benefits and impact potential go beyond tourism policy alone. Examples of EU policies that can be directly supported by take-up of the training developed in this project include: the 'EU Biodiversity Strategy for 2030'; European Green Deal; Long-Term Vision for Rural Areas; New Industrial Strategy for Europe; European Skills Agenda; NextGenerationEU and 'Recovery and Resilience Facility'. It should also be noted that the same applies to other national and/or international policy instruments, like the World Bank's recommendations for green approaches to recovery from the COVID-19 pandemic, or even the UN's Sustainable Development Goals, as these include multiple targets around promotion of knowledge and skills for sustainable development.

1 Introduction – Why the need for this project and what is it about?

1.1 Importance of Sustainable Tourism Training in Protected Areas

Tourism makes a substantial contribution to the EU economy. In 2018, it directly and indirectly supported over 27 million jobs and contributed to 10.3 % of the total EU GDP (European Parliament, 2021). Although in the context of the COVID-19 pandemic, European tourism growth is expected to remain below 2019 levels until 2023, the continued importance of the sector to the economy is reflected in its inclusion in the 14 industrial ecosystems categorised in the 2021 EC Industrial Strategy update (EC, 2021). The sector is also the largest employer of young people, women, part-time workers and migrants. Within this wider picture, European Protected Areas and their surroundings have an important role both as places of visitation and recreation, and as net contributors to local, regional and national economies.

An EC report on "Estimating the economic value of the benefits provided by the tourism/recreation and Employment supported by Natura 2000" (2011) estimated the benefits of tourism, recreation and employment supported by the entire Natura 2000 Network. It found that total expenditure related to tourism and recreation supported by Natura 2000 sites was between around € 50 and € 85 billion in 2006; and that the overall activities undertaken in Natura 2000 sites are estimated to have supported about 12 million FTE jobs each year during the period 2006-2008, i.e. about 6% of total employment in the EU.

These are non-negligible figures, but as the EU's "Agenda for a sustainable and competitive European tourism" (2007) recognized, one of the biggest challenges for tourism is the sustainable conservation and management of the natural and cultural resources that support it. In an ever-changing world, there are increasing expectations, demands and challenges to be faced by managers of Protected Areas. If Protected Areas are to remain relevant to modern society, they need to be able to adapt and respond to these changes. Ensuring the dedication, passion and commitment often shown by people working in Protected Areas is translated into qualified, competent, and effective staff, is central to success. Training can be a key element in this. It does not need to be seen as a highly expensive, time consuming activity, but an investment in the long-term effectiveness of the administration, which could very well be cost saving.

Several EU reports have highlighted the existing skills gap in sustainable tourism. The "Blueprint for sectoral cooperation on skills" (EU, 2017a) recognised that new skills are needed for sustainable tourism and green tourism. The study "Mapping and performance check of the supply side of tourism education and training" (EC, 2016) identified "skills for sustainability" as one of the specific gaps in the sector, both at destination and business level. The Vilnius Declaration on "Professionalising Protected Area Management in Europe" (BfN, 2013) stressed the need for jointly developed training activities and products to improve the capacity of PA managers in relevant associated sectors such as tourism. The Declaration strongly recommended the development of online courses, shared materials and case studies aimed at, and highlighted the need to enhance capacity of European training institutions to develop online training and to develop standards and curricula for 'train the trainer' workshops. As a result of the COVID-19 pandemic and its associated travel restrictions and social distancing measures, the need to share knowledge online has accelerated. Meanwhile, visitation to Protected Areas has actually increased, bringing new audiences and making the need for PA staff training even more urgent.

1.2 The need for this project to support current and developing policy

This project aligns with the stated aims of several current policies and initiatives directed towards an ecological transition, both in Europe and globally. Its outputs can therefore support both the implementation of current policies and the development of future policies.

From a global perspective, the World Bank has released recommendations for green approaches to recovery from the COVID-19 pandemic (WBG, 2021). Advocating for Green, Resilient and Inclusive Development (GRID), the World Bank Group identifies tourism as a sector hard-hit by the crisis. In an earlier report (World Bank, 2020) nature-based tourism's "singular potential to create jobs and growth, while protecting wildlife and ecosystems" was specifically acknowledged. Meanwhile, the World Tourism Organisation (UNWTO, 2021) has made recommendations for the transition to a green travel and tourism economy. "Lines of action" for sustainable and resilient growth are presented, including biodiversity conservation, climate action, circular economy, and social inclusion.

In Europe, a strategy for ecological transition is articulated in the Green Deal (EC, 2019). The Deal highlights the need for training to pro-actively re-skill and upskill the workforce, enabling them to acquire the skills they need to transfer from declining to growing sectors, and adapt to new processes. Announcing the launch of the European Climate Pact, the EC has committed to working on building capacity "to facilitate grassroots initiatives on climate change and environmental protection". Key to the Green Deal is the EU Biodiversity Strategy for 2030, which also recognises that improving knowledge, education and skills is essential to building an integrated approach to enabling transformative change.

The role of sustainable tourism in EU policy has long been clear. "To promote the development of sustainable, responsible, and high-quality tourism," was one of the four EU tourism policy axes and priorities, set in the European Commission's Communication "Europe, the world's No. 1 tourist destination – a new political framework for tourism in Europe" (EC, 2010). The remaining three priorities include i) the consolidation of Europe's profile as home to sustainable destinations; ii) the stimulation of competitiveness in European tourism sector (including through skills' improvement), and iii) the maximization of EU financial instruments for such purposes (including Erasmus). This project directly addresses all four priorities, focusing on skills development as an instrument to deliver those.

1.3 European Charter for Sustainable Tourism in Protected Areas

The EUROPARC Federation as the representative body of Europe's Protected Areas, is the collective voice for all nature and landscape areas and seeks to build a stronger, unifying, European network organisation that is better placed to support its members and to respond to current and future challenges facing Europe's nature.

In 1995, EUROPARC set up the European Charter for Sustainable Tourism in Protected Areas (henceforth referred to as the Charter or ECST), a practical management tool that enables PAs to develop tourism sustainably in partnership with local stakeholders. Since then the Charter network has grown significantly, and has counted [107 Sustainable Destinations from 15 countries](#) involving a growing number of local partners including tourism businesses, local and regional government authorities, NGOs and more. Over the past 25 years the Charter has been one of the most successful tools contributing to the EU policy aim "to promote the development of sustainable, responsible, and high-quality tourism" (EC 2010). Its 100+ destinations have accumulated a wealth of knowledge on best practices in sustainable tourism which can inform policy, practice and skills development. Part of this project's aims is to facilitate the sharing and dissemination of that accumulated experience.

The Charter is divided into 3 parts (Europarc, 2015):

Part I - Sustainable destinations: the first and main part is for sustainable destinations – primarily around a Protected Area. This is awarded to the Protected Area authority and covers a specifically defined ECST Area which may be wider than the legally designated Protected Area. The Charter brand is a commitment, and stresses that Sustainable Tourism is Good for Parks and Good for People.

Part II - Sustainable partners: potentially, every sustainable business located in and around a PA can become a certified Charter partner, comprising tourism businesses (e.g. activity providers, accommodations, transport companies, food providers, tourism bodies) as well as businesses benefitting indirectly from tourism (e.g. local producers and shops, building industry).

Part III - Sustainable tour operators: for sustainable tour operators bringing visitors to Protected Areas. They are involved in sustainable activities, such as (at a regional level) interpretation and guided tours' agencies, individual guides, specialised operators (e.g. birdwatching, scuba divers), and outdoor activities and sport operators; or (inter)national agencies working in the field of outdoor experiences and ecotourism. (STTfT, Engaging with the Charter).

The mission of the European Charter for Sustainable Tourism in Protected Areas is to safeguard cultural and natural values by stimulating quality sustainable tourism, engendering partnerships to support local livelihoods, increase awareness of the need for sustainability, and promote international cooperation.

The key topics in the Charter are:

1. Protecting valuable landscapes, biodiversity and cultural heritage
2. Supporting conservation through tourism
3. Reducing carbon footprint, pollution and wasteful resource use
4. Providing safe access, quality facilities and special experiences of the Protected Area, available to all visitors
5. Effectively communicating the area
6. Ensuring social cohesion
7. Strengthening prosperity in the local community
8. Providing training and capacity building
9. Monitoring tourism performance and impacts
10. Communicating actions and engaging with the Charter

Topic 8 is considered as the key point in this Erasmus+ project. In order to provide training and capacity building for PA stakeholders on Sustainable Tourism, an online platform has been created, aimed at learners and trainers, providing detailed content on each of the remaining nine topics.

1.4 E+ project: “Sustainable Tourism: Training for Tomorrow”



The project “Sustainable Tourism: Training for Tomorrow” meets the need identified in the Charter, to provide training and capacity building in Sustainable Tourism. It also aligns with recent European policy developments directed towards an ecological transition in building capacity for initiatives on climate change and environmental protection. The key output of the project is an open access online training platform on Sustainable Tourism in Protected Areas (PAs). The project was funded by Erasmus+ and ran

from September 2018 to February 2021 (30 months), but due to COVID-19 was extended by 6 months until August 2021.

1.4.1 Goal

The aim of this project was to jointly develop a European standard for Sustainable Tourism Training for PAs, drawing from the experiences of the Charter. The partnership had the following objectives:

- to significantly increase the quality, supply and accessibility of training in sustainable tourism for PA stakeholders across Europe;
- to develop an innovative, open access, online training platform which will enable access to sustainable tourism training for PA staff, businesses, local/regional authorities and others;
- to provide high quality e-learning and ‘blended learning’ opportunities, through the creation of a new, up-to-date curriculum, and supported by a training toolkit, based on end users’ needs;
- to disseminate the training curriculum across European and national networks through a comprehensive programme of multiplier events and dissemination initiatives.

The key target groups for the project are:

- staff of PA authorities across Europe;
- local businesses operating in and around Protected Areas (e.g. hotels, restaurants, tour operators) who are collaborating with PAs (or aim to) in driving sustainable tourism;
- staff of local authorities, development groups, business associations, conservation groups etc. who aim to partner with PAs in the development of sustainable destinations;
- trainers/facilitators involved in supporting PAs and their partners in driving sustainable tourism at business and PA destination level.

1.4.2 Partners

The project partnership brought together a mix of academic (2 universities) and practitioner-representative partners, such as:

- Hasselt University (lead partner), Belgium (Dr. Elke Hermans; Veerle Cops)
- University of Hull, United Kingdom (Dr. Fernando Correia; Yvonne Black)
- EUROPARC FEDERATION, Germany - the representative body of Europe's Protected Areas (Carol Ritchie, executive director; Giacomo Benelli; Teresa Pastor)
- Ente di Gestione per i Parchi e la Biodiversità Emilia Occidentale (EPEO) / Parks and Biodiversity Management Authority - Western Emilia in Italy (Sonia Anelli, Barbara Vernizzi, Enrica Montanini). EPEO is an Italian public body, representing a chain of regional parks, and belonging to a regional network of PAs including regional, inter-regional and national parks, natural reserves and Natura 2000 sites in the Emilia-Romagna region;
- Asociación de Ecoturismo en España (AEE) / Ecotourism Association Spain (Amanda Guzmán, managing director). AEE is a Spanish national-level association that brings together tourism business associations committed to sustainability and who work in cooperation with Protected Areas, representing more than 800 businesses in 17 Spanish Protected Areas over 10 regions;
- Parc naturel régional de la Montagne de Reims (PnrMR) / Montagne de Reims regional nature Park in France (Olaf Holm, director; Emmanuelle Deon; Estelle Profit). PnrMR has been a recognised Charter Park since 2013.

Associated partners:

- The French Federation of Regional Nature Parks (FPNRF) in France
- Federparchi in Italy
- Universidad Politécnica de Madrid (UPM), School of Forestry in Spain

1.5 Related initiatives

Over recent years, several organisations have been developing parallel initiatives intended to build capacity for sustainable tourism, emphasising the growing need in this area, to which our project also responds. Examples include:

- IUCN PAPACO (Program on African Protected Areas and Conservation) is a Massive Open Online Course (MOOC) which focuses on the sustainable use, or valorisation, of natural resources in Protected Areas. Its main goal is to contribute to the long-term conservation of Protected Areas by introducing some of the ways in which they and their resources can be sustainably valorised. The first part of the MOOC covers the direct and indirect benefits provided by natural resources in Protected Areas, while the second part examines sustainable tourism and its benefits, costs, opportunities and threats.
<https://papaco.org/mooc-val/>
- Global Sustainable Tourism Council (GSTC) sustainable tourism training programme offers a Professional Certificate in Sustainable Tourism. Training towards the official exam is provided via 3-day in-person training classes and facilitated online courses. Course participants are

provided with in-depth knowledge of the GSTC Criteria for sustainability in travel and tourism.

<https://www.gstcouncil.org/sustainable-tourism-training/>

- IUCN WCPA Tourism and Protected Areas Specialist group provides a platform for sharing expertise and knowledge, among protected area practitioners and others.
<https://www.iucn.org/commissions/world-commission-protected-areas/our-work/tourism-tapas>
- CABI Tourism Cases share experiences and expertise that have been accumulated in tourism projects and programmes around the world. <https://tourism.cabi.org/casestudies/>

The outputs of this project will serve as a valuable contribution to this growing body of work on a much-needed area.

2 What are the main training needs on Sustainable Tourism in Protected Areas?

Various different professionals and organisations are involved in managing sustainable tourism in or around PAs, from PA managers to local businesses, to staff of local authorities, local NGOs and others. To identify the key training needs of such professionals, a training needs analysis (TNA) was carried out as one of the project's first outputs. This included a review of previously published literature, analysis of the IUCN Global Register of Competences for Protected Area Practitioners¹ and the European Charter for Sustainable Tourism in Protected Areas², and a survey of Protected Area stakeholders across Europe. A variety of relevant competences, skills and training needs were uncovered. These are detailed in the next sections.

2.1 Approach for the Training Needs Analysis

2.1.1 Literature review and Map of Sustainable Tourism Competences

The first step in the training needs analysis was a systematic review of research literature. Five different journal databases were scanned for key terms relating to tourism, sustainability, and competences³. From an initial set of 1472 articles, after analysis, 42 were considered relevant for the identification of training needs for sustainable tourism in Protected Areas.

The training needs identified in the research literature review were mostly related to competences required for managing recreation in and visitation to Protected Areas, and for developing relationships with stakeholders. For example, Depper et al. (2015) identified a need for competences in *gathering, monitoring and evaluating data*, including data on visitor patterns and behaviours and *how to use such data to inform policy and regulations*, in the US National Parks Service. Some of the literature directed attention to the role of *political, ethical and multicultural competences* (e.g., Anderson & Stone, 2005), and also evident was a recognition of relative unpreparedness for *collaboration and partnership work* (Depper et al., 2015). Further, competences in areas not typically considered to be key to Protected Area management, such as those required for *marketing, innovation or revenue generation* were seen as relevant for sustainable tourism management (McCool & Khumalo, 2015). The results of the literature review were then used to support the process of generating the skills survey discussed below.

In addition to the review of academic research literature, a complementary in-depth review of the IUCN's Global Register of Competencies for Protected Area Practitioners (Appleton 2016) was carried out. This involved mapping those competences against the key topics of the European Charter for Sustainable Tourism in Protected Areas. The IUCN Register is likely to be the most comprehensive compilation of PA management competences currently available, organised by levels of jobs or personnel roles in PAs, based on general responsibilities of each type of role. Many of the competences included in the Register are also directly relevant for the planning and management of sustainable tourism in PAs. Meanwhile, the Charter is a tool with a set of principles and topics that guide PAs to develop tourism sustainably in partnership with local stakeholders. Mapping Register competences against key topics of the Charter allows for the identification of competences needed in the pursuit of Charter principles⁴. Drawing from this exercise and the wider literature review, an extensive list of knowledge areas and skills was produced and mapped against the Charter's

¹ IUCN's *Global register of competences for protected area practitioners* is available at <https://www.iucn.org/content/a-global-register-competences-protected-area-practitioners>

² More information on the *European Charter for Sustainable Tourism in Protected Areas* is available at <https://www.europarc.org/library/europarc-events-and-programmes/european-charter-for-sustainable-tourism/>

³ Full details of methodology, terms and databases used, etc, are available on the full TNA report (downloadable at <https://sttft.eu/training-needs-analysis-report/>).

⁴ A full mapping of the Charter's key topics and priorities against the IUCN's Register of Competences was produced and is available in **Appendix B** of the TNA report (downloadable at <https://sttft.eu/training-needs-analysis-report/>).

priorities. This is presented in a comprehensive '**Map of areas of Knowledge and Skills for Sustainable Tourism in PAs against the Charter's Priorities**' (available in the project's TNA report - Appendix C⁵). The Map comprises an extensive collection of relevant training themes that can be used by managers and trainers as:

- a source of themes to inform the development of tailored training programmes in PAs around specific priorities of the Charter;
- a wider index or directory of training areas that can serve as a starting point for the setting of more granular TNA exercises at local, regional, national or international levels.

This latter utility was demonstrated with the production of the project's own European survey, as described next.

2.1.2 Production of TNA Survey



The Map produced in the first step of the training needs analysis was used as a starting point for the second stage: the production of a European TNA survey. In a full-day workshop with the project partners (2nd of April 2019, Madrid), the map was used to structure a discussion and shortlisting of themes to be included in a Europe-wide survey to PA stakeholders, according to partners' views as practitioners involved in sustainable tourism, management of PAs, and development and implementation of the Charter. Further rounds of shortlisting and reduction of

themes via online communications were done, to reduce the list to a manageable size for a survey. A pilot survey was also done at the XI Charter Network meeting in Greece (in the Tzoumerka, Acheloos Valley, Agrafa and Meteora National Park, April 2019). A final list of 22 training themes (plus profile questions) was produced that was considered manageable for an online survey (see Table 1). Each of the 22 themes was framed as a statement in response to which respondents were asked to assess both the *relative level of importance* of that theme for their work, as well as their own *relative personal level of knowledge on the subject*. This allowed for the identification of: i) areas considered most important; ii) areas where respondents lacked most knowledge; and iii) an analysis of the gap between both, that could help determine priority areas of need.

⁵ Appendix C of the TNA report (downloadable at <https://sttft.eu/training-needs-analysis-report/>).

Table 1: Themes framed as statements for the online Training Needs Analysis survey

Areas of knowledge or skills in sustainable tourism included in the TNA survey.	
1.	Tools and strategies for visitor management in natural areas (for example tools like zonation, carrying capacity, techniques to influence visitor behaviour, redistribute demand, etc).
2.	Tools and approaches to influence and regulate potentially damaging tourism developments (e.g. principles and processes of environmental impact assessment, best practices on influencing type, location and design of tourism-related infrastructure, etc).
3.	Knowledge of tourism and recreation activities and investments centred directly on contributing to nature and heritage conservation as its key offer (e.g. volunteer tourism, best practices of conservation-focused visitor events, projects and activities, etc)
4.	Methods to influence and encourage support for conservation funding by visitors and businesses (e.g. visitor payback schemes, payments for ecosystem services, using concessions and permits, alternative donation and revenue generating approaches, etc)
5.	Tools to reduce environmental impact from organisational activity (e.g. pollution and waste management, water and energy savings, eco-certifications and environmental management systems, etc)
6.	Best practice on creating sustainable transportation offers and alternatives (e.g. public transport to and within the Protected Area, strategic offers and packaging of biking, hiking and/or other non-polluting transportation alternatives, etc).
7.	Main types of tourism and recreation offers adequate for Protected Areas, and tools for their planning and development (e.g. product and destination development models, development of interpretation and experiences/products/services/packages, etc).
8.	Safety standards, codes of conduct and risk management approaches for visitors and providers of tourism and recreation activities.
9.	Best practice on provision of services, facilities, information and general offers that are accessible to everyone (e.g. visitors with special needs and demographic or socio-economic groups who don't normally visit Protected Areas).
10.	Knowledge of how to develop a communication strategy (e.g. ability to identify key messages and media for marketing and communication with visitors and other stakeholders, branding and relationship-building methods, designing programmes for visitor and community awareness, etc)
11.	Best practices on communicating organisational commitment to sustainable tourism (e.g. how to help businesses become ambassadors for the Protected Area, how to promote own efforts to become more sustainable, etc).
12.	Knowledge of how to develop, design and/or use attractive and engaging communication tools (e.g. use of online and social marketing techniques, production of communication materials, campaigns, media relations etc to engage visitors and other stakeholders, ...)
13.	Approaches to minimize and solve conflicts between activities linked to tourism in Protected Areas (e.g. best practice on conflict resolution and negotiation, seeking compromise, win-win solutions, etc).
14.	Practices, mechanisms and different collaboration and partnership formats to promote stakeholders' participation in decision-making and planning of sustainable tourism (including mechanisms for regular communication and consultation with local communities, businesses, visitors, Protected Area authorities and/or others).
15.	Inclusive techniques of facilitation, consultation and moderation of meetings that encourage stakeholder dialogue and cooperation on destination management matters.
16.	Best practice on strategies and methods to promote and market local products and services through tourism.
17.	Best practice on partnerships/formal agreements that can support economically local tourism businesses, and related products and services (e.g. permit, licensing and concession schemes, business partnerships and commissions, use of procurement to promote supply of local goods and services, facilitating access to assistance, support and finance, etc)
18.	Tools for tourism monitoring (e.g. visitor volumes, demand, patterns and satisfaction, businesses performance and needs, etc)
19.	Tools for monitoring tourism impacts on the environment, economy and communities
20.	Methods to define and measure sustainable tourism indicators (including key tourism indicators systems, processes and techniques for collecting and analyzing information, etc).
21.	Knowledge of national and international initiatives, networks and specialist groups that support professionals developing sustainable tourism and recreation in and around Protected Areas
22.	How to actively engage with the wider network of the European Charter for Sustainable Tourism in Protected Areas (e.g. how to access best practice of other stakeholders, meet peers of other areas, share information on own work, etc).

The final questionnaire was available in four languages (English, French, Italian and Spanish) and links to the survey were distributed by the partners between 28th May and 24th June 2019, through direct emailing, news articles on websites, e-newsletters, Facebook and twitter posts. 235 respondents started answering the questionnaire. 173 of them assessed all statements, and 158 respondents finished the questionnaire completely (statements and profile questions). Resultant data was analysed and a summary of key findings is presented below.

2.2 Findings of the European Training Needs Analysis' survey

The data from the survey was analysed to determine which knowledge and skills' areas were rated most important by respondents, and which areas respondents said they most lacked knowledge. It was also possible to analyse how data differed across different countries, and across different types of organisation.

The top 5 knowledge and skill areas rated **most important** by respondents overall were:

1. Knowledge on how to develop a communication strategy (see statement 10 in Table 1 for full description).
2. Tools to reduce environmental impact from organisational activity (statement 5).
3. Knowledge of how to develop, design and/or use attractive and engaging communication tools (statement 12).
4. Tools for monitoring tourism impacts on the environment, economy and communities (statement 19)
5. Best practice on creating sustainable transportation offers and alternatives (statement 6).

Therefore, competences around communication, reduction and monitoring of impacts, as well as sustainable transportation, were all considered highly important. It should be noted however that all statements in the survey were considered important by a clear majority of respondents, though the list above stood out at the 'highly important' end of the scale.

Unlike the ranking of importance, there were much starker contrasts of responses when participants were asked to assess for each statement their relative level of knowledge on those areas. The top 5 of which respondents overall said they **most lacked knowledge** were:

1. Methods to influence and encourage support for conservation funding by visitors and businesses (statement 4).
2. Knowledge of national and international initiatives, networks and specialist groups that support professionals developing sustainable tourism and recreation in and around PAs (statement 21).
3. Best practices on partnerships / formal agreements that can support economically local tourism businesses, and related products and services (statement 17).
4. Methods to define and measure sustainable tourism indicators (statement 20).
5. Tools for monitoring tourism impacts on the environment, economy and communities (statement 19).

Taking into account the results of *both* the overall respondents' stated level of importance and level of knowledge, a **gap analysis** was conducted, between stated levels of importance and levels of knowledge. The 5 areas came highest in the ranking of gaps, and provide an indication of main training needs areas deserving close attention:

1. Tools for monitoring tourism impacts on the environment, economy and communities (statement 19).
2. Methods to define and measure sustainable tourism indicators (statement 20).
3. Knowledge of national and international initiatives, networks and specialist groups that support professionals developing sustainable tourism and recreation in and around PAs (statement 21).

4. Knowledge of how to develop, design and/or use attractive and engaging communication tools (statement 12).
5. Methods to influence and encourage support for conservation funding by visitors and businesses (statement 4).

However, responses were not homogeneous across the different profiles of respondents, and a more granular analysis of results was also conducted, a summary of which is presented below.

2.2.1 Findings by type of organisation

A more detailed analysis was also conducted for respondents working in a specific type of organisation, such as organisations involved in PA management (n=27), businesses (n=69, including the subcategories business associations, accommodations, guided tours, restaurants, as well as other business organisations) and the public sector (n=44, including the subcategories local municipalities, tourism authorities/agencies and other public sector organisations). Responses from other types of organisations were much lower in number and were not included in this analysis.



Table 2 presents the results for the top 3 areas identified as **most important** for respondents of those three main types of organisations. A clustering of views of different priority areas for different types of organisations is apparent from these results. For instance, two out of the three most important areas for PA managers are related to monitoring, both of tourism impacts and of visitor data. Business representatives emphasize the importance of not just communication tools, but also safety standards and codes of conduct, as well as tools to reduce their own environmental impacts. Finally, public sector representatives reiterated the importance of sustainable transportation, but also understanding and planning of tourism and recreation, which reflects the wider territorial and strategic economic development approach of public sector roles.

As for the areas of which respondents indicate having the **least knowledge** (Table 3), all three groups indicate low levels of knowledge on methods to influence and encourage support for conservation funding by visitors and businesses. Both PA managers and other public sector representatives also indicated having low levels of knowledge on partnerships and agreements with local businesses, which points to a potential area of training that could be commonly developed and delivered for both groups of professionals simultaneously.

Table 2: Top 3 skills' areas identified as most important per type of organisation.

Skills' areas considered most important (per type of organisation)	PA mgt orgs (n=27)	Businesses (n=69)	Public sector (n=44)
"tools for monitoring tourism impacts on the environment, economy and communities" (statement 19).	x		
"knowledge of how to develop a communication strategy" (statement 10).	x		
"tools for tourism monitoring (e.g. visitor volumes, demand, patterns, satisfaction, etc)" (statement 18).	x		
"tools to reduce environmental impact from organisational activity" (statement 5).		x	x
"safety standards, codes of conduct and risk management approaches for visitors and providers of tourism and recreation activities" (statement 8).		x	
"knowledge of how to develop, design and/or use attractive and engaging communication tools" (statement 12).		x	
"best practice on creating sustainable transportation offers and alternatives" (statement 6).			x
"main types of tourism and recreation offers adequate for Protected Areas, and tools for their planning and development" (statement 7).			x

Table 3: Top 3 skills areas that respondents in different types of organisations considered to have least knowledge about

Skills' areas for which respondents indicate to have least knowledge about (per type of organisation)	PA mgt orgs (n=27)	Businesses (n=69)	Public sector (n=44)
"best practice on partnerships/formal agreements that can support economically local tourism businesses, and related products and services" (statement 17)	x		x
"methods to influence and encourage support for conservation funding by visitors and businesses" (statement 4)	x	x	x
"best practice on strategies and methods to promote and market local products and services through tourism" (statement 16).	x		
"knowledge of national and international initiatives, networks and specialist groups that support professionals developing sustainable tourism and recreation in and around Protected Areas" (statement 21)		x	
"methods to define and measure sustainable tourism indicators" (statement 20).		x	
"approaches to minimize and solve conflicts between activities linked to tourism in Protected Areas" (statement 13).			x

To check if there are differences in training gaps among different types of PA stakeholders (i.e., gap between stated level of importance vs stated level of knowledge), the training gaps were analysed for PA management organisations, businesses, and the public sector. The **gap analysis** for the different types of PA stakeholders (i.e. *gap between stated level of importance vs stated level of knowledge*), revealed some similarities but also differences between respondents from PA management organisations, businesses, and the public sector.

In the case of respondents of **PA management organisations**, the gap analysis revealed the following main areas as priorities:

- Tools for monitoring tourism impacts on the environment, economy and communities (statement 19).
- Approaches to minimize and solve conflicts between activities linked to tourism in Protected Areas (statement 13).
- Methods to define and measure sustainable tourism indicators (statement 20).
- Knowledge of how to develop, design and/or use attractive and engaging communication tools (statement 12, having an equal score as statement 20).

For respondents from **businesses**, the following areas showed the biggest gaps between level of importance and level of knowledge:

- Knowledge of national and international initiatives, networks and specialist groups that support professionals developing sustainable tourism and recreation in and around Protected Areas (statement 21).
- Tools for monitoring tourism impacts on the environment, economy and communities (statement 19).
- Methods to define and measure sustainable tourism indicators (statement 20).

Finally, for respondents from the **public sector**, the areas with the biggest gaps between stated level of importance and level of knowledge were:

- Tools for monitoring tourism impacts on the environment, economy and communities (statement 19).
- Approaches to minimize and solve conflicts between activities linked to tourism in Protected Areas (statement 13).
- Tools and approaches to influence and regulate potentially damaging tourism developments (statement 2).
- Methods to influence and encourage support for conservation funding by visitors and businesses (statement 4, having an equal score as statement 2).

It can be concluded that tools for monitoring tourism impacts on the environment, economy and communities (statement 19) and methods to define and measure sustainable tourism indicators (statement 20) represent key training gaps for all PA stakeholders. At the same time, respondents from PA management organisations and the public sector have a key training gap with respect to approaches to minimize and solve conflicts between activities linked to tourism in Protected Areas (statement 13) whereas the top training gap for businesses appeared to be knowledge of national and international initiatives, networks and specialist groups that support professionals developing sustainable tourism and recreation in and around Protected Areas (statement 21). Tools and approaches to influence and regulate potentially damaging tourism developments (statement 2) was only a top 3 training gap for the public sector.

2.2.2 Findings by country

An analysis was also done by country of respondents, to see if there were national differences in terms of training needs. Only three countries were included in this analysis – France, Italy and Spain – as the ones with the highest number of respondents.

Table 4 shows the results for stated levels of **importance**, and it is apparent that there is a higher level of overlap between areas than the results by organisation (presented on table 2.2.1). Respondents from all countries rated highly the importance of skills and knowledge areas related to *communication*. There was a high proportion of business respondents in Spain, so perhaps it is not surprising that for Spanish respondents *all* top three areas which were identified as important were related to communication. On the other hand, in France and Italy – which had higher proportions of PA manager and public official respondents - the area of sustainable transportation was also seen as a priority.

Table 4: Top 3 skills areas identified as most important by country.

Skills' areas considered most important (top 3 in each country)	France (n=38)	Italy (n=22)	Spain (n=69)
"best practice on creating sustainable transportation offers and alternatives" (statement 6).	x	x	
"tools to reduce environmental impact from organisational activity" (statement 5).	x		
"knowledge of how to develop a communication strategy" (statement 10).	x	x	x
"knowledge of how to develop, design and/or use attractive and engaging communication tools" (statement 12).		x	x
"best practices on communicating organisational commitment to sustainable tourism" (statement 11).			x

When the top skills areas that respondents considered themselves to have **least knowledge** about were examined, low knowledge levels were expressed for methods to influence and encourage support for conservation funding by visitors and businesses (Table 5). Respondents in France and Italy (who were mostly non-business) also expressed relative lack of knowledge on partnerships and agreements that can support local businesses.

The wider aspect of improving access to experiences and practices being developed elsewhere, is also reflected by the low levels of knowledge expressed of a) initiatives and networks supporting sustainable tourism professionals (in Spain) and b) ways to actively engage with the Charter network. The latter was particularly relevant in Italy, which is likely connected with the fact that the Charter approach is now a methodology being promoted by Federparchi across the country, but this result seems to indicate that PA managers or public officials there are not yet fully confident on how to engage with the wider Charter network.

Table 5: Top 3 skills' areas that respondents in each country considered to have least knowledge about.

Skills' areas for which respondents indicate to have least knowledge about (top 3 in each country)	France (n=38)	Italy (n=22)	Spain (n=69)
"methods to influence and encourage support for conservation funding by visitors and businesses" (statement 4).	x	x	x
"best practice on partnerships/formal agreements that can support economically local tourism businesses, and related products and services" (statement 17).	x	x	
"tools for monitoring tourism impacts on the environment, economy and communities" (statement 19).	x		
"how to actively engage with the wider network of the European Charter for Sustainable Tourism in Protected Areas" (statement 22).		x	
"knowledge of national and international initiatives, networks and specialist groups that support professionals developing sustainable tourism and recreation in and around Protected Areas" (statement 21).			x
"methods to define and measure sustainable tourism indicators" (statement 20).			x

Overall, the results and training needs identified above provide useful directions for decision-makers, providers and promoters of training and capacity-building in and around Protected Areas in the countries covered, but should also prove of relevance beyond those. More in-depth findings and information are also presented on the full TNA report of the project, available at <https://sttft.eu/training-needs-analysis-report/>.

3 How to accelerate the development of Sustainable Tourism skills in PAs?

This section provides a review of the resources developed under the project to address the question of *how* to develop and accelerate Sustainable Tourism skills in Protected Areas.

There is an important role for traditional presential training and adult learning, with important advantages that can be difficult to replicate in other formats (depending on the subject). However, the format can also have significant limitations, particularly in terms of reach, availability, time and resource requirements. Hence a key aim of this project was to significantly increase the availability and accessibility of training in sustainable tourism for PA stakeholders across Europe through the provision of a free, open access online training platform, complemented by accompanying resources to support its dissemination and use.

The focus on online training resources was considered a key priority from the start (even before the COVID-19 pandemic and consequent lockdowns), as the format makes it particularly suitable for the context of PAs. Many PAs and natural spaces tend to be in remote rural areas, often with low population densities and reduced availability of services and economic opportunities for local communities. Availability of more traditional capacity-building and training structures in many PAs is far from guaranteed. Even if they exist, the types of end beneficiaries the project focuses on are unlikely to be able to commit long(er) periods to presential training programmes, as these individuals include micro-business owners, PA staff, and civil servants, amongst others, with limited time and resources. Likewise, with its focus on the principles of the Charter and support to the network of PAs implementing the Charter (or considering to do so), one of the challenges of offering training to members of a network geographically dispersed is connecting these potential 'learners' with learning opportunities. As such, an online training platform, available to anyone with a computer and an internet connection, was considered from the beginning as one of the best solutions to increase access to vocational training for these often geographically isolated individuals or communities of professionals.

It was also considered important to support the development of training skills of PA managers and other professionals not normally accustomed to facilitate or deliver capacity-building in sustainable tourism. The project then included a "Train the Trainer" dimension, aiming to develop a network of trainers across Europe and beyond, that can help disseminate and apply the project's resources in blended and/or face-to-face programmes in relevant destinations. Two key outputs were developed under this element: i) a 'Train the Trainer' toolkit, with guidance and activities to support trainers and facilitators to use the materials on the online platform to run capacity-building sessions on sustainable tourism; and ii) a 'Train the Trainer' course, that tested the platform and toolkit, and prepared a cohort of trainers ready to use the project's resources on future training activities.

The project therefore focused on the development of practical outputs that can take the training to users (rather than vice-versa), both through new e-learning opportunities, but also with complementing resources to increase the take-up of those and promote their adaptation for use at local or regional levels, in any PAs looking to adopt more sustainable tourism practices. The next sections summarise these key resources developed under the project.

3.1 Online training platform on Sustainable Tourism in PAs

The first output of the project was an online training platform, available at sustainabletourismtraining.eu. The content of the platform is available in four languages: English, French, Spanish and Italian. The reach of the online training platform is potentially unlimited, as the open access platform is freely available to anyone interested in participating. The platform is addressed to all types of stakeholders with an interest in sustainable tourism development in PAs, such as PA staff, local businesses, local governments, but also students, teachers, etc. Interested users have to register and can next access the content they wish to explore.

This was the first time that Sustainable Tourism Training content (including case studies and best practices) on all key principles and actions of the Charter was developed and made available in a single platform aimed at all key tourism stakeholder groups working in European PAs.

3.1.1 Online curriculum structure

A full learning programme based on the principles of the Charter is available in the online platform, offering knowledge, tools and new ideas on the following key topics in sustainable tourism development in PAs:

1. Protecting valuable landscapes, biodiversity and cultural heritage;
2. Supporting conservation through tourism;
3. Reducing carbon footprint, pollution and wasteful resource use;
4. Providing safe access, quality facilities and special experiences to all visitors;
5. Effectively communicating the area to visitors;
6. Ensuring social cohesion;
7. Strengthening prosperity in the local community;
8. Monitoring tourism performance and impacts; and
9. Communicating actions and engaging with the Charter.

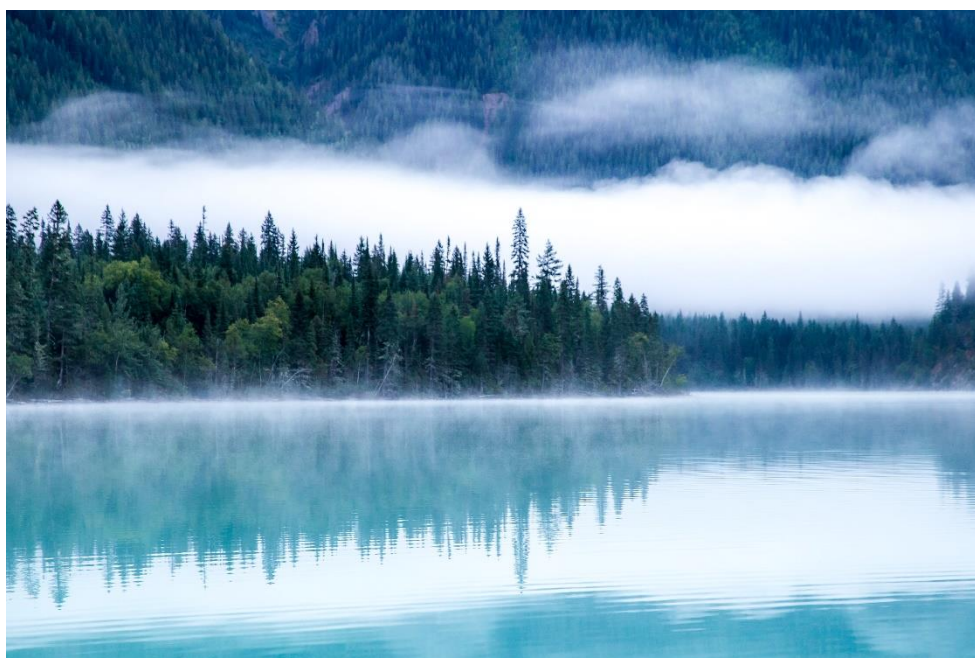


Figure 1: Screenshot of the platform's start page (with the 9 topics of the curriculum and the training toolkit)

Welcome to Sustainable Tourism Training for Tomorrow

We often say that **Sustainable tourism is Good for Parks, Good for People!** Our iconic landscapes are often one of the most cited reasons for tourist visits to Europe. But our parks and communities themselves are facing challenges and pressure from visitation. At the same time they also have the opportunity and potential to act as catalysts for sustainability and lifestyle changes at a local, regional and indeed national level. We need to enable everyone with an interest in working together in their area, to have the knowledge, tools and new ideas to ensure that they can do that collectively and sustainably.

If you want to be inspired about why we believe Sustainable Tourism is Good for Nature and Good for People, take a look at "[A Sustainable Journey](#)", a EUROPARC's award winning film, available in 5 languages, created within the CEETO project.

The **Charter for Sustainable Tourism in Protected Areas** has been shown to be an excellent way of bringing everyone together to develop a shared vision and a common purpose, bringing sustainable economic, social and ecological benefits. This **introductory course** is brimming with real life experiences, in 4 languages, that will help you understand the basic principles of sustainable tourism and equip you, your park and your business for the challenges of tomorrow.



1. Landscapes, biodiversity and heritage

Course >



2. Conservation through tourism

Course >



3. Reducing impacts

Course >



4. Accessibility and facilities

Course >



5. Effective visitor communication

Course >



6. Social cohesion

Course >



7. Local prosperity

Course >



8. Monitoring

Course >



9. Charter engagement

Course >



Training Toolkit

Course >

The above curriculum content (9 topics) can be easily and independently explored by any user individually on his or her own time. However, the contents can also be used to support trainers developing capacity-building activities in this area, and more information on this element – Training Toolkit – is presented in section 3.2.

Each of the 9 curriculum topics has been elaborated through a fixed structure of content, including:

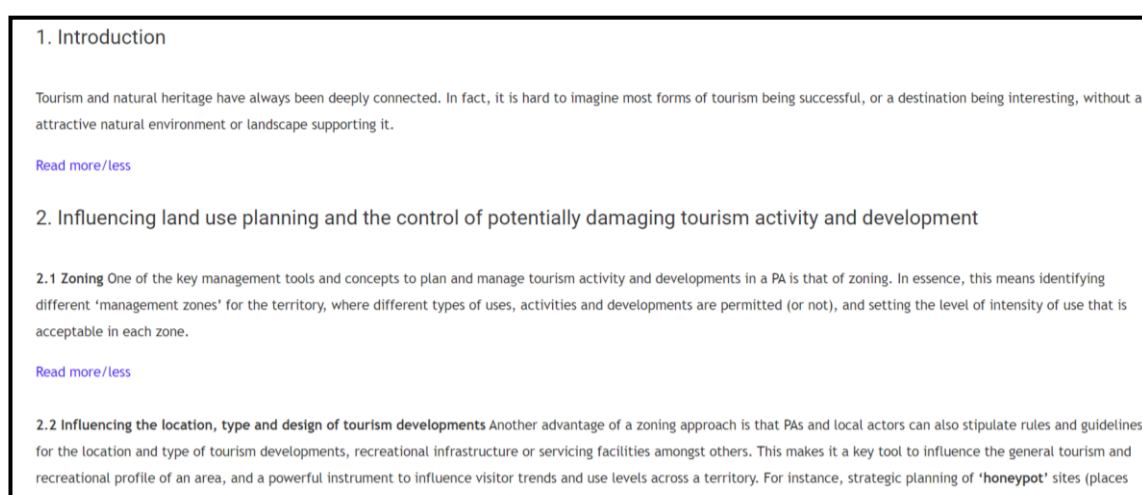
- (1) a short video introducing the focus and learning objectives of each topic;

Figure 2: Screenshot of the video introducing topic 1



- (2) key information providing introductory knowledge on key concepts for each topic, containing a theoretical framework as well as practical examples;

Figure 3: Screenshot of the key info on topic 1



- (3) links to relevant webinars (including a short description) or other video material;

Figure 4: Screenshot of video material related to topic 1


Webinar [Sustainable Tourism in Protected Areas: From design to Implementation: the experience of CEETO Project](#) (available in English): The “Central Europe Eco-Tourism: tools for nature protection” (CEETO) Interreg project ran for three years, to test innovative governance models for tourism development in Protected Areas (PAs). In this webinar, we will hear some of the best examples of the project implementation, and get access to relevant tools for PA Managers and policy-makers.

Webinar [Night Vision: a webinar about Dark Sky Parks](#) (available in English): Artificial light is the number one pollutant of our skies and despite the scientific research produced over the last decade on how it negatively impacts biodiversity and human health, levels of light pollution continue to rise across the globe. One-third of the humanity has never had the chance to see the Milky Way and many will never experience conditions resembling a true night. This is where Protected Areas, as safe places for nature and biodiversity, have a role to play.

Webinar [Large Carnivores in Transboundary Parks](#) (available in English): During centuries, European large carnivores (including the brown bear, wolf, lynx and wolverine) suffered dramatic declines in numbers and distribution. Human activity, habitat loss and the decrease of prey, pushed these species to the very remote areas of Europe. However, the situation is shifting. Due to the improvement of habitat conditions and prey availability, backed by protective legislation in many European countries, the populations of large carnivores are stable or indeed growing. The predatory nature of these species has pushed them to trespass the political boundaries established by humans in the search for better conditions to thrive.

- (4) a collection of 130 best practices and inspiring case studies, many developed within the network of Charter PAs but also from other contexts;

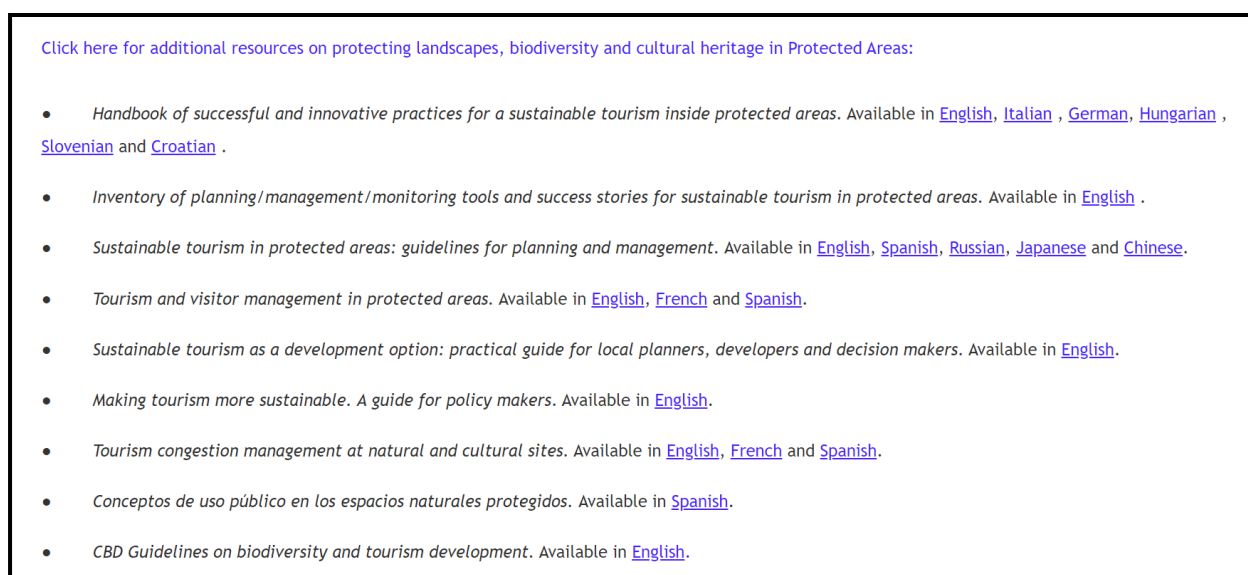
Figure 5: Screenshot of cases related to topic 1



- Tourism and attractions in the territory of the Biosfera Delta Po (Italy). A manual for tourism providers explaining how to become “Biosfera” brand supporters.
- TurNat: a sustainable development strategy in the Protected Areas of the Autonomous Province of Trento (Italy).
- Nat Pro: strategic plans for restoring and protecting Natura 2000 Sites and for promoting ecotourism in the Dune Costiere Regional Nature Park (Italy).
- “Garibaldi Agricoltore”: the restoration of the nineteenth century agricultural landscape in the Arcipelago di La Maddalena National Park (Italy).
- A competition for the protection of alpine meadows’ biodiversity: awards for farmers in the Adamello Park (Italy).
- Organising responsible sporting events: finding balance between activities and nature conservation (France).
- Environmental Interpretation Plan of the Monti Sibillini National Park (Italy).
- Managing the Faux de Verzy biological reserve: making the link between preservation, enhancement and visitor flow management (France).
- Roaming on hiking trails: managing visitor flows in order to promote heritage discovery (France).

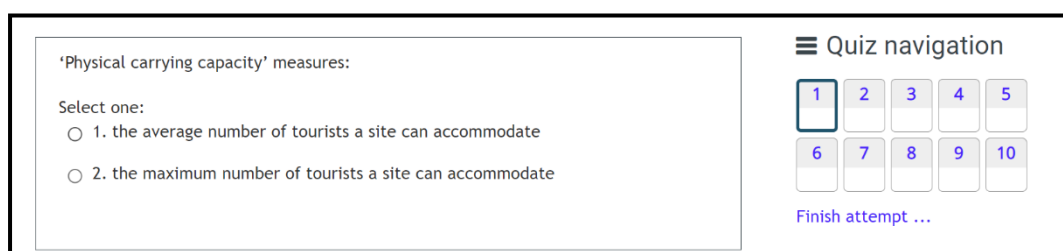
- (5) a list of relevant resources containing links to manuals, reports, or extra cases on other websites;

Figure 6: Screenshot of useful follow-up resources related to topic 1



- (6) a quiz per topic. Users that successfully complete each quiz obtain a confirmation certificate. An overall completion certificate is also given for users that successfully complete all 9 topics.

Figure 7: Screenshot of the quiz of topic 1



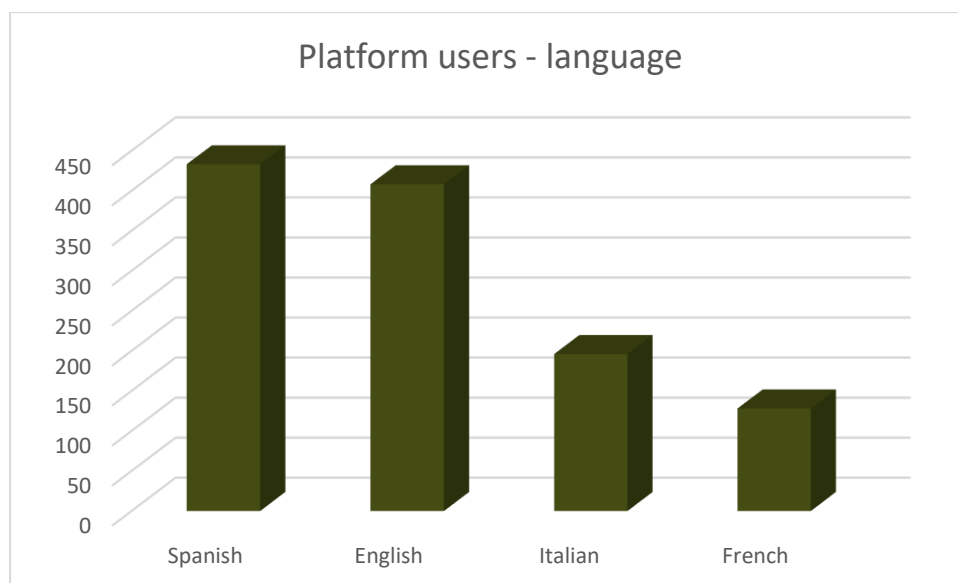
Throughout the project, the developed content has been optimized based on users' feedback (such as including more videos and other visuals). Various multiplier events were organised to present the platform. Stakeholders who tried the platform during and/or after the multiplier events held in Italy, Spain and France, found it very interesting and useful for their area of activity. For example, the overall assessment of the first version of the platform by users in Spain was extremely positive. The respondents considered the structure of the platform clear (100%), the registration on the platform easy (98%) and indicated the platform looked attractive (87%). Furthermore, 98% of the respondents would recommend the platform to other professionals. The key information was rated as relevant (100%), clear (98%), interesting and useful (96%). The follow-up resources were found interesting (100%) and the case studies relevant (94%).

3.1.2 Platform use

From December 2019 to June 2021, 1168 users registered on the platform. This makes it possible to obtain a picture of the types of user engaging with the platform, and the types of engagement with it.

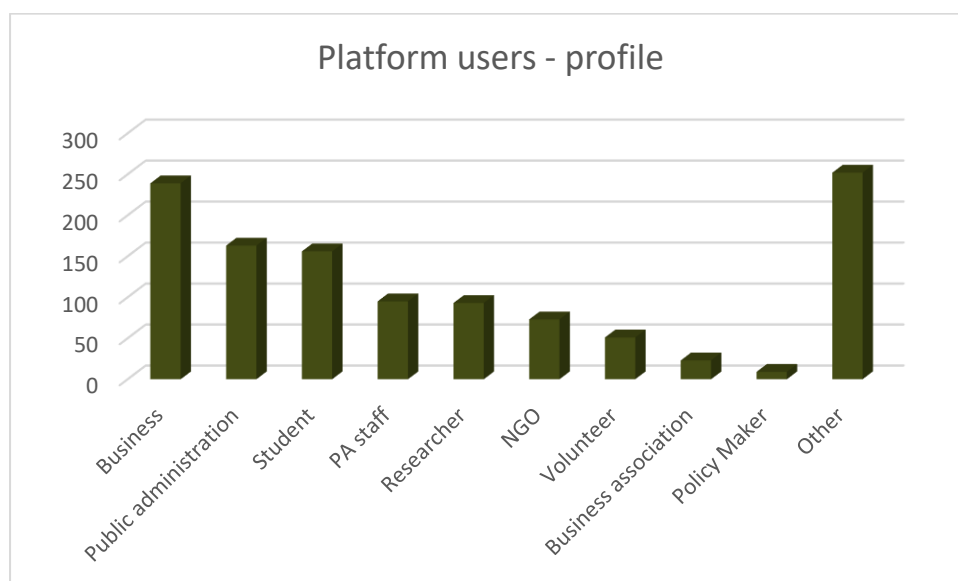
The majority selected English or Spanish as language choice for the platform (Fig 8). Businesses, public administrations and students were represented the most on the platform, followed by PA staff, researchers and NGOs (Fig 9).

Figure 8: Language choice of platform users



Data retrieved on 08/06/2021, n = 1165.

Figure 9: Profile choice of platform users



Data retrieved 08/06/2021, n = 1154.

Since the launch, the platform was visited almost 5000 times. The average duration of the visits was almost 11 minutes. The platform generated almost 44000 page views (of which 17400 unique page views).

Although the platform can be consulted at own pace and piecewise, some users prefer to test their knowledge regarding one or more of the nine topics through a quiz. By early June 2021, the total number of quiz attempts was 1846, resulting in 1028 certificates. Furthermore, 69 platform users successfully completed all 9 topic quizzes and received an overall certificate.

The platform and all its developed material will continue to be available through EUROPARC's website, where it can permanently be consulted by any interested stakeholder.

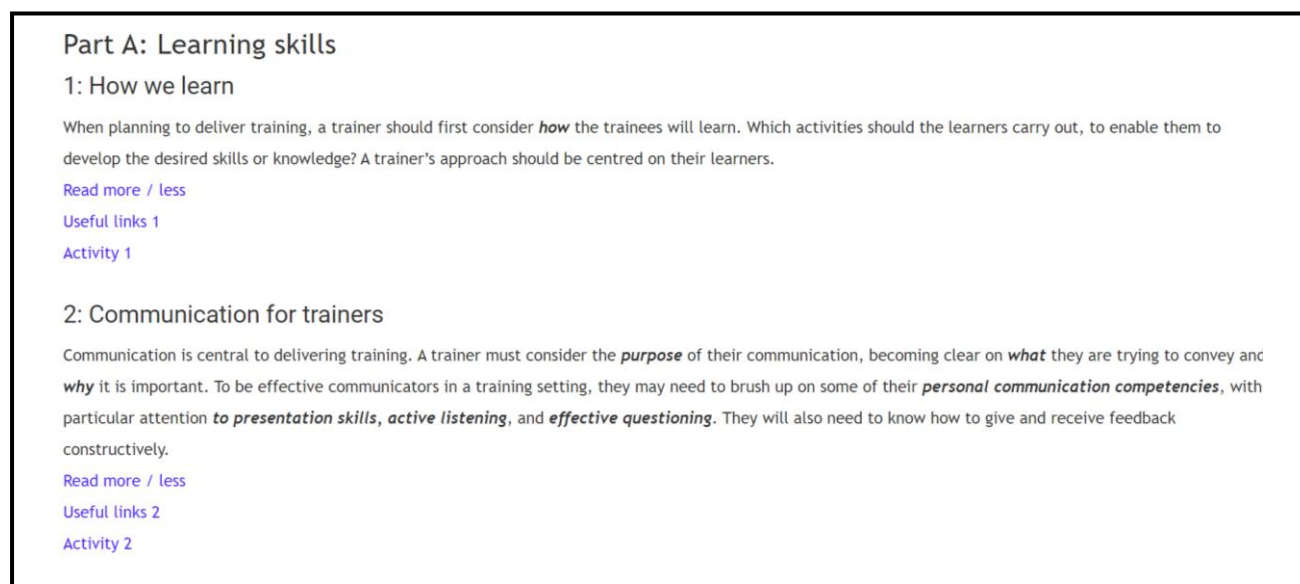
3.2 Train the Trainer Toolkit

To complement the content on the project's online training platform, a Training Toolkit has been created, that is also available in English, Spanish, French and Italian. The toolkit provides additional supporting materials and resources for those who wish to offer learning experiences on Sustainable Tourism in Protected Areas. These can be existing or future trainers from the wider European Charter network, involved in training in countries or territories that are already implementing the Charter, as well as any others where there is an interest in sustainable tourism in PAs. The toolkit was designed to support different levels of experience in training, facilitation or capacity-building, providing both introductory guidance for those who have never designed, developed or delivered training, as well as a collection of resources and training activities that both experienced and inexperienced trainers can use. The resources in the Toolkit can be used to support face-to-face, online or 'blended' learning formats. The Toolkit is composed of two parts, as follows:

Part A

Part A provides a brief introduction to key pedagogical concepts that a trainer needs to consider when preparing a training programme or activity, and signposts the reader to useful complementary resources to explore those concepts in more depth. It contains 5 sections, any or all of which may be useful to consult when planning a training activity. The first section explores the theory of how we learn. This is followed by a section examining communication techniques. Next, the roles and qualities of an effective trainer are described in a third section. In the final two sections, practical approaches to training are detailed. The first of these focuses on how learning objectives, assessment, and evaluations may be created. Lastly there is a section on using online technology to create learning experiences. For each section there are links to some resources which provide an insight into the concepts described.

Figure 8: Screenshot of the training toolkit part A



Part B

Part B of the toolkit comprises a compilation of 40 Activity Outlines, aligned to the learning topics of the online training platform. These aim to provide practical guidance for the running of specific training activities that explore topics, concepts and case studies covered in the platform. Trainers may select as many activities as they require from this collection of outlines. They are invited to use them exactly as they are presented, or to adapt them as appropriate to their needs and contexts. It should be

possible to facilitate all the activities outlined in Part B of the toolkit in either online or face-to-face training sessions.

Figure 9: Screenshots of the training toolkit part B overview (8 topics and in detail for topic 5)

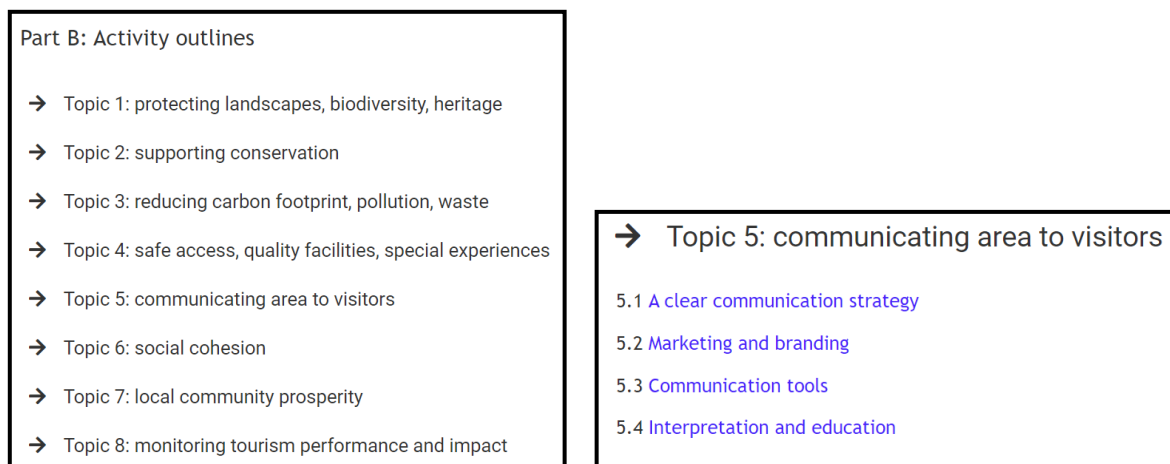


Figure 10: Example of an Activity Outline handout available for download on the Train the Trainer Toolkit

Training activity 1.3



Influencing tourism development

Time required: 60 mins

Relevant key topic: Topic 1: Protecting valuable landscapes, biodiversity and cultural heritage

Sub-topic(s): (1.2) Influencing land use planning and the control of potentially damaging tourism activity and development

Context / prior knowledge:

For trainees:

- Consult topic 1 of e-platform and complete quiz.

For the trainer:

- Read Chapter 3 "Aligning management objectives with tourism impacts" in: "Tourism and visitor management in protected areas: Guidelines for Sustainability" (<https://bit.ly/2Y0hUr4>).
- Read the chapter "Environmental and Biodiversity Footprint" in: "Linking Communities, Tourism & Conservation" (p 88) (<https://bit.ly/3gJQU60>).

Learning objectives:

At the end of the activity, participants will be able to:

- explain how it is possible to influence the location, type, and design of tourism developments,
- give examples of 'soft measures' used to influence tourism developments.

Description of the activity:

- Split the participants into separate groups/pairs. If possible, include in each group representatives of different types of stakeholder.
- Give each group copies of Tables 1.3.1 and 1.3.2, and a case study. Set up and introduce the activity. (5 mins)
- Ask groups to spend 20-25 mins identifying two types of threat mitigated against in their case study, then fill in Table 1.3.2 for each, using Table 1.3.1 as a guide.
- Groups present their tables to the plenary and discuss how similar tourism development threats might be mitigated against in other PAs. Allow 30 mins for presentations, discussion and conclusions.

Resources:

- Copies of Table 1.3.1: Environmental and biodiversity footprint matrix.
- Copies of Table 1.3.2: Exercise - Environmental and biodiversity footprint matrix.
- Copies of case studies (see cases in e-platform topic 1):
 - [The "materials display area", an exhibition area to demonstrate and promote the traditional architectural style of the Montagne de Reims region, an attractive feature of our villages \(France\).](#)
 - [A competition for the protection of alpine meadows' biodiversity: awards for farmers in the Adamello Park \(Italy\).](#)

Appendices

Table 1.3.1: Environmental and biodiversity footprint matrix.

Type of threat (examples)	Potential Impact	Potential Opportunity and Key Assumptions	Key Groups/ Stakeholders involved or affected	Expert/ Person(s) to contact
Poaching of endangered species in protected area	Tourism development might provide income to locals, to purchase better hunting equipment	<i>Assumption:</i> Poaching illegal, used to increase income due to few alternatives. <i>Opportunity:</i> Tourism could provide an alternative and a reason to protect wildlife. Awareness campaigns and increased awareness activities will be key.	Local villages and hamlets around the Protected Area Protected Area Management	Local biologist, researchers. Protected area management staff. Socio-cultural experts. Socio-economic surveys
Agricultural encroachment into unprotected forest reserve	Tourism development might increase demand for agricultural products, provide income for agricultural technology - increasing farming	<i>Opportunity:</i> Ecotourism might provide rationale for creating a protected area, could provide incentives for organic and sustainable agriculture, etc. <i>Assumptions:</i> Economic justification for establishing a protected area will be strong enough. The right community historical/cultural context exists in favour of protected areas	Local Ecotourism Associations Community Members Government Ministry and Officials	Agriculture Extension Officers Local Biologists Economists Socio-economic surveys

Source: Adapted from Gutierrez, E., Lamoureux, K., Matus, S., Sebunya, K. (2005). "Linking Communities, Tourism & Conservation: A tourism assessment process". Conservation International and George Washington University. (p 92) (<https://bit.ly/3gJQU60>)

Table 1.3.2: Exercise - Environmental and biodiversity footprint matrix.

Type of threat	Potential Impact	Potential Opportunity and Key Assumptions	Key Groups/Stakeholders involved or affected	Expert/Person(s) to contact

Source: Adapted from Gutierrez, E., Lamoureux, K., Matus, S., Sebunya, K. (2005). "Linking Communities, Tourism & Conservation: A tourism assessment process". Conservation International and George Washington University. (p 92) (<https://bit.ly/3gJQU60>)

3.3 Train the Trainer course

Within the framework of this project, a multiplier event has been organised by the EUROPARC Federation on behalf of the STTfT consortium. This event (in English) aimed to train a number of people from the wider Charter network. The call for participation was distributed and various persons across the world showed an interest. The idea was to train participants as well as further disseminate the training programme more widely within their own countries. Trainers with quite some experience as well as individuals with a strong interest to learn about trainer skills took part.

The course consisted of 7 course units in which pedagogical skills, and tips and advice, were provided on using the online curriculum in a 'blended learning' and/or 'flipped learning' context. Originally planned for a 2-day face-to-face workshop, due to COVID-19 this training event was adapted into an online training course, that took place in the period Feb-May 2021. For the participants of the training, an additional platform was created, which can be consulted on <https://europarc.moodlecloud.com/>. On this platform assignments, background information, a discussion forum, a wiki, and all information regarding the training sessions could be found. The participants considered the content very useful. Apart from enhancing their training skills, participants also provided feedback on the training activities produced in the project and presented in part B of this toolkit (see previous section). Several of the resources listed in part A of the Train the Trainer Toolkit are a summary of themes and resources covered in more depth during this training course.

The course consisted of 7 units:

1. Introduction to the course.
2. How we learn.
3. Communications for trainers.
4. Roles and qualities of trainer.
5. Creating learning objectives. Assessments and evaluations.
6. Organising the learning experience. Online technology.
7. Final assignment and conclusions.

Participants of the Train the Trainer Event were also asked to try and assess the Activity Outlines developed for Part B of the Training Toolkit (see previous section). In general, participants agreed with the following evaluation statements:

- 'the description of the activity was clear'
- 'the sources mentioned are sufficient to prepare a trainer for the workshop'
- 'the tables offered in the Appendices were a handy tool during the workshop'
- 'organising a workshop as described in the Activity Outline Worksheet contributes to the understanding of the topic'
- 'participating in a workshop as described in the Activity Outline Worksheets is an added value for professionals, businesses and/or public sector organisations working with/within a PA setting'
- 'the Activity Outline Worksheets offers interesting information for a trainer'
- 'the template used is clear'.

Participants also noted that the Learning Outcomes in the activity outlines could be changed or improved depending on the use. Indeed, it should be noted that Learning Outcomes in the outlines are meant to be flexible or indicative only, and that future users should adapt or create their own, for their needs.

3.4 Developing skills for sustainability

The Activity Outlines presented in Part B of the Training Toolkit were selected and designed to support the development of practical training activities that explore topics, concepts and case studies covered in the online platform. Given the focus of the project on supporting training for sustainable tourism, it was considered important not only to ensure relevant knowledge areas were covered, but also that the activities proposed followed available best practice and research on development of skills for sustainability. Therefore, for the development of the activity outlines, a review was done of the pedagogical and didactic approaches and methods considered most effective for sustainability skills' development. A summary of some of the most relevant ones is presented below, to serve as reference for trainers and/or facilitators interested in applying or adapting the project's resources in future sustainable tourism capacity-building initiatives. As previously explained, trainers are invited to use the Activity Outlines and the other resources of the project as they are, or to adapt them as they best see fit for their own contexts and needs. We hope the approaches summarised below are useful to provide further ideas to adapt these materials for the development of sustainable tourism training initiatives in PAs.

3.4.1 Pedagogical approaches for sustainability skills' development

Pedagogy refers to the general principles of teaching. It broadly encompasses the why of education, yet also includes consideration of what is to be taught, and the values and visions associated with the teaching. Common pedagogical approaches include:

Passive learning approaches:

Passive approaches include traditional methods such as *lecturing, reading, writing exercises, demonstrations of problems, and quizzes*. They can be useful for introducing subject material and starting concepts. For example, the project's online training platform contains a collection of materials which can be approached by individual learners in their own time through passive learning. Ideally however, passive learning should be integrated with active learning and collaborative approaches.

Collaborative learning approaches

These are interactive and participative methods. They can include a wide range of strategies such as *group discussion, role play, group diaries, brainstorming, debates, and peer assessment*, amongst others. Since collaborating with multiple stakeholders and working in teams are significant elements of the work carried out in sustainable tourism destinations, these approaches are of particular importance for these contexts. To help surface novel perspectives while encouraging united action for common purpose, tutors should facilitate listening and self-reflection in collaborative sessions, enabling participants to adjust to individual differences, reach agreement, and share in constructing knowledge.

Activity-based approaches

In activity-based approaches, participants learn by doing. Also known as experiential learning, active learning engages learners so that they increase their understanding. Crucially, they also contextualise their understanding within their own lives. Sustainability scholars have pointed to experiential learning as a way to empower, engage, and motivate learners. Active learning approaches such as project- or problem-based learning and community service learning were found to be highly likely to address various competences associated with sustainability. Activity-based approaches may employ physical engagement in real-world settings. For example, face-to-face sustainable tourism training may incorporate field trips and visits to Protected Areas to experience and/or engage with local contexts and issues.

Place-based approaches

Place-based pedagogy engages learners through the positioning of a curriculum within the context of their own lives, communities, and regions, taking advantage of participants natural interest in what is "local" to them. This approach can be particularly useful in environmental education and development of interpretation approaches, providing learners with experience and knowledge to care for their

environments, perhaps incorporating traditional ecological knowledge built up by local or traditional resource users, rather than by external experts.

3.4.2 Didactic methods for sustainability

Didactics focus on *how* teaching and training is delivered within a specific field. It can provide a structured approach to the specific process of teaching and training. Didactic methods that can be effective in sustainability training include:

Stimulus activities

A variety of activities can stimulate thought and discussion, surfacing a variety of viewpoints in workshops or group discussions, either face-to-face or virtually. These can include *watching videos* or *looking at photographs or newspaper extracts*. Collaborative methods of activating learners include *brainstorming, debating, and voting*.

Case studies

Rich descriptions of real, relevant settings or problems can provide learners with a holistic view of an issue, inviting them to consider diverse perspectives. Learners can discuss a case study collectively, or analyse it individually, to propose solutions or answer questions.

Concept mapping

Mind maps and other forms of concept map, provide a non-linear outline of a major theme, with related concepts radiating out from a central idea. This visual approach may incorporate pictures and use colour, size, connecting line style, and placement to communicate relationships between concepts. Concept maps can help learners to retain factual information.

Simulations and role-play activities

Simulations can be used to facilitate experiential learning in a controlled setting. They may be designed to develop communication skills, group work, cognition, and metacognition. *Simulation games* can even help prepare people to respond to similar situations in real settings, offering opportunities to understand other peoples' perspectives and develop empathy.

Modelling and simulation of systems

Real-world problems may be modelled or simulated using systems thinking. For example, learners can develop anticipatory competency by forecasting from statistical and simulation models or games, or by practicing participatory approaches such as Delphi or FutureWorkshop methods.

Problem-based learning

Learning that is organised around the investigation of complex, real-world problems or projects can support knowledge construction, integrating learning with real life. In an iterative process, participants are asked to research an identified issue, envisaging alternative actions and potential solutions. The primary aim of this approach is not the resolution of the problem. Rather, it is the development of critical analysis skills.

Action learning

In action learning, learners investigate an issue which is of importance to them through an iterative process, by enlisting peers to question their assumptions, consider new alternatives, test those on the ground and share results with peers for further questioning. An example of a specific action learning approach is *participatory action research*, which places particular emphasis on collaboration, acknowledging the production of knowledge by *all* participants, especially by community members.

Service learning

Another experiential teaching and learning strategy, service learning allows learners to demonstrate competencies in action, through the planning and implementation of projects that respond to real needs of local stakeholders. It involves learners actively participating and integrating their learning objectives with service objectives which benefit the community. It is also referred to as "*community-based learning*". Participants in service or community-based learning form meaningful collaborations with members of the greater community.

Learning in Virtual Environments

Not a method *per se*, but virtual environments also allow for a rethink of how training can be delivered in practice. Often this includes mirroring many of the didactic methods above but through new tools and new ways of engaging. An online learning community can be a medium for sharing skills, their underpinning knowledge, and the emerging experience of practitioners in their contexts (Hockey et al., 2008). Exchanges may take place within specifically designed *virtual learning environment* platforms as well as over social media. Groups may be set up in *social networks* such as Facebook and cloud-based messengers like WhatsApp or Telegram, to facilitate collaboration (Ataie et al., 2018).

Stimulus activities such as watching videos, listening to podcasts, viewing slides, and taking part in quizzes or voting, are well suited to the virtual environment. These may be presented in synchronous sessions over *video conferences* or curated on the platform for learners to access in their own time. Learners may also be encouraged to produce their own materials, perhaps collaboratively, to increase their engagement in the learning process. All the activity outlines produced for Part B of the Train the Trainer toolkit can be adapted for delivery in virtual environments.

Table 6: Summary of pedagogical approaches and didactic methods for training in sustainability. While some methods are more suited to particular approaches (e.g., problem-based learning is useful in activity-based approaches), most methods may be applied to a variety of approaches (e.g., stimulus activities may be approached individually or collaboratively), hence the absence of dividing lines within the table.

Pedagogical approaches	Didactic methods
Passive learning	Stimulus activities (e.g., watching videos or debating)
Collaborative approaches	Case studies
Activity-based approaches	Concept mapping (e.g., mind mapping)
Place-based approaches	Simulations and role-play
	Modelling and simulation of systems (e.g., Delphi method)
	Problem-based learning
	Action learning
	Service learning/community-based learning

In response to the findings of our review of sustainability skills' literature, the training activity outlines included in part B of the Training Toolkit were designed to facilitate different pedagogical approaches, utilising a variety of didactic methods. These include case studies, problem-based learning, and role-play activities. There are also opportunities for activity- and place-based learning, with participants encouraged to draw on their own experiences from the settings in which they work. Other approaches summarised above can also provide further ideas for prospective sustainable tourism trainers/facilitators. Together with Parts A and B of the Training Toolkit, these resources can help anyone learn how to prepare for, plan, organise and facilitate participatory capacity-building sessions with different stakeholders in PAs.

4 Final recommendations for practitioners and policy-makers

The outputs of this project are not intended to provide an endpoint or a definite account of training for sustainable tourism in Protected Areas. Sustainability is by nature a process and a journey, with new learning to be made every day. Rather, they aim to provide a starting point and invitation for PA managers, business owners, public officers, policy-makers, trainers, facilitators and any other relevant parties, to engage in and promote continuing development of shared sustainable tourism skills and knowledge. The online training platform offers contents that allow decision-makers, practitioners, and trainers to obtain a good introduction to a variety of sustainable tourism themes, but that should be seen as just the first step of the journey. Those resources are an open invitation to use that knowledge, along with the additional training support materials available on the platform, to develop more in-depth and tailored capacity-building activities on the areas of most relevance to each territory. Instruments like the Training Toolkit or 'Train the Trainer' online course serve as an excellent set of supporting tools for this purpose. They are designed to enable both experienced trainers and "non-professional" facilitators to promote and engage with training in sustainable tourism for PA contexts.

Significant learning has also been gained throughout the development of the project on the challenges and opportunities in training for tomorrow's sustainable tourism. Additionally, during the project's duration the world has experienced the start of the global COVID-19 pandemic, which has transformed economies everywhere, but also training and educational practices. Reflecting on this learning and experiences, we outline below a set of recommendations for practitioners and policy-makers.

4.1 Embrace digital transformation

Online and blended learning have long been significant elements of vocational education and training (VET), but the impacts of the COVID-19 pandemic have accelerated this process substantially. Many of the previous psychological and behaviour barriers to engage with online training have gradually faded, as virtual communications became commonplace, both in work and personal contexts. A plethora of new online learning-support tools have been developed and perfected over the past few years, facilitating new delivery possibilities and formats. Adoption of online conferencing and webinar platforms became widespread and are now common use across most sectors. Given all these changes, training for sustainable tourism should capitalise on these trends in online learning take-up and development, and embrace these opportunities.

Reach, availability and convenience

Protected Areas can be geographically dispersed, many tend to be in remote areas, have low population densities and/or can have lower levels of access to services and 'traditional' training resources. This makes online learning routes particularly relevant to training in such contexts.

In addition, virtual learning platforms bring benefits to learners with limited available time and a need for flexibility. They offer the opportunity for learners to access content according to their available time, and at their own pace. Virtual learning platforms also carry advantages of scale, offering opportunities for delivery of training to geographically spread groups of people, where 'traditional' organisation of face-to-face training workshops may not be cost-effective. Likewise, modern platforms allow use and interaction through multiple formats and devices, from laptops to mobile phones, expanding access possibilities to wider pools of user profiles, contexts and varying levels of digital skills.

Need to offer flexibility and variety

As seen in section 3.1.2 of this report, user data of the eLearning platform make clear that stakeholders in PAs with an interest in sustainable tourism training can be very varied, so flexibility and variety of content is important. Rather than the traditional fixed sequential structure of a training programme, user data from the platform shows that it is important to design materials in a way that allows users to explore content according to their own preferences and/or professional relevance.

Some learners wish to gather general information, while others seek to understand a particular topic in more depth.

Diversity of formats of content is also important, to cater for users' different needs and preferences. For example, video content, detailed manual documents, and case studies may be offered. Since learners may also have connectivity limitations, care should be taken to ensure that courses are not reliant on bandwidth-heavy formats. Offering diverse types of information also allows learners to select what they favour. Learners on the STTfT course appreciated having the option to check their knowledge through a quiz, for instance.

Need to consider multiple 'digital divides'

In setting up the Action Plan for Rural Broadband, the EC (2017b) noted that only 40% of rural households have next generation access compared to 76% of total EU households. Therefore, it is not uncommon that many PAs (or some remote parts of PAs) may have internet speed and bandwidth limitations. As mentioned above, planners of online and blended programmes should take these limitations into consideration in course design.

Likewise, digital skills also tend to be lower in rural than in urban areas, and digital skills gaps can be found transversally between individuals, generations, professional levels, etc. Accelerating the closing of these gaps in broadband access and in digital skills needs to be a policy priority for decision-makers.

Approach eLearning as a valuable complement (not full replacement) to presential learning

Notwithstanding the positive points above, online learning cannot always fully replace value of face-to-face contact. Providing alternatives and other collaborative approaches is still important. There remains a significant value in direct face-to-face communication, peer-to-peer learning and sharing of experiences between practitioners. This can be even more relevant on topics of sustainable tourism in PAs, where there is usually a strong focus on community engagement, very context-specific themes and place-based learning. Often informal and serendipitous exchanges of training participants outside of the 'formal' training activities can also provide valuable learning and sharing opportunities, and these can be much harder to replicate online. So, training facilitators can also actively plan for the creation of such informal spaces and informal opportunities when designing a training programme of activity.

eLearning materials like those on the project's online platform constitute a great way to bring all learners to similar levels of base knowledge, before advancing to other complementary training approaches. The project's 'Training Toolkit' provides a plethora of participatory activities that aim to build on the online learning materials and promote opportunities for more direct peer-to-peer learning. Training models which utilise both online *and* face-to-face formats have then the potential to offer more comprehensive and effective approaches than using any one those formats on their own, and especially for multi-stakeholder focused training themes for sustainable destinations.



4.2 Turn skills gaps into future intervention opportunities

As seen by the results of the project's Training Needs Analysis (see section 2), there are various areas of important skills' gaps for different stakeholders in PAs, that constitute future training priorities and opportunities for capacity-building initiatives in sustainable tourism. Analysis of stated *levels of knowledge*; *perceived importance* of knowledge areas and skills, as well as the *gap* between knowledge and perceived importance, revealed various training needs, offering strong directions for future capacity-building actions, projects or activities to be pursued by policy-makers and practitioners.

For example, overall results stressed the importance of developing skills and competences in areas related to communication, including competences required for the development of a communication strategy and the utilisation of communication tools. This confirms previous analysis and work by EUROPARC on this area, and highlights the synergistic opportunities for further dissemination to practitioners of other valuable EUROPARC projects and outputs already available, that aim at increasing such competences in PAs. These include the [LIFE e-Natura2000.edu](https://e-natura2000.edu) project, and the "[Manual for Natura 2000 Managers on Effective Communication](#)". But several other priority areas were also identified, and Table 7 below lists these, together with the relevant Activity Outlines (AOs) from Part B of the Training Toolkit that can be used to support training programmes in those areas.

Table 7: Summary of priority training areas identified in the project's Training Needs Analysis, with recommendations of corresponding training activities to develop those areas, using the Activity Outlines proposed in the project's Training Toolkit.

Training priority areas	Activity Outlines (Training Toolkit)
Knowledge on how to develop a communication strategy and engaging communication tools	<p>2.4 Protected area branding: engaging businesses in sustainable tourism in protected areas</p> <p>5.1 A clear communication strategy</p> <p>5.2 Marketing and Branding</p> <p>5.3 Communication Tools</p> <p>6.3 Effectively sharing information with stakeholders</p> <p>6.5 Choosing communication methods for stakeholder engagement continuum</p>
Methods and tools for measuring sustainable tourism indicators, and monitoring of tourism impacts on environment, economy and communities	<p>6.6 Inviting residents' views</p> <p>7.6 Indicators for local prosperity</p> <p>8.1 Set up a monitoring programme</p> <p>8.2 Monitoring indicators in PAs</p> <p>8.3 Monitoring techniques</p>
Methods to influence and encourage support for conservation funding by visitors and businesses	<p>2.2 Visitor Giving</p> <p>2.3 Identifying opportunities to mobilise tourists as conservation volunteers</p> <p>2.6 Visitor Giving Schemes</p>
Best practices on partnerships/formal agreements that can support economically local tourism businesses, e.g., permits, licensing and concession schemes, commissions, supporting procurement practices	<p>2.1 Planning tourism concessions</p> <p>2.7 Partnering in tourism offers in protected areas: concession, lease, permit or licence</p>
Best practice on creating sustainable transportation offers and alternatives	<p>3.3 Towards a sustainable transport policy</p>
Approaches to minimize and solve conflicts between activities linked to tourism in Protected Areas	<p>1.1 Applying zoning and visitor flow management to protect landscapes, biodiversity and heritage</p> <p>1.2 Limits of Acceptable Change</p> <p>1.4 Visitor Flow Management</p> <p>6.1 Conflict management tools</p> <p>6.5 Choosing communication methods for stakeholder engagement continuum</p> <p>6.6 Inviting residents' views</p> <p>6.7 Community Mapping</p> <p>6.8 Stakeholders' expectations, rights and responsibilities</p>
Knowledge of national and international initiatives, networks and specialist groups that support professionals developing sustainable tourism and recreation in and around PAs, including how to more actively engage with the wider network of the European Charter for Sustainable Tourism in Protected Areas.	<p><i>Note: Although there are no Activity Outlines on this needs area on the Training Toolkit, extensive support resources are available in Topic 9 of the training platform</i></p>

Run your own Training Needs Analysis

The TNA exercise highlighted general skills gaps of relevance at wider European level, but also differences at national level and by stakeholder category. However, every PA is unique in its characteristics, circumstances and stakeholder networks, so it is good practice to run locally-focused TNA exercises to identify context-specific needs for intervention. The methodology produced for the project's TNA (described in section 2) is simple enough to be replicated at local and/or regional level, and readers of this report are invited to use it in their own contexts.

However, the selection of themes used in the project's TNA survey (and presented in Table 1) is only a subset of the wide range of relevant competence areas for sustainable tourism in PAs, as selected by the project's partners. Locally-focused TNA exercises should consider starting from a wider set of competence areas, and also narrow those down to locally-relevant subsets, through stakeholder consultation. Two other outputs of the project's TNA report can help on this, namely:

- the 'Map of areas of Knowledge and Skills for Sustainable Tourism in PAs against the Charter's Priorities' (available as Appendix C on the [project's TNA report](#))
- and the "Map of the Charter's Priorities against IUCN's Global Register of Competences for PA Practitioners" (available as Appendix B on the [project's TNA report](#))

The former comprises an extensive collection of relevant training themes that can be used by managers and trainers as a source of topics to inform the development of training programmes in PAs, organised around specific priorities of the Charter. The map can be used as a wider index or directory of training areas that serve as a starting point for more granular TNA exercises at local or regional levels (or also for national and/or international networks of PAs).

The latter is a useful tool for practitioners to assess how to use the IUCN Register to support training on sustainable tourism, using also the Charter's principles and topics as reference, and targeted at PA managers in different professional roles. The IUCN Register is likely to be the most comprehensive compilation of PA management competences currently available, and many of the competences included in it are also directly relevant for the planning and management of sustainable tourism in PAs. On the other hand, the map also reveals areas of sustainable tourism competence gaps in the Register when contrasted against the Charter's topics, which can be an area of interest for IUCN on future revisions of the Register.

Emphasise collaboration: use Sustainable Tourism Training as a tool to develop a common culture and strategy at PA level

Unlike 'traditional' training programmes targeted at specific sectors, types of organisations or roles, training for "Sustainable Tourism in PAs" has by definition a transversal focus, *connecting and requiring the participation* of multiple stakeholders (e.g. local communities, PA managers, tourism professionals, local authorities, etc). Most of the materials and resources of this project have therefore also such transversal focus, following one of the key Principles of the European Charter for Sustainable Tourism in Protected Areas, i.e.: "*Principle 3. Engaging all stakeholders - all those affected by sustainable tourism should be able to participate in decisions about its development and management, and Partnership working should be encouraged.*" (EUROPARC 2015)

Topic 8 of the Charter ("Providing training and capacity building") also requires PAs implementing the Charter (or considering it) to provide and encourage relevant training for PA staff, local businesses and other stakeholders in sustainable tourism. Several of the activities of the Training Toolkit emphasise and require multi-stakeholder engagement to promote joint learning and development of mutual agreeable outcomes. PAs interested in implementing the Charter (or simply interested in implementing a sustainable tourism approach) can use these materials to facilitate stakeholders' involvement, consultations and discussions, and to support the process of defining a common sustainable tourism strategy and action plan for their territories. Just as sustainable tourism is by definition collaboration-focused, capacity-building in sustainable tourism needs to be the same. No real sustainability learning can be achieved by working in 'silos', and its ultimate aim should be to develop a "common culture" and understanding amongst local partners.

Developing new skills to address new demands and expectations

Pursuing sustainable tourism increasingly means going beyond traditional expectations from traditional roles, and requiring skills outside of individuals' usual training or 'comfort zone'. For instance, many Charter PAs engage in partnerships and initiatives beyond themes of conservation alone, but focusing also on other environmental, social and economic themes in more holistic ways. Examples include initiatives to support local businesses in product development, improve their environmental management, reduce the overall carbon footprint of business activities, or promote public transport use and alternatives to cars. Arguably, these are areas that are not commonly part of the 'traditional' training or preparation of PA managers and might require new upskilling. Likewise, engaging businesses in common sustainable tourism strategies might mean requiring from these collaborating with PAs in visitor and impact management, monitoring of indicators and collection of data, new cooperation models, new digital and communication skills or others.

These new demands on stakeholders and practitioners in PAs require new thinking and approaches to skills development. This can be supported through more formal or targeted training, but often such skills can also already exist in a territory and can be disseminated through facilitated peer-to-peer learning and sharing between practitioners. Even when a specific territory or PA has no experience of a particular sustainable tourism theme or approach, others may have so. This means there is fertile ground (and demand) for peer-to-peer learning initiatives across regional, national and international practitioner networks. The demand for such cross-learning was also evidenced by the project's TNA results, as seen in Table 7. Knowledge of national and international initiatives, networks and specialist groups to support professionals developing sustainable tourism was one of the priority areas of need identified.

Develop networks of trainers that can support development of sustainable tourism skills in PAs

The resources developed in this project can be used to help develop networks of trainers and facilitators across Europe to support sustainable tourism skills' development in PA contexts. Both the 'Train the Trainer' course materials and 'Train the Trainer' toolkit aim to help PA staff and others converting the materials of the online platform and develop expertise in running capacity-building activities in Sustainable Tourism in their own PAs and beyond. As the previous point highlighted, there is significant demand for peer-to-peer knowledge sharing across different territories. So there are potential opportunities and valuable gains to be made by developing a network of experienced trainers and facilitators from PAs implementing the Charter, willing to share their training experiences across the network. We should also bear in mind that sustainable tourism is a dynamic area of development and innovation, with new competences and skills co-evolving as new ideas, experiences and initiatives are developed in PAs. Facilitating the creation of networks of trainers from these areas could be an effective way to disseminate and share future developments and updates in this dynamic field.

4.3 Use the project's resources as a lever to drive public policy

As a transversal activity with large multiplier effects and systemic impacts on communities and nature, sustainable tourism can have a key role to play in delivering a wide range of public policy goals. Its importance is reflected in the EU's policy framework for tourism (EC, 2010), one of the priorities of which is the development of sustainable, responsible, and high-quality tourism, which is in turn dependent on appropriate capacity-building to deliver such goal. However, given the wider focus and scope of this project on sustainable tourism in Protected Areas' contexts, its benefits and impact potential are more far reaching than on tourism policy alone. Below we list some of the EU policies that can be directly supported by promoting the take-up of the training developed in the project. These illustrate areas where policy-makers and public administrations can use the project's outputs and sustainable tourism upskilling as a strategic tool to support delivery of public policy.

EU Biodiversity Strategy for 2030

The project's training resources and structure are firmly anchored on the Principles of the Charter, the first of which is "giving priority to protection". Training topics mirror the Charter's priorities, with a focus on areas like "protecting valuable landscapes, biodiversity and cultural heritage" and "supporting conservation through sustainable tourism activity". Therefore, the project's outputs support directly the

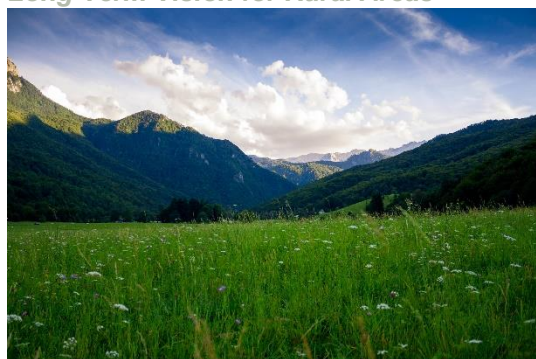
aims of the EU Biodiversity Strategy for 2030 (EC 2020a), and can help meet its focus on “improving knowledge, education and skills” (section 3.3.4 of the Strategy), including reskilling of the workforce in different sectors to support the fight against biodiversity loss, and the promotion of effective management of all Protected Areas.

Similarly, both the Charter and the EU Biodiversity Strategy recognise the interlinkages between certain agricultural practices and biodiversity decline, and promote working with farmers to support the transition to more sustainable practices. The Strategy directly points to the potential that improving the condition and diversity of agroecosystems can have “while creating new jobs, for example in organic farming, rural tourism or recreation” (section 2.2.2). This can then generate direct benefits for “strengthening prosperity in the local community” (topic 7 of the Charter). But supporting such transitions and generation of multiple benefits will also require upskilling in collaborative practices, stakeholder engagement and local economy support (amongst others), which are equally areas of focus of the project’s training resources.

European Green Deal

The European Green Deal is Europe’s growth strategy that aims to tackle climate and environmental-related challenges, at the same time as decoupling economic growth from resource use (EC 2019). A key part of the Green Deal is the goal of achieving net zero emissions of greenhouse gases by 2050, and a reduction of at least 55% by 2030, compared to 1990 levels. As a transversal policy tool it drives regulation, target-setting, innovation and opportunities in areas like transport, energy, industry, buildings, agriculture and others, to support the GHG reduction targets, with impacts that are also transversal across multiple sectors. Topic 3 of the project’s training materials directly addresses these goals, with its focus on “reducing carbon footprint, pollution, and wasteful resource use”, aligned with the Charter’s own topic 3. This includes an emphasis on supporting local businesses in and around PAs to improve environmental management and promote use of public transport and alternatives to cars, in a drive to reduce carbon emissions.

Long-Term Vision for Rural Areas



This new EU policy guidance (EC 2021a) identifies a range of areas of action to enable stronger, connected, resilient and prosperous rural areas and communities. The Vision acknowledges that although 30% of the European population lives in rural areas, and that these stretch to 80% of the EU’s territory, these are also areas with marked structural problems, which can include: higher unemployment rate for young people, gender wage and employment gap, average older population that will slowly start to shrink in the coming decade, absence of diverse employment opportunities,

limited access to services, lack of connectivity and underdeveloped infrastructure. Therefore, the Vision sets a Rural Pact and a Rural Action Plan that aims to support flagship initiatives for empowering rural communities, facilitating social innovation, preserving natural resources and greening farming activities, offering access to training courses, and diversifying economic activities in rural areas (amongst several other priorities). Tourism takes a key role particularly on the latter point of rural diversification, with the Vision stressing the synergies that can be developed between tourism and farming, support to production of local quality products, promotion of geographical indications and adequate management of landscapes. Likewise, the role of the Natura 2000 sites is acknowledged for their importance for demonstrating compatibility of well managed production with nature conservation. All of this overlaps greatly with the principles of sustainable tourism and the Charter and the training materials developed on this project, highlighting again how the projects’ outputs can be used as an instrument to support both rural development and conservation policy.

New Industrial Strategy for Europe

The New Industrial Strategy for Europe (EC 2020b) and its complementary “SME Strategy for a sustainable and digital Europe” (EC 2020c) both emphasise the importance of investment in upskilling and the role of SMEs to support the twin transition to a green and digital economy. The Strategies prioritise support to 14 industrial ecosystems, including tourism, agri-food, mobility, proximity and

social economy (amongst others), several of these with relevance to the principles of the Charter. The Enterprise Europe Network, for instance, is putting in place Sustainability Advisors to provide dedicated advice to SMEs on solutions to sustainability challenges, promote adoption of decarbonisation, energy efficiency and others. There are obvious synergies between the goals of these EU initiatives and the aims of the training developed in this project. The latter can be used as an instrument to raise SME sustainability awareness in PA contexts, that can then be pursued further by actions supported by the former.

European Skills Agenda

This key policy of the EU (EC 2020d) aims to help individuals and businesses develop more and better skills, in order to strengthening sustainable competitiveness, as set out in the European Green Deal. One of the priorities of the Agenda is to support the development of skills to support the green transitions in jobs and beyond, including development of green products, services and business models, create innovative nature-based solutions and help minimise the environmental footprint of activities. These aims align with several of the Charter's Principles and areas of training focus of the project.

Another aim of the Skills Agenda is to help ensure social fairness through access to education, training and lifelong learning, as per the first principle of the [European Pillar of Social Rights](#). The latter set a target to have by 2030 at least **60%** of all adults in the EU participating in training every year. In order to reach this target instruments like Erasmus+ and the European Social Fund are put forward as key tools for its delivery. As an Erasmus+ funded project, the training materials developed can be already used to directly support this goal, and/or to support the development of future training actions that build on the projects' resources.

NextGenerationEU and "Recovery and Resilience Facility"

NextGenerationEU (EC 2020e) is the EU's temporary recovery instrument to help repair the economic and social damage brought about by the coronavirus pandemic. The 'Recovery and Resilience Facility' is the centrepiece of this instrument, providing €672.5 billion in loans and grants available to support reforms and investments undertaken by Member States, structured around six pillars including: 'green transition', digital transformation, economic cohesion, productivity and competitiveness, social and territorial cohesion and health, and economic, social and institutional resilience. "Reskill and Upskill" is one of the flagship areas to be supported through the Facility, with the European Commission recommending that this could be used for "providing training to tourism entrepreneurs, workers and destination managers in support of the green and digital transition" (EC 2020f).

The list above of relevant policies that can be supported by widespread adoption of the project's resources does not aim to be exhaustive, but provides an illustration of the plethora of areas that benefit from increased training and upskilling in Sustainable Tourism in PAs. Although the examples selected were limited to EU policy instruments, these are increasingly focus areas that are also pursued by other policy instruments more widely and internationally. Examples include the World Bank's recommendations for green approaches to recovery from the COVID-19 pandemic (WBG, 2021), or even the UN's Sustainable Development Goals, that include multiple targets around promotion of knowledge and skills for sustainable development (SDG 4), sustainable management and efficient use of natural resources (SDG 12), or support to conservation, restoration and sustainable use of ecosystems and their services (e.g. SDG 15).

Bibliography

- Anderson, D. M. & Stone, C. F. (2005) Cultural Competencies of Park and Recreation Professionals: A Case Study of North Carolina. *Journal of Park & Recreation Administration*, 23(1), 53-74.
- Appleton, M.R. (2016). *A Global Register of Competences for Protected Area Practitioners*. Gland, Switzerland: IUCN
- Ataie, F., Shah, A., Bagheri, F., Ali, N. I., Mohammadgholipour, M., Rezaie, B. & Shaikh, H. (2018) Web 2.0-based collaborative Learning framework promoting lifelong learning: Developing sustainability competencies. *International Journal of Engineering and Technology (UAE)*, 7(2), 89-92.
- Ayson, S. (2011), "Chapter 13 Sustainable Management Education: A Graduate Skills Approach", Eweje, G. and Perry, M. (Ed.) *Business and Sustainability: Concepts, Strategies and Changes (Critical Studies on Corporate Responsibility, Governance and Sustainability, Vol. 3)*, Emerald Group Publishing Limited, Bingley, pp. 293-308
- BfN (2013) Professionalising Protected Area Management in Europe. Resolution of a Workshop held on the Isle of Vilm / Germany from 3- 5 June 2013
<https://www.bfn.de/fileadmin/MDB/documents/ina/vortraege/2013/2013-Vilm-Declaration-of-Professionalising-PA-management.pdf>
- Cotton, D.; Winter, J. (2010) 'It's not just bits of paper and light bulbs': A review of sustainability pedagogies and their potential for use in higher education. In *Sustainability Education: Perspectives and Practice Across Higher Education*; Jones, P., Selby, D., Sterling, S., Eds.; Earthscan: London, UK; New York, NY, USA.
- Depper, G. L., Vigil, D. D. C., Powell, R. B. & Wright, B. A. (2015) Resource protection, visitor safety, and employee safety: How prepared is the National Park Service? *Park Science*, 32(2), 18-24. Available at: https://www.nps.gov/articles/parkscience32_2_18-24_depper_et_al_3832.htm
- EC (2010) *Europe, the world's No. 1 tourist destination – a new political framework for tourism in Europe*. Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions
https://ec.europa.eu/growth/content/commission-communication-2010-europe-worlds-no-1-tourist-destination-new-political-0_en
- EC (2016) *EU Tourism Skills: 'Mapping and performance check of the supply side of tourism education and training'*. Final report https://ec.europa.eu/growth/content/eu-tourism-skills-mapping-and-performance-check-supply-side-tourism-education-and-training-0_en
- EU (2017a) *Blueprint for sectoral cooperation on skills – responding to skills mismatches at a sectoral level* A key action of the New Skills Agenda for Europe
<https://ec.europa.eu/social/main.jsp?catId=738&langId=en&pubId=7969>
- EC (2017b) *The Action Plan for Rural Broadband* https://enrd.ec.europa.eu/action-plan-rural-broadband_en
- EC (2019) *The European Green Deal*. Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions <https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1576150542719&uri=COM%3A2019%3A640%3AFIN>
- EC (2020a) *Biodiversity strategy for 2030* https://ec.europa.eu/environment/strategy/biodiversity-strategy-2030_en
- EC (2020b) *A New Industrial Strategy for Europe* Communication from the Commission. <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52020DC0102&from=EN>
- EC (2020c) *An SME Strategy for a sustainable and digital Europe*. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52020DC0103&from=EN>

- EC (2020d) *European Skills Agenda for Sustainable Competitiveness, Social Fairness and Resilience*. <https://ec.europa.eu/social/BlobServlet?docId=22832&langId=en>
- EC (2020e) *Recovery Plan for Europe* https://ec.europa.eu/info/strategy/recovery-plan-europe_en
- EC (2020f) Internal Market, Industry, Entrepreneurship and SMEs. Recovery and Resilience Facility. Why is it relevant to tourism? https://ec.europa.eu/growth/sectors/tourism/funding-guide/recovery-resilience-facility_en
- EC (2021a) *A long-term vision for the EU's rural areas* https://ec.europa.eu/info/strategy/priorities-2019-2024/new-push-european-democracy/long-term-vision-rural-areas_en
- EC (2021b) *Updating the 2020 New Industrial Strategy: Building a stronger Single Market for Europe's recovery* Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions https://ec.europa.eu/info/sites/default/files/communication-industrial-strategy-update-2020_en.pdf
- EUROPARC (2015) *Sustainable tourism in Protected Areas: good for parks, good for people*. https://www.europarc.org/wp-content/uploads/2015/12/ECST_2015.pdf
- European Parliament (2021) *Tourism*. Fact Sheets on the European Union <https://www.europarl.europa.eu/factsheets/en/sheet/126/tourism>
- Gordon, S. & Thomas, I. (2018) 'The learning sticks': reflections on a case study of role-playing for sustainability. *Environmental Education Research*, 24(2), 172-190.
- Hockey, A., Spaul, M., Jimenez-Bescos, C. & Frame, I. (2008) Creating Sustainable Communities: Conceptualising an Interactive Toolkit for Skills Enhancement. *The International Journal of Environmental, Cultural, Economic, and Social Sustainability: Annual Review*, 4(1), 147-154.
- Lambrechts, W., Mulà, I., Ceulemans, K., Molderez, I., & Gaeremynck, V. (2013). The integration of competences for sustainable development in higher education: an analysis of bachelor programs in management. *Journal of Cleaner Production*, 48, 65-73.
- Lozano, R., Merrill, M. Y., Sammalisto, K., Ceulemans, K., & Lozano, F. J. (2017). Connecting competences and pedagogical approaches for sustainable development in higher education: A literature review and framework proposal. *Sustainability*, 9(10), 1889.
- Lozano, R., Barreiro-Gen, M., Lozano, F. & Sammalisto, K. (2019) Teaching Sustainability in European Higher Education Institutions: Assessing the Connections between Competences and Pedagogical Approaches. *Sustainability*, 11(6), 1602.
- McCool, S. F. & Khumalo, K. E. (2015) Empowering managers: Enhancing the performance of protected area tourism managers in the twenty-first century. *Tourism Recreation Research*, 40(2), 169-180.
- Sipos, Y., Battisti, B., & Grimm, K. (2008). Achieving transformative sustainability learning: engaging head, hands and heart. *International journal of sustainability in higher education*, 9(1), 68-86.
- Tarrant, S. P. & Thiele, L. P. (2016) Practice makes pedagogy – John Dewey and skills-based sustainability education. *International Journal of Sustainability in Higher Education*, 17(1), 54-67.
- Tejedor, G., Segalàs, J., Barrón, Á., Fernández-Morilla, M., Fuertes, M. T., Ruiz-Morales, J., ... & Hernández, À. (2019). Didactic strategies to promote competencies in sustainability. *Sustainability*, 11(7), 2086.
- Tiana, S. A. & Villarreal, A. A. (2016) A collaborative programme in sustainability and social responsibility. *International Journal of Sustainability in Higher Education*, 17(5), 719-736.
- Truscheit, A. & Otte, C. (2004) Sustainable Games People Play: Teaching Sustainability Skills with the Aid of the Role-play 'NordWestPower'. *Greener Management International* (48), 51-56.

UNWTO (2021) World Tourism Organization (2021), *Recommendations for the Transition to a Green Travel and Tourism Economy*, UNWTO, Madrid, <https://www.g20.org/wp-content/uploads/2021/05/210504-Recommendations-for-the-Transition-to-a-Green-Travel-and-Tourism-Economy.pdf>

WBG (2021) From COVID-19 Crisis Response to Resilient Recovery - Saving Lives and Livelihoods while Supporting Green, Resilient and Inclusive Development (GRID) <https://www.devcommittee.org/sites/dc/files/download/Documents/2021-03/DC2021-0004%20Green%20Resilient%20final.pdf>

World Bank (2020) *Tools and Resources for Nature-Based Tourism*. World Bank, Washington, DC. <https://openknowledge.worldbank.org/handle/10986/34433>