

Interreg
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HealingPlaces

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HealingPlaces

Enhancing environmental management
capacities for sustainable use of the natural
heritage of Central European SPAs



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ABOUT THE PROJECT:

Natural deposits of mineral waters and hot springs are well known in central Europe. Their healing power is widely used and they are important drivers of local and regional economies in health care, wellness and tourism sectors. However, a common challenge is the sustainable management of mineral and thermal waters which on one hand are a basis for the existence of SPAs and on the other hand are a subject of various threats and pressures related to economic and urban development, mass tourism and careless sector policies.

The HealingPlaces project has been an original idea, stemming from the different sectors needs and previous partners experiences integrating different local and regional approaches to solving the problems of SPAs internationally at the scale of Central Europe area.

The HealingPlaces project's ambition is to reach sustainable development of SPAs. The main idea is that SPAs have to reach balance between territorial development based on mineral and thermal water deposit exploitation and protection of the unique resources that constitute their basis.

HealingPlaces activities were grouped around 3 main themes: one was dedicated to environmental mapping and assessment, the second main theme covered the so-called pilot actions testing the newly developed solutions while the third one dealt with the development of a common strategy for sustainable SPAs.

Joint methodologies are prepared to answer the following questions: What is the significance of SPAs in the regions concerned? What kind of environmental and socio-economic situation defines their role? And at the same time, what type of pressures threatens the valuable natural resources providing the SPA assets? This well-structured assessment process was strengthened by GIS sources helping the visibility of what we have and what we need to protect our values. In order to walk along the same path, partners were regularly trained to improve skills and competences. And last but not least,

a widely applicable, easy-to-use computer tool was developed for the impact & environmental capacity assessment of further development of SPAs.

Using the results of the above activities, pilot actions were implemented; this helped the practical implementation of sustainable thermal water use in SPAs, ensuring the effective and rational use of identified resources, the protection of ecosystems while realizing social and economic functions.

HealingPlaces brought together 7 countries and 10 different regional contexts that constitute a complex and not homogeneous legal, environmental and socio-economic context in which the CE SPAs are inserted and from which derive the main challenges for a more sustainable development of its natural resources, based on the main results of the analysis carried out and the continuative consultations with main local stakeholders through the Regional Working Groups (RWGs): fragmentary management, not uniform governance model, growing urbanization, climate change effects, demographic changes and anthropogenic impact on natural resources are some of the several threats and pressures that the Central Europe SPAs are enfacing.



Figure 1: Project partners localization
Source: Project partners' own resources

HealingPlaces main objective is to improve current management practices of mineral & hot water and other valuable natural resources at SPAs.

The project consisted of three different work packages: WP T1 “Environmental Mapping and Assessment” has the goal to develop common tools for an integrated assessment of present-day and expected threats and pressures on mineral and thermal water resources in SPAs. It developed a common methodology and ranking criteria for assessment of impact strength on mineral and thermal water resources.

The activities of WP T2 included has throughout the implementation of different pilot actions on SPAs system located in the different regional territory of PPs. Pilot activities were performed in Poland, Austria, Czech Republic, Slovenia, Croatia, Hungary and Italy. The main objective of WP T2 was the practical implementation of sustainable thermal water use in SPA-regions, understood primarily as ensuring effective & rational use of identified resources & protection of ecosystems while realizing social & economic functions. For this purpose, different pilot actions were realized by partner regions and the various experiences gained affected the upcoming step of the project process - the creation of the joint strategy for sustainable SPA management.

Finally, the activities of WP T3, starting from the WP T1 tools and from the Pilot Actions implemented in the WP T2, provided an Integrated Strategy for Sustainable Management of SPAs system. The strategy is the result of engagement with key stakeholders through Regional Working Groups and integrates lessons from best practice in managing environmental and socio-economic pressures in HealingPlaces regions.

The partners extended knowledge and awareness regarding the influence of various factors on thermal and mineral water deposits by building multi-level and multi-territorial governance models of managing natural spa resources.

The main results of the project included:

- innovative 3 tools dedicated to decision makers in spa resorts and SPAs to respond

more effectively to existing environmental problems related to spa development and mineral and thermal water resources, such as:

- integrate database about deposits of mineral and thermal water,
- common, innovative and web-based tool for the assessment of threats and pressures on mineral and hot water deposits,
- web application for IOs and Android containing information on local thermal water conditions and characteristics of sites around the Euganean Spa (such as biodiversity, water consumption, occupied beds, well levels, temperature and water quality) enabling immersive & virtual experience,
- guidelines and trainings for improving the capacities of public authorities and other SPA decision makers to act more effectively on the existing SPA development problems and usage conflicts through integrated environmental management approach,
- 8 regionally applicable solutions possible to adaptation to other Central European regions in the field of development of sustainable technological, systemic, strategic solutions for popularisation of participatory approach to management of spa areas and at the same time taking care of protection of mineral and thermal water resources,
- the Integrated Strategy for sustainable management of SPAs’ for improve the capacity for sustainable management of Central European spa towns and regions. Framework of strategy based on innovative and flexible decision-making processes based on partnerships between local and regional authorities, the business sector and health and tourism organisations. This document serves as the core basis for partner regions to formulate their own regional sustainability plans to pave the way towards Central-European SPAs being in balance with nature, economy and our common future.





Figure 2: Project logic
Source: Project partners' own resources

The HealingPlaces project initiated a process that will be continued thanks to the acquired knowledge and the established multi-domain and multi-level relationships with representatives of the authorities, economy and community.

We hope that the stimulated interest and the support obtained by stackholders will contribute to the conscious and responsible management of health resort resources through the construction of multi-level and extraterritorial models for managing the valuable natural resources of health resorts.





WP T1 Environmental mapping and assessment



The main objective of thematic work package 1 (WP T1) was to develop common tools for the integrated assessment of current and projected threats and pressures on mineral and thermal water resources in spa areas. The theoretical baseline was provided by three analytical reports, developed with the participation of all Project Partners, whose task was to collect and deliver data based on the methodological schemes developed and commonly agreed on.

The first report defined the **current legal and socio-economic situation of SPAs in the partner regions**, taking into account the national and European perspectives. Four main parts of the report presented comparative analyses on:

- the legal basis for spa activities and healing and thermal water extraction at the EU level and in the individual participating countries;
- the socioeconomic situation of sub-regions with spa potential;
- the socioeconomics situation of spa municipalities in comparison with other municipalities in particular subregions;
- comparative view of the environmental, social, and economic situation of spa municipalities in all countries participating in the project.

Country	Region [NUTS 2]	Subregion [NUTS 3]	Total population*	Population density [per square kilometer]	Natural increase per 1000 inhabitants*	Net migration per 1000 inhabitants ***	Population change per 1000 inhabitants*
Austria	Upper Austria	Innviertel	286 047	101	1,0	4,5	5,6
Austria	Upper Austria	Mühlviertel	208 483	78	1,9	1,9	3,9
Austria	Upper Austria	Steyr-Kirchdorf	155 445	69	-0,7	1,0	0,3
Austria	Upper Austria	Traunviertel	236 572	94	0,3	5,2	5,5
Croatia	Continental Croatia	County of Krapina-Zagorje	125 357	72	-0,5	-0,4	-0,5
Croatia	Continental Croatia	County of Medimurje	109 921	151	-0,1	-1,1	-0,5
Croatia	Continental Croatia	County of Varaždin	166 982	132	-0,7	-1,2	-0,8
Czech Republic	Moravian-Silesian	Silesian Region	1 204 346	222	-1,2	-2,1	-3,3
Czech Republic	Central Moravia	Olomouc Region	633 178	120	-0,6	-0,6	-1,2
Hungary	Northern Hungary	Borsod-Abaúj-Zemplén	676 093	89	-3,4	-5,2	-9,0
Hungary	Northern Great Plain	Hajdú-Bihar	530 464	85	-2,8	-2,0	-4,8
Italy	Piemonte	Alessandria	426 658	118	-8,8	2,0	-6,8
Poland	Dolnośląskie	Jeleniogórski	562 331	101	-4,3	-1,5	-5,5
Poland	Dolnośląskie	Wałbrzyski	652 415	156	-5,2	-1,8	-7,0
Slovenia	Eastern Slovenia	Southeast Slovenia Statistical Region	143 382	54	0,5	8,0	8,5

* Czech Republic – 2017
** Croatia – 2017
Source: own research based on: Statistical Office of Upper Austria's government; Croatian Bureau of Statistics; Zbirnik tendence demografskega, socialnega in ekonomičkega razvoja Olomouckého kraje - 2017; Hungarian Central Statistical Office; Regional Official Data Bank - Regione Piemonte; Statistics Poland - Local Data Bank; Republic of Slovenia Statistical Office.

Figure 3: Indicators showing the demographic situation in the subregions included in the analysis in 2018
Source: Project partners' own resources

The next report was the **environmental report**, which presented general information on the geography of the project countries, renewable energy sources, and agriculture. In the detailed part, the focus was on presenting the existing and potential pressures on natural resources. These are broken down into biodiversity, soils, surface and groundwater, air quality and microclimate, cultural heritage, and landscape

and protected areas. Separately, pressures on spa resources related to human impact, technology used, resource depletion, and waste management were also presented.

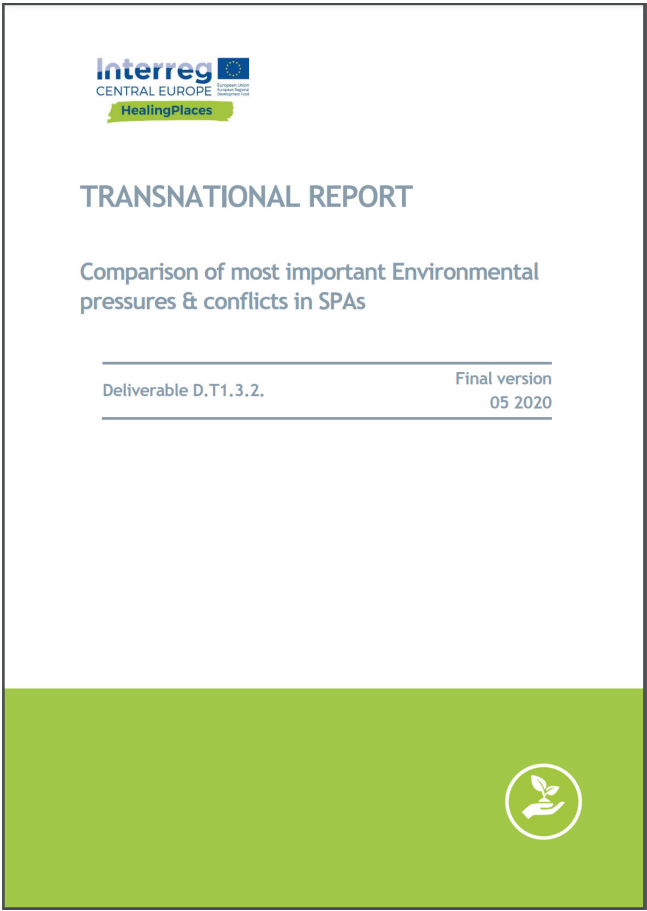


Figure 4: Transnational report_Comparison of most important Environmental
Source: Project partners' own resources

In the third - **socioeconomic report** - an attempt was made to systematise socio-economic phenomena that exert pressure on the natural resources of health resorts. These include demography, technological issues, raw material situation, economics, and tourism. The reports also describe threats to the natural resources of the spas related to global warming and the COVID-19 pandemic. The studies were the starting point for building a database on pressures and threats to the natural resources of spas.

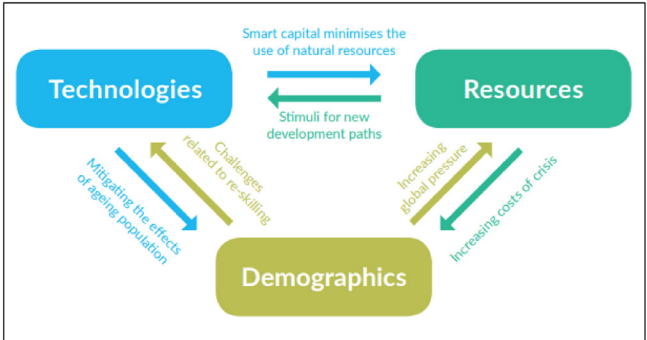


Figure 5: 21st century megatrends and their interlinkages
Source: Project partners' own resources



Tools

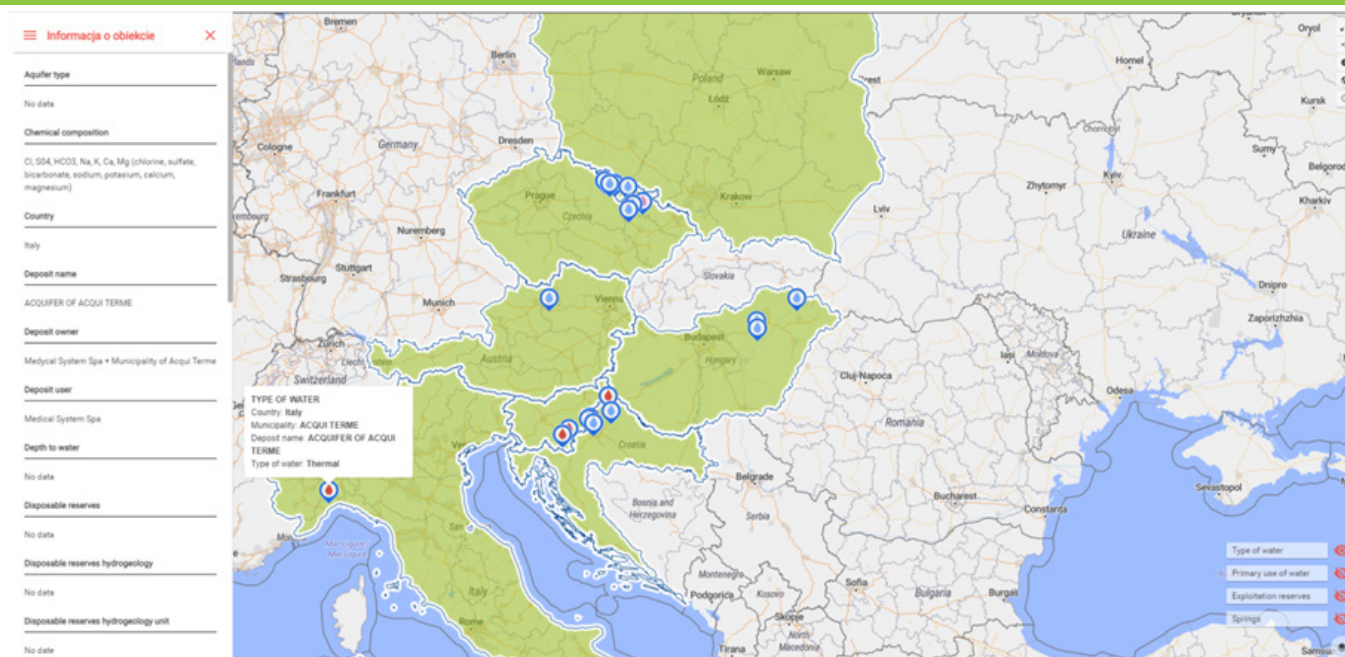


Figure 6: Web-based GIS/geoportal tool
Source: Project partners' own resources

Web-based GIS/geoportal tool

One of the most important activities carried out within the framework of WP T1 was the development and dissemination of a web-based GIS/geoportal tool (with mobile and interactive capabilities) linked to a spatial database on mineral and thermal water resources used in Central Europe SPAs. Individual layers present information such as types of healing and thermal waters, their basic use, chemical composition, and exploitation reserves. One of the layers shows selected threats and pressures on the natural resources of SPAas and was developed on the basis of the reports as well as an interactive questionnaire distributed among stakeholders in all partner countries.

Tool is available at
<https://map.nmaps.pl/healing-places.ubpAh4/project>

APP of the management for thermal water resource and environmental sustainability

Another key output of the project was an interactive tool - the APP of the management for thermal water resource and environmental sustainability for the Euganean Thermal Basin. The application collects, aggregates, and shows the data related to bed numbers, biodiversity/geology/landscape characteristics, etc. They are presented in the form of charts and graphs and serve the technicians, policymakers, and the thermal water management authorities. This tool will be adapted for iOS/Android and therefore will

be also useful for informing and guiding the visitors through the main thermal characteristics (also about the variables connected with the environmental changes), and this way it will help to increase awareness of tourists and locals about the importance of thermal water management.

Although the APP is initially elaborated for one specific location, it will be equipped with manual and series of trainings to enable its implementation in different territories especially those dealing with SPA development and thermal water management.



Figure 7: View of APP of the management for thermal water resource and environmental sustainability
Source: Project partners' own resources

The app can be found
<https://themeforest.iqbalnawaz.repl.co/index.html>

Tool for impact assessment of SPAs development

The third tool development under WP T1 is the tool for impact & environmental capacity assessment.

Its purpose is to determine the strength of the impact of spa industry development on natural resources in different regions of Central Europe with a particular focus on the regions participating in the HealingPlaces project.

The tool is intended for decision-makers at the local government level responsible for the development of territories with specific environmental values subject to anthropopressure related to spa and tourism activities. It aims to support the decision-making process and to raise awareness of the impact of the development of the spa and tourism sector on environmental resources, supporting the planning of sustainable spa development. The adopted logic for the tool includes the correlation of the level of tourism with the state of environmental resources, with particular emphasis on therapeutic water resources, including thermal and/or mineral resources. To fully assess the environmental impact of the spa development, the tool also includes algorithms for the maximum environmental capacity of other natural resources, including, among others, green areas or protected areas. The tool includes five main indicators that are used in the process of calculating the development capacity of spa municipalities:

- environmental touristic capacity of the municipality area;
- environmental capacity of SPA parks;

- capacity of the legal protected areas;
- sewage quantity;
- mineral water quantity.

For each of the above-mentioned indicators on the basis of developed algorithms the current level of pressure is calculated. In next step, the current level of pressure is compared with the limit value of pressure for each indicator.

Tool is available in Excel version - to be downloaded from <https://www.interreg-central.eu/Content.Node/HealingPlaces.html>

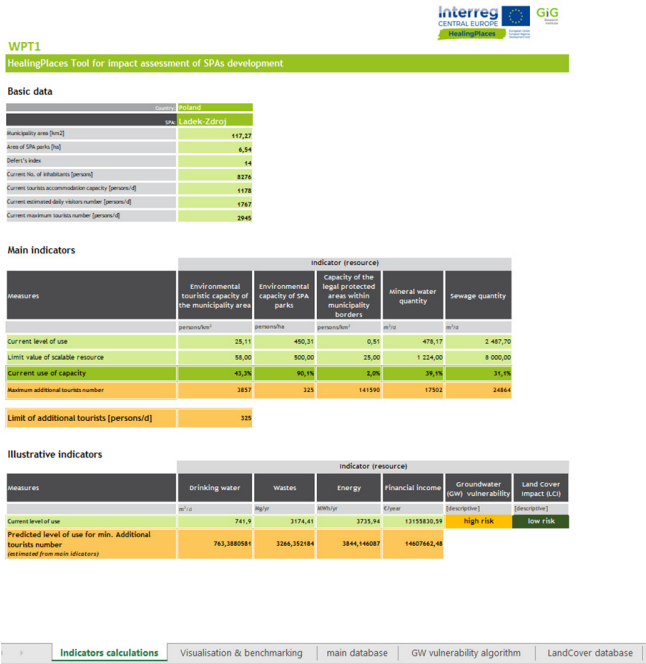


Figure 8: HealingPlaces Tool for impact assessment of SPAs - Excel screenshot.
Source: Project partners' own resources

And its online version is available at <https://healingplaces.gig.eu/>

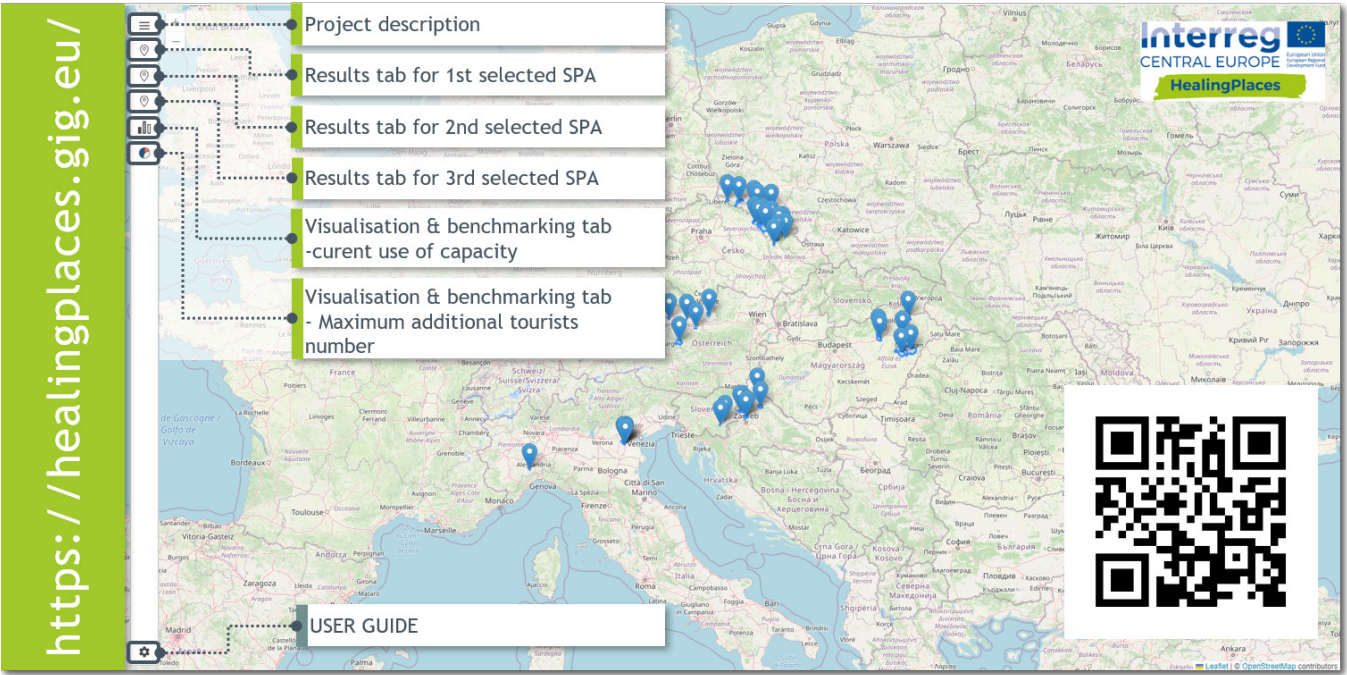


Figure 9: View of the tool for impact assessment of SPAs development
Source: Project partners' own resources



WP T2 Sustainable SPA management - from concept to realization



Pilot Actions in project regions

It is undisputed that healing water is health-promoting and helps with various diseases. In baths, drinking cures, or medicinal water inhalation, mineral-rich water can unfold its full effect and, depending on the focus, alleviate complaints relating to the musculoskeletal system, circulatory disorders, and skin, heart and circulatory diseases. The healing effects of water were recognized very early, which is why health resorts developed already in antiquity and in the Middle Ages. Recent developments in health tourism and the wellness sector open up new perspectives for spa towns and health regions. At the same time, technological developments are also leading to alternative ways of using water. For example, the use of thermal water for energy and heating purposes is increasing.

Therefore, the natural heritage, including natural water resources and hot springs, holds immense potential for regions with such resources. At the same time, current developments lead to increased consumption and thus to greater pressure on the water depots. To identify ways to ensure an effective and rational use of natural resources (also in an economic way), but also the protection of ecosystems, 8 pilot actions were implemented in the project (see picture below).

The main goal of these pilot actions was the efficient reduction of conflicts between economic, social & environmental approaches. Therefore, the pilot actions pursued the following challenges:

- Identification of necessary framework conditions for the long-term existence of a source
- Elaboration of plans for the sustainable protection of water ecosystems
- Development of measures for an environmental impact analysis for SMEs
- Support/creation of a dialogue between the interest groups to strengthen the exchange
- Recognizing and demonstrating the potential for sustainable regional development
- Awareness raising among users (both patients and tourists) for environmental protection and resource conservation issues.

The procedures in the individual regions and possible conclusions for sustainable spa management are described in more detail below.

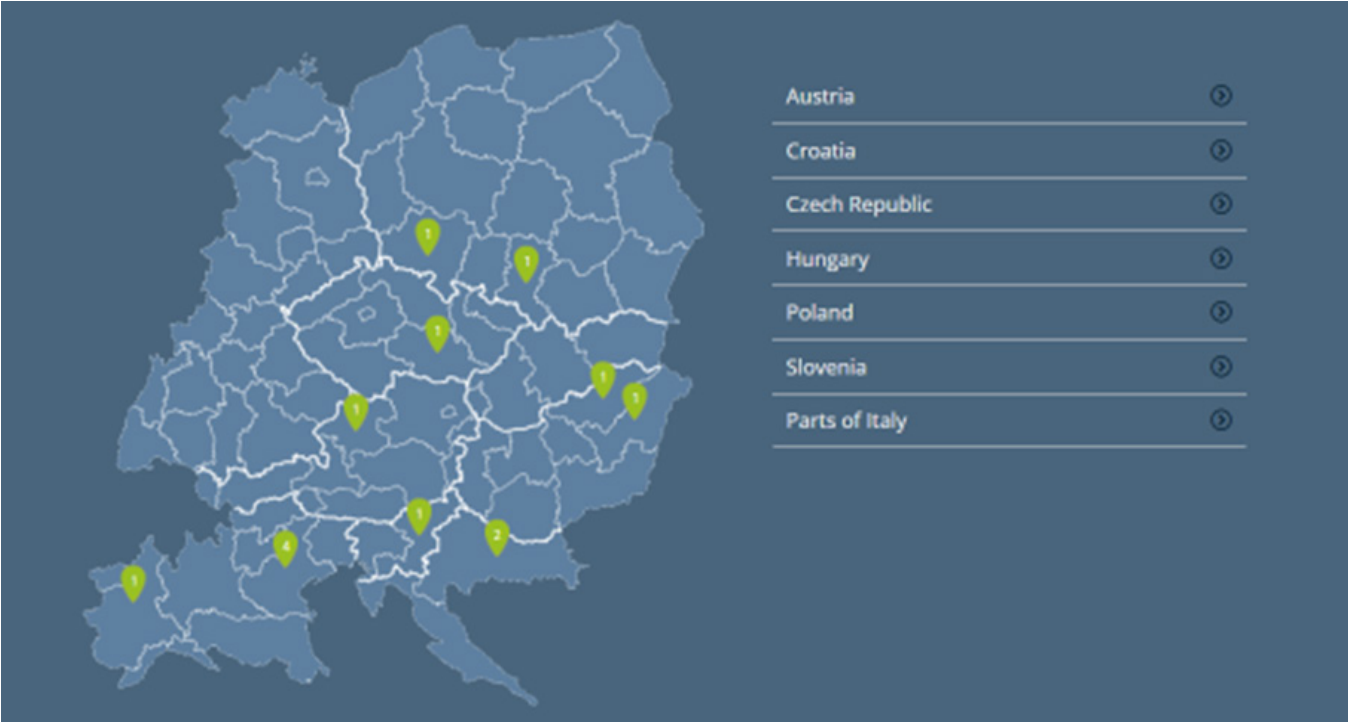


Figure 10: Database with interactive map of water resources.
Source: HealingPlaces Project (<https://www.interreg-central.eu/Content.Node/HealingPlaces.html>)



Pilot Action 1:

Balanced and sustained management of mineral waters in Lower Silesia (PL)

The protection of medicinal waters is an important challenge currently facing European SPAs, including those in Lower Silesia. The increasing impact of human activities on natural resources, especially the pressure for investment in potentially sensitive areas, causes a threat to the underground resources of healing waters. Therefore, the objective of the Pilot Action under the title: „Balanced and sustained management of healing waters in Lower Silesia”, was to deepen the knowledge of the impact of investment processes in the SPA municipalities and their vicinity, on underground resources of healing waters. On this basis, we wanted to develop, in cooperation with many stakeholders involved in the development of regional SPAs, the analytical and planning tools for sustainable SPA management.

The curative and tourist potential of health resorts is an important development capital of the Dolnoslaskie Voivodship - 11 municipalities here have the official status of a health resort, which places the region in the first place in Poland in this respect. For two of them, namely Polanica-Zdrój and Ladek-Zdrój, a detailed and in-depth analysis of threats to areas potentially sensitive to therapeutic waters was prepared, including the use of a tool developed under WP T1.

The results were presented at the *Regional Working Group for Sustainable Management of Medicinal Waters in Lower Silesian SPAs* established under the project umbrella, as well as at local workshops organized in both resorts under the common title: „Spatial development and land use vs. potential threats to medicinal water resources”. The discussion in the Working Group and at the workshops revealed an extremely complex set of factors affecting the possibilities of sustainable management of healing waters, including inaccuracies within the legal regulations for SPAs, complex relationships and competencies in spatial planning and investment, and even the gaps and limited access to knowledge on threats to healing waters resulting from the specific hydrogeological structures in Lower Silesia.

Based on activities in pilot areas and on the experience of all Project Partners, an Action Plan was developed for Lower Silesian SPAs. It formulates guidelines and actions in the following spheres:

- improving legal regulations at the national, regional, and municipal level;
- strengthening decision support tools in spatial planning and management of health resorts;
- promotion of health resorts and SPAs as a common regional brand;
- increasing public awareness of the value of SPAs and curative water resources as a regional cultural and natural heritage capital;
- integration of activities of various entities, including cross-border dimension.

The activities carried out in the framework of the Pilot Action not only confirmed the legitimacy of undertakings in the field of protection, monitoring and carrying out rational spatial policy in the SPA areas, but also delineated further necessary paths of cooperation. The solidarity-based responsibility of the SPA and neighbouring municipalities and SPA businesses, as well as cooperation with research institutions, can significantly strengthen the role of the SPAs as the engine of the regional economy and identity.





Figure 11: Workshop on the protection of healing water in the context of spatial planning in the pilot actions in Łądek-Zdrój and Polanica-Zdrój

Source: Project partners' own resources

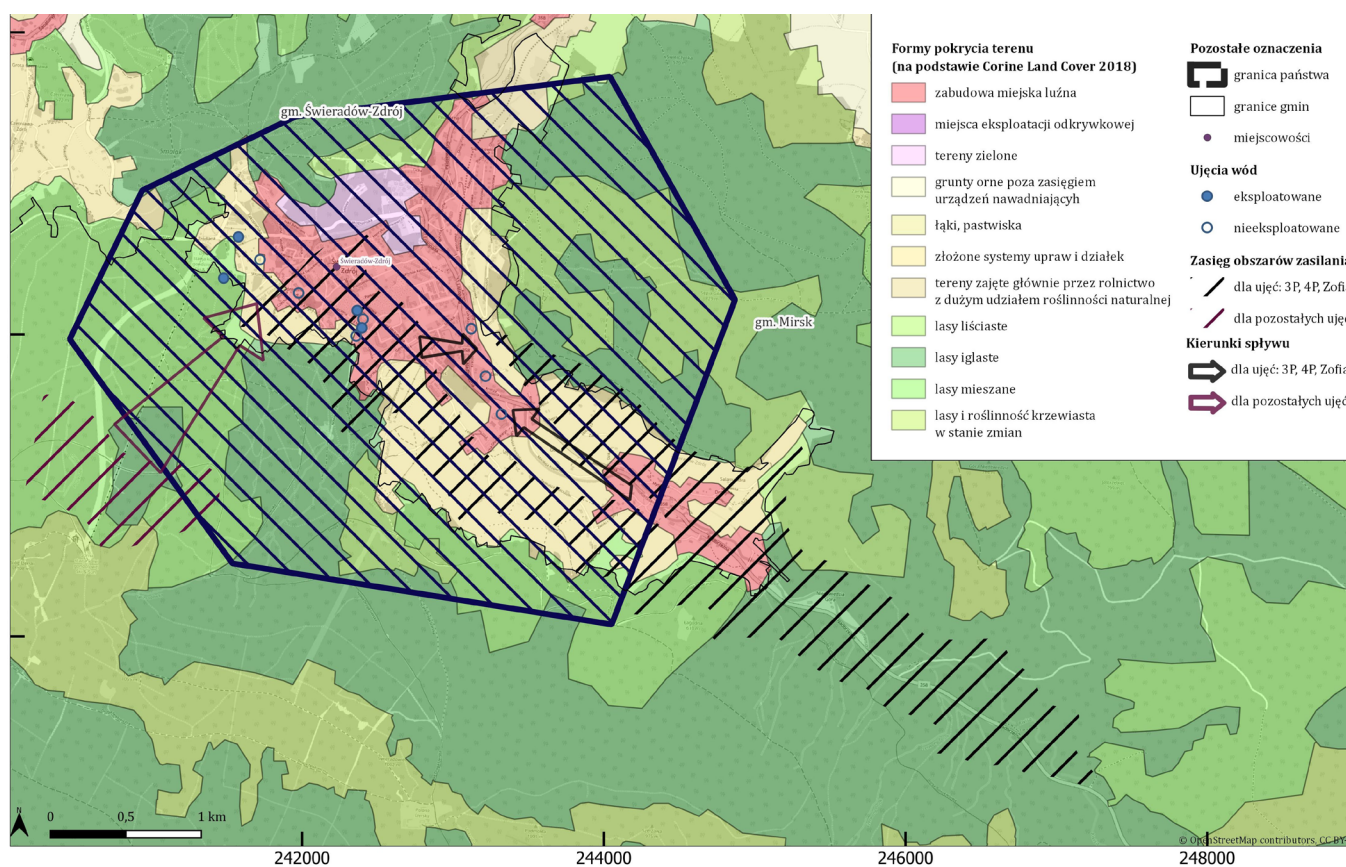


Figure 12: Fragment of a map from polish expert order - Areas sensitive to the protection of medical water deposits in the Dolnoslaskie Region

Source: Project partners' own resources



Pilot Action 2:

Improvement of sustainable management of thermal natural resources in Colli Euganei area (IT)

An extraordinary SPA touristic system and historically prestigious natural area, recognized as 2000 Regional Park and Natura Site, participates in the HealingPlaces project: The Euganean Thermal Basin is the largest thermal area in Europe with a size of 220 square miles, 10 Thermal Municipalities, 137 mining concessions, 230 extraction wells, 10 points of extraction level monitoring system of thermal water, and approximately. 12.000.000 m³/year of extracted thermal water.

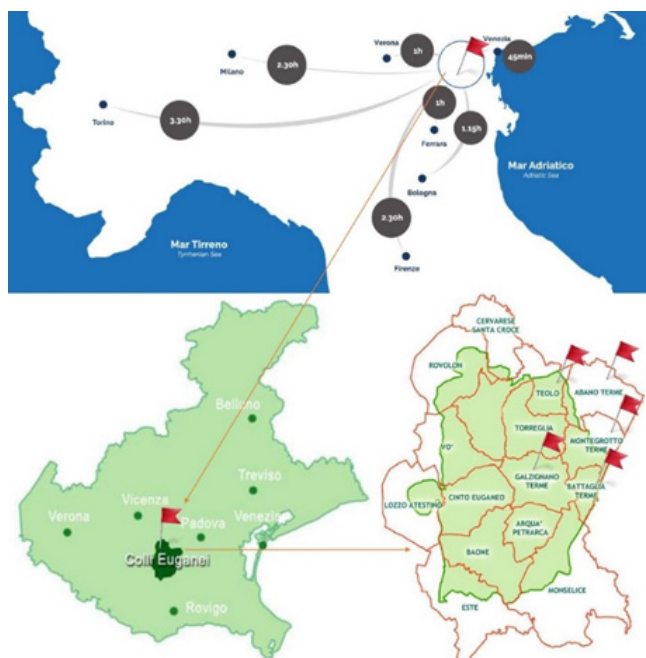


Figure 13: Map of the Euganean Thermal Basin, Veneto Region

Source: Project partners' own resources

This pilot action also has a benchmark in Friuli Venezia Giulia Region (through promotion to local thermal stakeholders).

The pilot action within the Euganean Thermal Basin, led by the Upper Adriatic Technology Park, has been developed with the aim of improving and enriching existing management strategies on thermal water usage in collaboration mainly with Authorized Managing Authorities, G.U.B.I.O.C.E. 'Homogenous Hydromineral Basin of the Euganean Hills (Regional Emanation for Thermal Water Usage, DGR n.1586/1991) of the Veneto Region. Within project implementation,

many territorial stakeholders have participated in local participatory processes on thermal water management and its sustainable exploitation: Terme Colli Marketing, ARPAV (Regional Agency for Environmental Protection), private concession owners such as hotels and technicians. The aim of the pilot action is to integrate existing management thermal water resource systems and environmental sustainability plans with an APP and to sensitize the citizenship with an immersive experience on sustainable use of thermal water and historical overview. Through local participatory processes, the pilot action from the Euganean Thermal Basin reached good resonance in other territorial thermal areas”.



Figure 14: SPAs in the Euganean thermal Basin

Source: Project partners' own resources

The Euganean Thermal Basin, together with its Management Authorities, perceives an eco-sustainable usage of thermal water thanks to well level monitoring systems in overall natural resource extraction area. This means that therapeutic water and mud resources are protected through restricted rules, thus avoiding excess consumption of natural resources and potential depletion. This area has been looking for innovative and strategic ways to preserve its natural resource and new market end links throughout time favouring unique touristic destination based on Terme & Health, Nature & Sport, Arts & Culture, and Food & Wine.



Figure 15: 29/03/2022, WP T3 -
Meeting in Acqui terme

Source: Project partners' own resources

Intense collaboration between Local authorities and sectoral managers is what can be seen as most successful and impactful within the pilot action: the University of Padua, Local Municipalities within the Regional Euganean Hill Park outside the concession area, Regional Authorities, private bodies and Thermal SPAs expressed their interest in adhering to project and starting exchange competences, knowledges and experiences. In regards of main pilot outputs: APP and immersive experience realized through local conditions adaptation, involved target groups and relevant stakeholders have considered hierarchical structure for punctual and precise APP functionalities with variables and characteristics of natural thermal resource of wide interest (water consumption, occupied SPA beds, well levels, temperature and water quality data). Immersive training and awareness sessions are aligned with APP in contents and networks, primarily with links into surrounding environment and resources.

Major interconnected relationship between citizenship, hotel owners and technicians involved in thermal water usage, and thus bottom-up participation approach has been the key and result achieved through the pilot action, therefore innovative and technological transfer and integrated operative applicability in the field has been guaranteed with new tools. HealingPlaces project has facilitated dialogue



Figure 16: 10/12/2021, WP T2 - Meeting in Abano terme
with local stakeholders

Source: Project partners' own resources

into “sustainability” concept of natural resource, in so doing much responsiveness and resilient-based changes into management planning have been discussed, especially renewable energy alternatives and ICT tools.



Figure 17: VR reality 1st view

Source: Project partners' own resources



Figure 18: VR reality 2nd view

Source: Project partners' own resources



Pilot Action 3:

Building sustainable partnership on shifting towards nature-focused development of spa water potential strengthening health industry (HU)

Harmonizing tourism and health industry goals with the preservation of natural values, Hungarian project partners are committed to serving the objectives of two Hungarian counties providing impact even in a wider range of communities.

Borsod-Abaúj-Zemplén (PP5) and Hajdú-Bihar (PP3) counties have rich spa potential provided by their numerous thermal bath complexes and some specialized spa municipalities; intensifying the cooperation of research institutions, municipalities, nature protection authorities / organisations as well as business actors and clusters in this special spa-nature related issue could be a great advantage; cross-fertilisation can have long-term effect not only at county but hopefully national and/or cross-border level as well. In strong cooperation with relevant stakeholders, the following steps have been taken:

- gathering, assessing, and capitalizing available national/regional sustainable spa development solutions where nature preservation / ground water protection is highlighted - this task covers the survey on completed and ongoing international / national / regional / local projects, initiations, measures or actions;

- following the identification of impacts/ threats on nature, partners will focus on and define specific demands aligned with national and regional theme-specific social and economic objectives (particularly health industry - concentrating on natural assets, tourism aspects, social inclusion, entrepreneurship development, healthy society);
- setting up a Green Spa Network for Eastern Hungary, uniting committed spas toward sustainable development, continuous knowledge, good practice exchange and creative solutions and also green service provisions, to be maintained beyond the project lifetime;
- from potential to opportunity: common development of the Sustainable Spa Development Concept to be applied for both counties covering even national needs, the document will serve as a framework for further exploitation of the spa potential with a specific focus on decreasing environmental burdens, improving the efficiency of nature preservation, and increasing biodiversity.



Figure 19: Location of spa members of the Green Spa Network of Eastern Hungary

Source: Hajdú-Bihar County Government



Figure 20: Zsóry Spa, Mezőkövesd

Source: zsory-furdo.hu

Looking further on the upcoming definition of economic, spatial, social, and environmental planning procedures concerning the two counties, the results achieved through HealingPlaces are expected to efficiently serve a more nature conscious, responsible, and particularly sustainable future vision of the wonderful spa heritage and potential.

As a general approach, the pilot action addresses a parallel vision of healthy society & healthy environment to achieve the following goals:

- Improving and strengthening the sustainability of the sector
- Applying sustainable, green solutions
- Gaining competitive advantage: green, ecologically responsible spa

During the implementation process, several aspects of spas have been identified to be examined and taken into consideration:

- Following numerous informal bilateral and multilateral discussions with relevant actors representing spa municipalities, spa management bodies, spa cluster members, university and research institutions, thermal tourism experts and regional planning professionals, the main structure and content of the Sustainable Spa Development Concept have been established. This draft and the methodology developed strongly define the formulation of the conceptual document. External expertise was hired to fully develop the concept that will serve several goals: on the one hand, the document lays the principles of “how to ensure responsible and sustainable spa management and development” and on the other hand, provides guidance with tools and methods how to achieve such larger-scale objectives.



Figure 21: Aquaticum Spa, Debrecen

Source: aquaticum.hu

- It was very important to make all actors understand the significance of such an approach. This process was strongly strengthened by the development of two pilot action videos in both Hungarian partner counties.
- The two Hungarian partner institutions (PP3 HBCG and PP5 BORA94) have consciously committed to producing two separate but complementary films. While PP5 interviewed the municipal leaders of the Eastern Hungary six spa municipalities of the Green Spa Network about the role of spas in the development of the municipalities and their future plans, PP3 explored the plans and ideas for institutional developments, especially technological developments, with the help of the spa leaders. The result is a complex and comprehensive movie-based document covering the two counties, outlining both the present and the future of spa development, providing a sound basis for the professional elaboration of the Sustainable Spa Development Concept.



It should be stressed that the short films are available both on a county-by-county basis (containing the material of 3 selected spas in both counties) and in a combined format for the 6 spas and their municipalities, thus helping to provide an overview of the municipalities and the spas' own concepts.



Figure 22: Hajdúnánás Spa
Source: hajdunanas.hu

The Concept has been finalised and validated by the actors concerned and is expected to support the future formulation of long-term, responsible development plans for spas with a strong focus on sustainability and responsible management of the green and natural heritage. The intention of its implementation has been confirmed by signing of the Letter of Intent to formulate the Green Spa Network of Eastern Hungary. The Concept, after its finalisation, is expected to support the future formulation of long-term, responsible development plans for spas with a strong focus on sustainability and the protection of the green and natural heritage. The intention of its implementation will be confirmed by signing of the Memorandum of Understanding of the Green Spa Network of Eastern Hungary.



Figure 23: Spa members of the Green Spa Network of Eastern Hungary
Source: Hajdú-Bihar County Government



Pilot Action 4:

Strengthening regional partnership in selected SPA regions in Upper Austria (AT)

The main goal of the pilot action of project partner number 4 (Upper Austria) was to strengthen the regional partnership in selected SPA regions in Upper Austria in order to secure and capitalize on the 'natural heritage' factor of location. As a starting point, the Austrian partner developed regional and national offers, where capitalisation of the factor 'natural heritage' has already been successfully implemented. The analyses showed, that the offer of health services in Upper Austria is quite wide and that health tourism has developed very positively in recent years (not taking into consideration the period of Corona Pandemic, which has changed the tourist statistics significantly). In 2019, more than 1.4 million overnight stays - that is almost 15% of the total overnight stays in Upper Austria - were achieved in health destinations.

The six SPA resorts - located in Bad Hall, Bad Ischl, Bad Schallerbach, Bad Zell, and Geinberg - offer all sorts of medical ailments with means such as iodine, brine, sulfur, radon, and thermal water. The main focus of the pilot action in Upper Austria was on the two regions around Bad Zell and Geinberg, which are briefly described below.

SPA municipality Bad Zell:

Tourism region Mühlviertler Alm Freistadt



The Bad Zell is not based on a thermal water depot but rather on the Hedwigsbründle - a natural spring containing radon. Therefore, the Bad Zell roots of the spa municipality as a healing place therefore go back to the 1950s. Today it is an established tourism municipality with a consistently decent number of overnight stays and arrivals. According to the Upper Austrian Tourism Act 2018, Bad Zell was classified as 'a municipality'. This means that the overnight stays of the municipality reach twice the value of the country's overnight stay intensity (Upper Austrian Tourism Act 2018 (Oö. Tourismusgesetz 2018, § 9.).

What is special about this pilot region is that there are different springs like that, the so-called 'Augenbründle', throughout the region. For some of these springs, elevated radon levels were found as well, and all springs are said to have healing effects. Therefore, these sources offer a good opportunity to use this precious resource not only for Bad Zell but for the entire tourism region. This focus on a larger region was also reinforced by the merging of different tourism associations in 2020, as this made it easier to conceptualize on a larger scale.

In order to have a better basis of information, an analysis of the existing Augenbründle was carried out. It was the first time that a joint look was taken at the various offers in order to be able to derive further strategies. Thus, 8 of the existing locations were examined more closely. In addition to a science-based water analysis, the study also included the collection of historical records and mythical stories about springs.



Figure 24: Hedwigsbründle Bad Zell, Municipality Spring in Tragwein, Maria Bründl Sankt Oswald

Source: Project partners' own resources



In this pilot region, a chance was also given to get a better understanding of the possible (economic) importance of natural heritage to a region. With the existing offer of the Johannesweg, a hiking trail in the region - an analysis of the indirect profitability of the last 10 years was carried out. The trail includes 12 stations at different power spots, many of them at the analysed springs. In the course of a calculation, an attempt was made to approximately quantify the regional demand effects. In addition to the indicated overnight stays, the revenues generated by day guests and follow-up investments in the region through bed development, infrastructure contributions, and gastronomy were also considered.

In summary, this analysis made it clear that the capitalisation of natural heritage and functioning regional partnerships - via the tourism association and through other players in the region - could trigger considerable regional economic effects by comparatively low investment costs.

SPA municipality Geinberg:
Tourism region s'Innviertel

**S'INN
VIERTEL** Tourismus

As part of the pilot action of PP4 several activities were also carried out several activities. The Therme Geinberg Spa Resort, which bases its offer on thermal water, is located in this region. The figures in the s'Innviertel region also make it clear that the natural heritage can have enormous appeal for the location. Around 40% of overnight stays in the association area are in Geinberg and thus largely through the thermal baths. This raises awareness and added value to the entire tourism region.

The situation in this region is also very interesting, since the Innviertel is located on the water depot of the Molasse Basin. What is special about this pilot region is that there already exists a contract between Upper Austria and Bavaria for the common use of the joint water depot. Despite the common language, negotiations between countries have proven to be very difficult, since sustainable water use can only be achieved together. Nevertheless, the agreement was worked out and the framework conditions for joint use were defined (Policy papers on thermal water use: <https://www.land-oberoesterreich.gv.at/26264.htm>).

Since the conditions in this region were completely different from those in the Mühlviertel region, other measures were chosen within the pilot action. A study was commissioned in the tourist region of s'Innviertel to analyse the existing actors in the field of water use. In addition to tourist use, special attention was paid to nontourist use in order to be able to identify possible harassments and synergies.

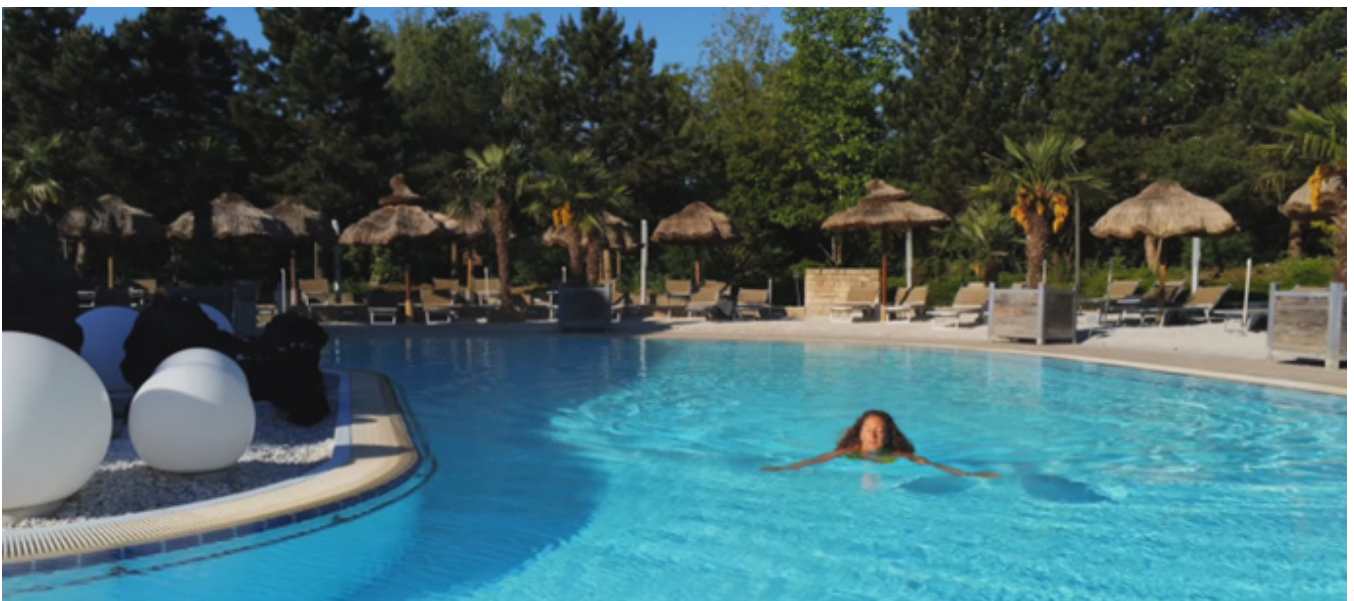


Figure 25: Caribbean flair at the outdoor pool, Spa resort Therme Geinberg
Source: Project partners' own resources

The literature and also the analysis clearly indicate that the competing use of thermal water for geothermal reasons (heating, energy generation) can pose a major challenge in the sustainable management of the resource, since several different (and above all uncoordinated) actors can influence e.g. the pressure and temperature in the water depot. Precise agreements and regular measurements, therefore, seem absolutely necessary here.

However, it could also be recognized that coordination of those involved definitely allows joint and sustainable management of thermal water and can also contain immense potential for a region. For example, very sustainable use of the resource can be achieved through cascade use, which can be used to add value with the same water at different levels. For example, offers from mushroom or fish farming or the supply of glasshouses can be implemented without further environmental pollution. In the example of the s'Innviertel region, we were allowed to accompany the opening of the Biohof Geinberg, whose heat requirements are met via cascade use exclusively via the water from district heating and the spa (see graphic above).

The analysis has also made it clear that the region is playing a pioneering role in the field of geothermal use with several plants, which increases the possibility for further joint projects. In addition, the strong geothermal deposit has the potential to position the entire region as a technological pioneer and an exemplary case of a sustainable region, an image that easily can also be used for tourist providers.

Altogether, the two pilot regions in Upper Austria have been quite different in natural realities and framework conditions. Nevertheless, in both regions, the possibilities of a sustainable capitalization of natural heritage could be considered. It became clear that the partnerships between the different players in the region play an immense role, since sustainable management of the resource can only take place through mutual coordination and regular exchange. Therefore, the role of tourism associations as a hub and anchor point is important one in order to be able to coordinate partnerships in the region and keep them alive.

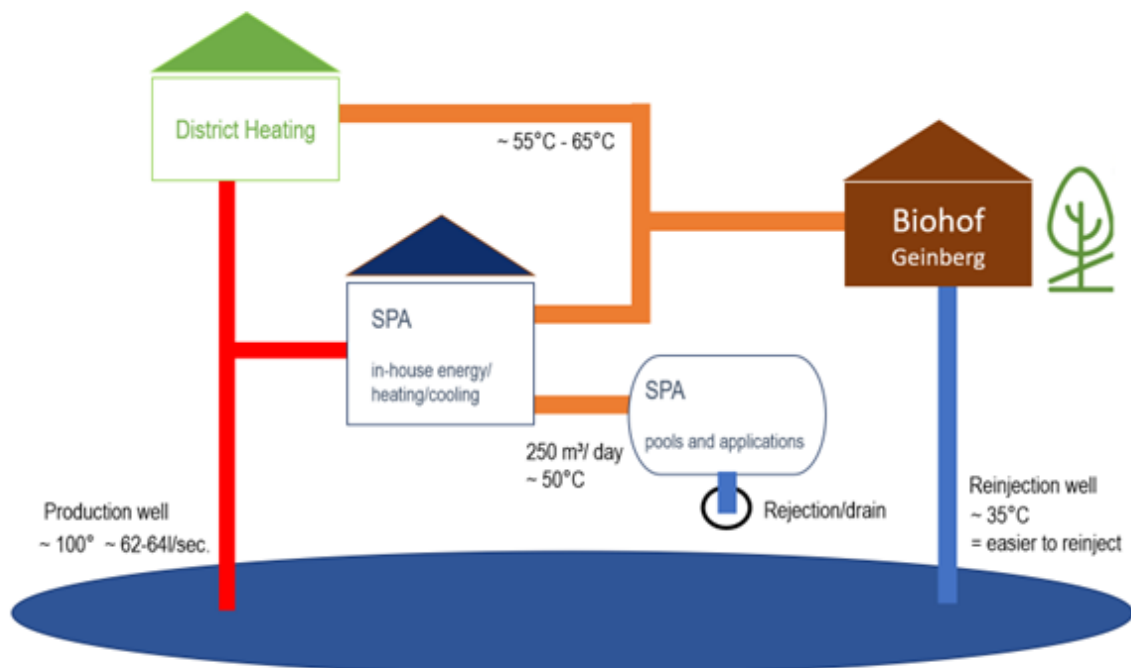


Figure 26: symbolic representation of the cascade use at the Biohof Geinberg
(own representation)

Source: Project partners' own resources



Pilot Action 5:

Eco-friendly SPA management in region and guidance for sustainable use of local thermal and mineral groundwater resources (HR)

Given the geothermal water and its untapped potential, the City of Križevci has been constantly looking for new solutions to do the best thing for its residents.

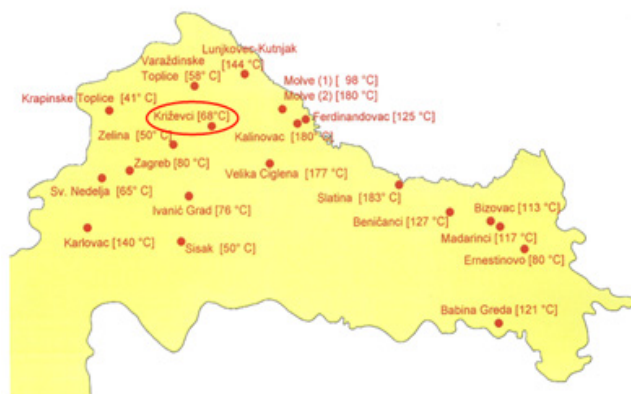


Figure 27: Geothermal potential in northwestern Croatia
Source: Project partners' own resources

By joining the HealingPlaces project and defining an action plan, another step towards realizing our plans has begun.



Figure 28: KRIŽEVČANKA 1 well in Križevci Croatia
Source: Project partners' own resources

Also, spa Terme Sveti Martin has joined the project, trying to bring the current practice of using geothermal energy for medicinal purposes to a new level. From the very beginning, the stakeholders were very friendly and were happy to respond to working meetings, trainings, and research within this project.

Thus, we included various experts, professors, scientists, students, government services (ministries), but also the interested public in topics related to geothermal energy and ways to solve defined problems.



Figure 29: WP T3: REGIONAL WORKING GROUP (RWG) - Terme Sveti Martin 11/11/2020
Source: Project partners' own resources



Figure 30: On-site visit at Sveti Martin na Muri - AP12 / part of the 4th Partner's meeting (on-line)
Source: Project partners' own resources

We are especially proud of the ECO-SPA conference, which, despite the current COVID pandemic, gathered a large number of stakeholders, our two action plans (one for the City of Križevci, one for the Terme

Sveti Martin spa), but also the initial research of our existing geothermal well where our students saw first saw what it looks like in practice.



Figure 31: 1st Regional ECO-SPA conference on September 8th, 2021. - whole-day event, at the conference hall in Terme Sveti Martin
Source: Project partners' own resources

All our outputs, resulting from this Pilot Action, are a kind of foundation for further research and development of the City towards sustainable and green, as well as for

improving the business of spa Terme Sveti Martin and strengthening continental tourism in Republic of Croatia.



Pilot Action 6:

Sustainable management plan of thermal water use (SI)

The Razvojni center Novo mesto elaborated a pilot action under the activity called Sustainable management plan of thermal water use. The spa areas in the Jugovzhodna Slovenija are among the oldest and most known natural and cultural heritages in the region and are the carriers of local and regional development. Their healing and touristic functions employ several hundred people and are a generator of tourist flows and tourism development. In several development documents and strategies, spa areas are mentioned as factors of improvement of local and regional quality of life if they are managed sustainably. Since their environmental and landscape impact is unique, we decided to analyse these conditions and prepare a vision of their development.

In the HealingPlaces project, the participatory approach was a key element to understanding the status quo of a very horizontal activity where several sectors coexist (such as agriculture, environmental protection, economic development, energy, health). We managed to address most of them by private meetings and public consultations. Firstly, it was necessary to communicate the project person-to-person and secondly to invite them to a joint public event which was co-created by them. The whole

process of preparation of the pilot action was based on inputs from stakeholders, such as local authorities, business representatives, research institutions, and sectoral agencies, especially those which are part of the process of planning and management of natural resources and land use. It was harder to motivate and involve national authorities. Nevertheless, we managed to involve some national stakeholders, and by continuing such activities and projects it is possible to involve more of them and achieve planned changes. A specific challenge for us was finding the right moderator capable of cross-sectoral understanding and mitigation of measures. The COVID-19 pandemic also had a major impact on project activities as physical contact was not available, reducing the availability to motivate stakeholders in person. General lockdowns also reduced the activity of spa facilities (75% fewer arrivals to spa facilities in both spa areas in 2020 and no foreign guests), creating more important challenges to be addressed. However, the spa activity was not completely closed, as it was crucial for the health sector.



Figure 32: Spa area Šmarješke Toplice, Slovenia
Source: Project partners' own resources



Since the topic of sustainable management of thermal water use was broader than originally planned in the project, we focused on the integrated system of healing resources, which can also be sand, mud, climate, or gases, and in combination with landscape they form unique places for long-term development, tourism, and health. Thermal water is unique in the Jugovzhodna Slovenija, but during the project we identified other factors that comprise a picture of spa areas and included them. We are proud to motivate several national stakeholders, including business organisations to attend joint public events and discuss the future of spa areas. The response of local and regional stakeholders was also positive. We are also proud to publish two journals after each public consultation, which will enable long-term and public access to results.



The HealingPlaces project revealed several challenges in the planning and management of Slovenian spa areas, related to hydrogeology, environmental protection, ecological agriculture, sustainable mobility, tourism destination management, energy and climate questions, health and medical conditions and landscape architecture. In the future, it is necessary to implement the pilot action and monitor its impacts and effects. With the support of local action groups and tourism destination management, it will be possible to leverage funds based on project achievements and create conditions for improvement of spa areas in Jugovzhodna Slovenija.



Figure 33: Spa area in Dolenjske Toplice, Slovenia
Source: Project partners' own resources



Pilot Action 7:

Product Environmental Footprint Testing in the Thermal District of Acqui Terme (IT)

The history of Acqui Terme has always been strongly linked to its thermalism: water has always been its hallmark and the spa system its flagship. Already renowned since Roman times for its boiling hot springs, in the early 1900s, the Spas were grandiose and were a source of pride for the city. In the new millennium, Acqui Terme has continued this long spa tradition, offering medical, wellness, and beauty treatments in the thermal facilities built around its three springs.

Today, the Acqui Terme spa cluster is going through a profound crisis, specifically related to the Covid-19 health emergency and its strong economic repercussions on the spa and tourism system, which have led to temporary closure of the main thermal facilities.

Originally designed to directly involve the managerial authority of Acqui Terme Spas, which, however, was forced to decline the invitation due to the severe period of crisis it is facing, the Pilot Action has been redesigned taking into account this complex framework. The new focus of the activities has been the „Former Military Baths” of which Acqui Terme has become the owner in attempting to relaunch the spa sector.

The Former Military Baths are a unique heritage for the city. The complex was built in 1700 and strengthened in the second half of the 1800s. This spa, one of the few plants of this kind in Italy, was used for two centuries by soldiers for spa treatments and was definitively closed in 1997.



Figure 34: Former Military Baths, vintage postcards
Source: Vittorio Bonaria,
„The novel of thermal waters”, 2010.



Figure 35: The main front of the military thermal establishment on the other side of the Bormida, early twentieth century.

Source: Pietro Zucca Collection, Acqui Terme; The Lake of Springs within the Former Military Baths.

The main objective of the Pilot Action has been to identify a set of hypotheses and scenarios in the framework of a possible regeneration of the “Former Military Baths”. When carrying out the activities, the inspiring principles were those derived from the Life Cycle Assessment and Product Environmental Footprint Methodology that allowed to foresee how potential thermal services/products including the stages of preproduction (thermal water), production, distribution, use and reuse, and final disposal could ‘interact’ with the environment.

In this way, it has been possible to understand how to manage the complexity of the supply chain, upstream and downstream of the production process, in order to find more sustainable approaches in the management of natural resources.

The Action Plan for environmental improvements of the Thermal System of Acqui Terme represents the main output of the Pilot Action, which includes concrete actions for the recovery of the Former Military Baths.

Starting from the peculiarities of Former Military Baths, as a complex capable of keeping about 130,000 litres of water in 24 hours (about 1.5 litres per second), different services and products have been analysed as potentially activable in this framework, namely: thermal muds, inhalation treatments, reuse of the wastewater from thermal pool processing. And from them, a set of hypotheses on possible sustainable solutions aimed at saving and recovering energy and materials have been elaborated.

The idea of trying to lower the temperature of the water used in balneotherapy by using a geothermal heat pump has been pursued not only to mitigate the effects of thermic pollution and protect aquatic ecosystems, but also to recover thermal energy to be used within the structure of the former SPAs for different services.

Furthermore, a Certification Protocol for Thermal Sludge has been hypothesized, designed to categorize the physical, chemical, and mineral peculiarities of thermal mud in order to minimize any danger not only with regard to the use of these products both from a human and environmental health point of view, but also to enhance their quality use.

Finally, an analysis of wastewater management and the implementation of a filtering system for organic residues have been hypothesized as a ‘good solution’ to decrease the impacts of inhalator treatments.

Thanks to the implementation of the Pilot Action, a set of mitigation measures, dedicated to tackling the effects of chemical, biological, water pollution and water depletion have been identified, with the aim of defining a Quality and Environmental Management System that should be considered in the broader concept of the Thermal Green City.

In addition, the great merit of the pilot action has been to make clear the great potential of the area, already listed among the UNESCO Heritage as the “Vineyard Landscape of Piedmont: Langhe-Roero and Monferrato” and particularly engaged with the topics of sustainable tourism, light mobility, and valorisation of local identity, highlighting the uniqueness of the thermal resources defining them as potential trigger of a green revolution towards a full eco-sustainability.



Pilot Action 8:

Testing participative tool for improvement of SPAs water deposits sustainable management in Jeseníki (CZ)

Mendel University in Brno worked on the Pilot Action with the title ‘Sustainable management of spas in the Jeseníky pilot region’.

The Jeseníky Mountains represent the second largest concentration of spas in the Czech Republic after the so-called Spa Triangle in Western Bohemia. There are five spas, three of which have natural healing waters (Bludov, Karlova Studánka and Velké Losiny) and two spas have the atmosphere as natural healing resources (Jeseník Spa and Lipová Lázně) and in the case of Karlova Studánka Spa it is also a peledoid.

The activities in the area covered several key areas. Above all, it was a matter of creating a functioning regional working group, which would continue to create a platform to solve strategic challenges and mitigate problems throughout the region. The associated partner Jeseníky-Tourism Association, whose members are both spa entities and municipalities and other public and private actors in the Jeseníky region, had significant assistance in forming a regional working group. The Czech Inspectorate of Spas and Springs (part of the Ministry of Health of the Czech Republic) played an important role in methodological support.

In addition to the elaboration of strategic documents for understanding the status quo (Analysis of planning decision making processes potentially dangerous for mineral / hot water deposits and others), regular meetings of stakeholders in the form of round tables, and workshops were used as the main method. Unfortunately, a large part of them took place only in the online form (due to the pandemic situation, which affected a large part of the project duration). Round tables and workshop were thematically focused on areas that covered topics that were important both for the HealingPlaces project and topics that were defined on the basis of introductory interviews with the most important stakeholders at the beginning of the project.

We are very happy that we also managed to organize several workshops in cooperation with other partners of the project. Let us mention, for example, the methodology workshop led by PP01 (Central Mining Institute) in Karlova Studánka focused on the use of residual heat from waste mineral waters in September 2020.

The main output of WP T2 is therefore a functioning network of actors who are able and willing to share their views (such as spas, local authorities, business representatives, research institutions and sectoral agencies, especially those which are part of the process of planning and management of natural resources and land use). Unfortunately, what has not been very successful is the implementation of the Tool for the Sustainable Use of Mineral Waters in the spatial planning process. In the case of the Czech Republic, however, this is mainly due to the fact that the protection of the spas is very well elaborated in the Spa Act (164/2001 Coll.), thanks to the activities of the Czech Spa Inspectorate as a supervisory body. It is also necessary to mention that, unfortunately, the system of spatial planning at the municipal and regional level allows only a very limited implementation of this tool and only at the level of recommendations.



Figure 36: Velké Losiny June 2020

Source: Project partners' own resources

To better promote awareness of spas and spas in general and spas in the pilot area in particular, a regional video was created, which presents the general public (Jeseníky visitors, pupils, and students) the issue of natural healing resources on the example of spas, where mineral waters are present. From a professional point of view, it was sponsored by the head of the Czech Inspectorate of Spas and Springs and the directors of the spas. This video was distributed to schools, local authorities. It was presented at a workshop in Karlova Studánka in March 2022 and most recently during a field exercise with students of Mendel University in Jeseníky in May 2022.

During the implementation of the project, it became clear that the issue of mineral healing waters cannot be separated from other natural healing resources, spatial planning, and other socioeconomic activities in the area. In the future, it is necessary to focus on the integrated system of healing resources, which should also include peloids, climate (air as a natural healing resource), spa forests or gases. In combination with the landscape, they form unique places for long-term development, tourism, and health.



Figure 37: Karlova Studánka September 2020
Source: Project partners' own resources



WP T2 - summing up

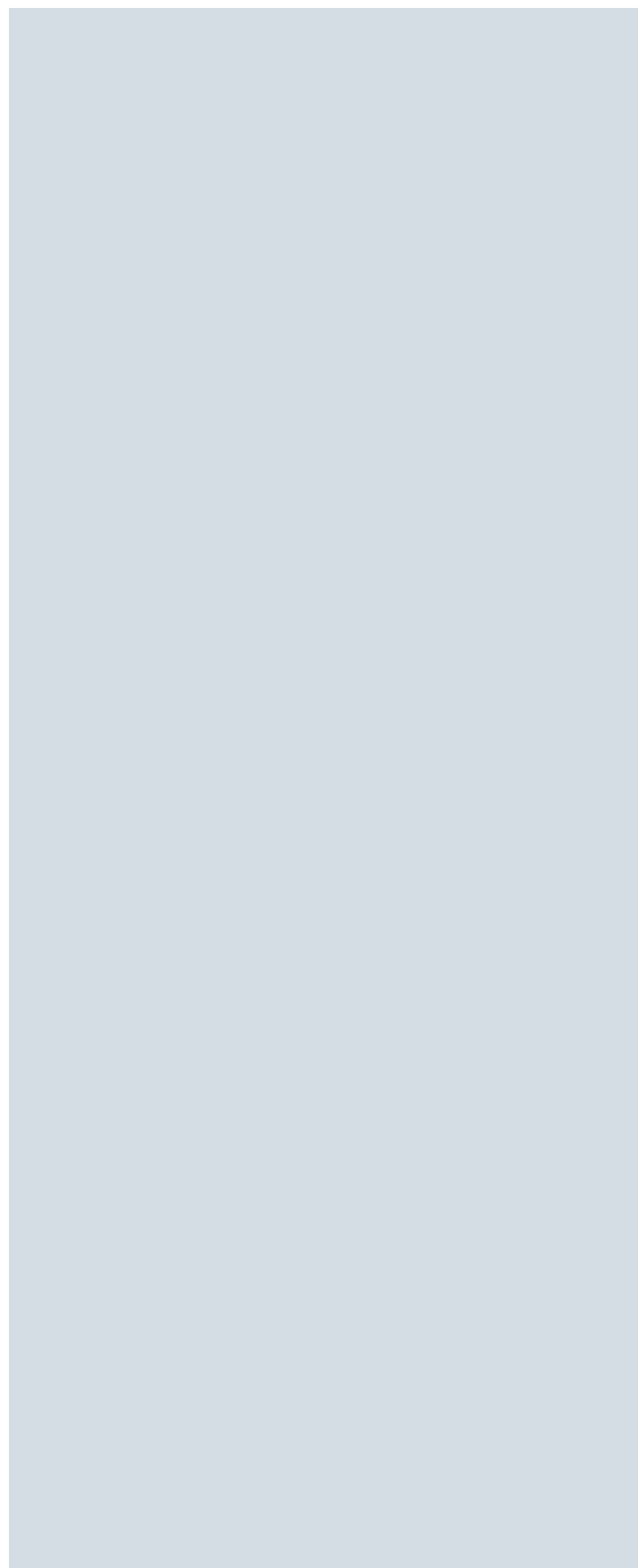
The work in the pilot regions has made it clear that the challenges in the individual countries are very different and yet very similar. The framework conditions differed, for example, in the form of the water depot, the ownership structure of the thermal baths and the expectations of the spa industry. Similar challenges can be found in the question of responsibilities, a strategic approach, and the willingness to act of those affected.

For many of the pilot regions, it became clear that bringing the decision-makers together „at one table” is a critical success factor in the desire for sustainable water management. A lack of awareness, a shortage of resources, and a lack of empathy between those involved were often recognized.

In addition, the ownership situation represents additional barriers. This applies, for example, to accessing important data, which was often very difficult to obtain, and the involvement of public and non-public decision-makers in exchange meetings.

It was also recognized in some pilot regions that the need to protect the water - not only at the point of withdrawal and on the surface - is often not recognized. Since thermal water often takes a long time to form and the effects cannot be seen in the short to medium term, they seem to play a subordinate role in many decision-making processes.

The work in the pilot regions has made it clear that, above all, the exchange, awareness-raising, and standardization of systems can represent a critical factor in the sustainable management of water sources. Clear responsibilities and an appreciation of the topic can be helpful. The resource is under increasing pressure as a result of developments in the healthcare sector and innovations in the field of alternative uses. In any case, a solution must be considered from a long-term perspective.





WP T3 Sustainable SPA management - from concept to realization



WP T3 can be considered as the capitalization framework of activities carried out within WP T1 and WP T2. Thematic WP 1 "Environmental Mapping and Assessment" aims to develop common tools for an integrated assessment of current and expected threats and pressures on mineral and thermal water resources in SPAs. The WP T2 "Pilot actions in project regions", through the implementation of pilot actions in partner regions, provides the practical elements for the development of the Integrated Strategy of the CE regions on a project scale. Finally, the WP T3 establishes an Integrated Strategy for sustainable management of the SPA system, as one of the main results of the project. To achieve this result, the essential approaches are the involvement of the most relevant stakeholders through the Regional Working Groups and the sharing of lessons learned from best practices on the management of environmental and socio-economic pressures in the partner regions.

In WP T3, the main condition that made it possible to synthesize and improve the many information collected during the implementation of the HealingPlaces project was the full participation of all partners, with their specific interdisciplinary expertise and experience.

This workpackage consists of 3 interrelated activities:

- the active involvement of stakeholders in all partner regions;
- the collection, by the regions involved, of best practices in the field of mitigation of environmental and socio-economic pressures;
- the elaboration of an integrated strategy for sustainable management of SPAs natural resources and the integration of regional results in the international context, including the implementation of transferability and sustainability plans.



Figure 38: Main activities and approaches of WP T3

Source: Project partners' own resources

The main outputs are as follows:

- the Handbook on Best Practices in environmental & socio-economic pressures mitigation & conflict solving;
- the Integrated Strategy for sustainable management of SPAs natural resources.

The Handbook provides a valuable overview of Best Practices implemented in seven Central European countries (Poland, Hungary, Austria, Croatia, Czech Republic, Slovenia, and Italy) and related to mitigating existing pressures and potential threats on natural resources. These pressures or threats can arise from the effects of climate change, land consumption, population density, energy consumption, water consumption and waste generation, ecosystem disruption, in three main fields: policy/regulation, environment, and socio-economic context.



As the aim of the project is to improve current management practices of mineral and hot water and other valuable natural resources in SPAs, it is particularly important to draw inspiration from the main virtuous examples implemented in each of the project partner countries with respect to the different aspects of environmental protection. At the same time, although the main concern of the HealingPlaces project is water resources (mainly thermal and mineral, but also surface waters), the valuable SPA system has been considered as a whole and therefore pressures /conflicts with nature protection, biodiversity, landscape (land use), air quality/microclimate, cultural heritage were also taken into account.

The Integrated Strategy for the sustainable management of the natural resources of the Spa aims to create a multiplier effect in other regions of Central Europe. The definition of an Integrated Strategy aims to improve the environmental management skills of the spas decision makers, increasing the knowledge and awareness of the fragility of water deposits among the different stakeholder groups, such as authorities, organizations, companies and the general public, in order to implement innovative and reactive decision-making processes based on collaboration between the thermal sector, environmental management organizations, local and regional authorities and other strategic actors.

Therefore, the HealingPlaces Integrated Strategy is based on an interdisciplinary and functional approach. And while the cooperation between the interested parties is its basis, the products created in the project - tools, pilot actions, analyzes, good practices, guides, manuals - together constituted a fundamental contribution to its construction and strengthening.

Together with the Integrated Strategy the project partners work for the transferability and sustainability of the HealingPlaces project: partners provide the regional plans for the sustainability of the project while a common transferability plan contains the main elements on how to transfer the results and the most promising best practices.





Where to find us



WHERE TO FIND US:

The main source information about HealingPlaces project is the project's website where all information about the project implementation and the main outputs, documents can be found. Check it out:

www.interreg-central.eu/Content.Node/HealingPlaces.html

The project's implementation can also be followed on the project's social media accounts:

- ▶ **Fb profile:** <https://www.facebook.com/HealingPlacesProject>
- ▶ **LinkedIn profile:** <https://www.linkedin.com/company/healingplacesproject/>
- ▶ **ResearchGate:** <https://www.researchgate.net/project/HealingPlaces-Enhancing-environmental-management-capacities-for-sustainable-use-of-the-natural-heritage-of-Central-European-SPA-towns-and-regions-as-the-driver-for-local-and-regional-development-Int>

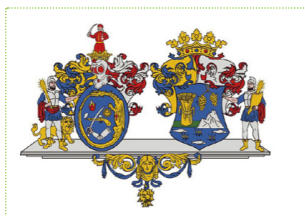
HealingPlaces project has a youtube channel where recording of meetings organized by partners, study visit, regional videos about pilot actions and also the project's final video can be found. Enjoy!

<https://www.youtube.com/channel/UCPAASppx-rvXeVH64UL-g9w>

www.interreg-central.eu/Content.Node/HealingPlaces.html



PROJECT PARTNERS



- MENDELU
- Faculty of Regional
- Development and
- International Studies



TAKING COOPERATION FORWARD

