

FINAL ENVIRONMENTAL REPORT

Strategic Environmental Assessment of the
Interreg Programme Slovenia-Hungary 2021-2027

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TABLE OF CONTENTS

NON-TECHNICAL SUMMARY	5
<i>Main characteristics of the Interreg Programme Slovenia-Hungary 2021-2027.....</i>	<i>5</i>
<i>Current environmental conflicts and problems in the programme area and the likely evolution thereof without implementation of the programme</i>	<i>8</i>
<i>Likely environmental effects of programme implementation</i>	<i>9</i>
<i>Recommended measures to protect environment, guidelines for lower hierarchy levels</i>	<i>13</i>
<i>Monitoring and Evaluation Plan</i>	<i>15</i>
1. MAIN CHARACTERISTICS OF THE STRATEGIC ENVIRONMENTAL ASSESSMENT	19
1.1. <i>Objective of the strategic environmental assessment</i>	<i>19</i>
1.2. <i>SEA process and its relationship with the Interreg Programme Slovenia-Hungary 2021-2027</i>	<i>19</i>
1.3. <i>Incorporation of comments and proposals made during the SEA process</i>	<i>21</i>
2. MAIN CHARACTERISTICS OF THE INTERREG PROGRAMME SLOVENIA-HUNGARY 2021-2027	22
2.1. <i>The analysed territory</i>	<i>22</i>
2.2. <i>Main objectives and actions of the Programme</i>	<i>23</i>
2.3. <i>Relationship with other relevant plans, programmes, and environmental protection objectives established in these documents</i>	<i>26</i>
2.4. <i>Internal consistency of the programme document</i>	<i>33</i>
2.4.1. <i>Contradictions between Chapter 1 and Chapter 2 of the programme documents</i>	<i>33</i>
2.4.2. <i>Internal consistency of the programme document</i>	<i>33</i>
3. CURRENT STATE OF THE ENVIRONMENT IN THE PROGRAMME AREA AND THE LIKELY EVOLUTION THEREOF WITHOUT IMPLEMENTATION OF THE PROGRAMME	35
3.1. <i>The environmental characteristics of the areas which are likely to be affected by the programme objectives</i>	<i>35</i>
3.1.1. <i>Landscape structure</i>	<i>35</i>
3.1.2. <i>Soil conditions.....</i>	<i>36</i>
3.1.3. <i>River basins and their water resources, water protection, water use and water regulation</i>	<i>36</i>
3.1.4. <i>Natural values, protected areas, biodiversity</i>	<i>42</i>
3.1.5. <i>Cultural heritage</i>	<i>43</i>
3.1.6. <i>Climate characteristics, the impacts of climate change</i>	<i>44</i>
3.1.7. <i>Natural resources, energy potentials</i>	<i>45</i>
3.1.8. <i>Waste management</i>	<i>45</i>
3.2. <i>Relevant environmental conflicts and problems</i>	<i>46</i>
3.3. <i>Likely evolution of the environment without implementation of the Programme.....</i>	<i>47</i>
4. LIKELY ENVIRONMENTAL EFFECTS OF PROGRAMME IMPLEMENTATION	48
4.1. <i>Potential impacts on environmental systems</i>	<i>48</i>

4.1.1. Soil	49
4.1.2. Air.....	51
4.1.3. Noise and vibration.....	52
4.1.4. Surface waters and groundwater, including protection areas and risk areas, water regulation	54
4.1.5. Biodiversity, flora, fauna, habitats, Natura 2000 territories, nature reserves.....	57
4.1.6. Climate.....	59
4.1.7. Built environment, settlement surroundings, landscape and cultural heritage	62
4.1.8. Human health, and quality of life	65
4.1.9. Environmental consciousness.....	68
4.2. <i>Summary of environmental impacts</i>	69
5. RECOMMENDED MEASURES TO PROTECT ENVIRONMENT, GUIDELINES FOR LOWER HIERARCHY LEVELS	73
6. MONITORING AND EVALUATION PLAN	75
REFERENCES	79
ANNEX 1: COMMENTS RECEIVED TO THE DRAFT VERSION OF THE ENVIRONMENTAL REPORT	82

LIST OF FIGURES

Figure 1: Relationship between the SEA and programme development processes	20
Figure 2: The analysed territory of the IP SI-HU 2021-2027	23
Figure 3: Intervention logic of the IP SI-HU 2021-2027	26
Figure 4: Relationship between actions of the Programme and objectives of EU-level, national and regional strategies relevant from an environmental point of view	32
Figure 5: Synergies of actions from an environmental point of view	34
Figure 6: Programme area with the main cities and topography data.	35
Figure 7: Soil conditions of the Programme area based on the FAO international soil classification ..	36
Figure 8: Surface water bodies of the Programme area	37
Figure 9: Groundwater bodies of the Programme area	39
Figure 10: Water protection areas of the Programme area.....	40
Figure 11: Flood risk areas in the Programme area	41
Figure 12: Erosion and landslide-prone areas in the Slovenian part of the Programme area.....	41
Figure 13: Transboundary UNESCO Biosphere Reserve	43
Figure 14: Change in waste generated per capita.....	46
Figure 15: Environmental impacts of the actions in IP SIHU 2021-2027.....	70
Figure 16: Recommended indicators and evaluation criteria for the assessment of the Programme's environmental impacts	78

LIST OF ABBREVIATIONS

EAFRD	European Agricultural Fund for Rural Development
EC	European Commission
EU	European Union
FAO	Food and Agriculture Organisation
GHG	Greenhouse gas
HU	Hungary
IP SI-HU 2021 - 2027	Interreg Programme Slovenia – Hungary 2021-2027
ISO	Interreg Specific Objectives
NGO	Non-governmental Organisation
NUTS	Nomenclature of territorial units for statistics
PTF	Programming Task Force
SAC	Special Areas of Conservation
SEA	Strategic Environmental Assessment
SI	Republic of Slovenia
SO	Specific Objective
SPA	Special Protection Area
TBR MDD	Transboundary Biosphere Reserve Mura-Drava-Danube
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organization

NON-TECHNICAL SUMMARY

Main characteristics of the Interreg Programme Slovenia-Hungary 2021-2027

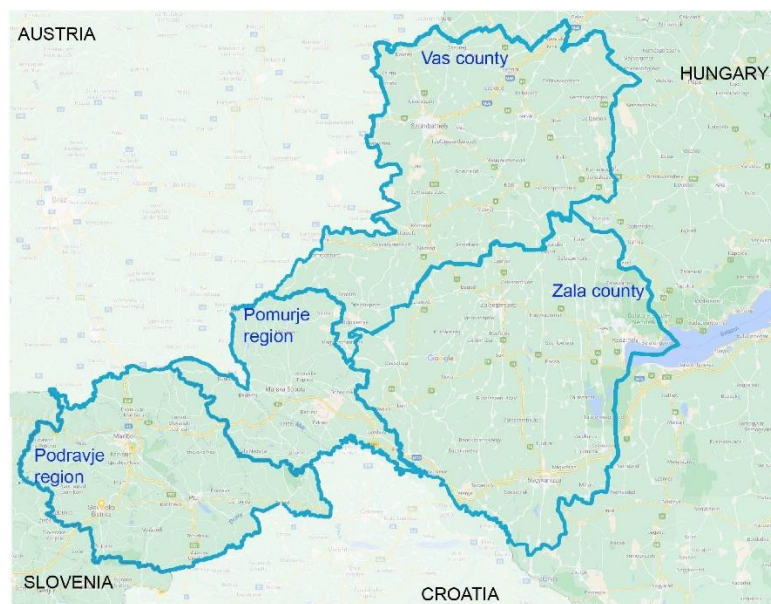
The programme area of the Interreg Programme Slovenia-Hungary 2021-2027 (hereinafter: IP SI-HU 2021-2027, or Programme) covers a territory of 10 627 km², homes for 962 thousand citizens.

The analysed area of the Programme on the Slovenian side includes two NUTS 3 regions, covers a territory of 3 507 km², giving home to 440 thousand people altogether:

- Pomurje region
- Podravje region

The analysed area of the Programme on the Hungarian side also includes two NUTS 3 regions ('megye'), covers a territory of 7 120 km², giving home to 522 thousand people altogether:

- Vas megye (county)
- Zala megye (county)



The analysed territory of the IP SI-HU 2021-2027

(Source: "Territorial and Socio-Economic Analysis, Interreg Programme Slovenia-Hungary 2021-2027"; 2021.)

Main objectives and actions of the Programme are as follows:

Priority	Specific Objective	Action
1. Green border region	SO 2.7. Enhancing protection and preservation of nature, biodiversity and green infrastructure, including in urban areas, and reducing all forms of pollution	<p>1.1. Elaboration of cross-border/common analytical studies, strategies, action plans and models for more effective preservation of natural assets, biodiversity and improvement or maintenance of natural assets</p> <ul style="list-style-type: none"> - Analysis water resources in terms of quantity and quality, development of monitoring system - Research projects in the field of biodiversity, elaboration of cadastres of different species of flora and fauna and their presentation - Common strategies on nature conservation and biodiversity - Strategies and action plans for definition of joint measures of protection - Strategies and action plans for introduction of sustainable ecosystem-based water management approaches, including natural water retention measures and prioritizing nature-based solutions in the border area, particularly on cross-border waterflows - Improved spatial planning of urban areas and rural landscapes with focus on natural protection - Modelling biodiversity impacts of climate change for the future and elaboration of pilots for testing possible solutions, including innovative digital solutions - Elaboration of joint actions for management of nature-related disasters; strengthening the coordination role of municipalities therein - Action plans for reduction of various forms of pollution (water, air, soil etc.).
		<p>1.2. Implementing joint pilot actions contributing to protecting biodiversity, fostering joint water and disaster management and reduction of pollution</p> <ul style="list-style-type: none"> - Joint actions improving biodiversity, cross-border ecological connectivity and green infrastructure - Joint protocols, monitoring, intervention schemes for management of nature-related disasters - Revitalisation, improvement of water quality of and sustainable management of cross-border waterflows, including testing and application of sustainable ecosystem-based water management approaches and natural water-retention measures, including support of digital solutions in the border area - Awareness raising and prevention activities on biodiversity, nature and environment protection, disasters (e.g. forest fires), fight against various forms of pollution

Priority	Specific Objective	Action
2. Inclusive border region based on sustainable tourism	SO 4.6. Enhancing the role of culture and sustainable tourism in economic development, social inclusion and social innovation	2.1. Establishment of joint tourism quality standards and joint tourism destination management models on the basis of cooperation of tourism organisations <ul style="list-style-type: none"> - Mapping and collection of existing quality standards - Fostering establishment of joint quality cross-border green tourism standards and brands - Connection of micro tourism destinations to formulate cross-border sustainable tourism destination management systems - Application of creative tools for attracting tourists and promotion, including innovative use of digital solutions and ICT tools - Improvement the human capacity of local tourism sector (awareness raising actions, trainings)
		2.2. Implementing pilot actions and joint solutions for development of quality tourism attractions and connected tourism services <ul style="list-style-type: none"> - Quality improvement of cross-border tourism destinations with special focus on attractions of lesser-known areas (e.g. promotion and adoption of green standards and brands, promotion of sustainable mobility solutions in cross-border tourism product development (biking, hiking, use of public transport), increasing awareness on the climate change effects, promotion of eco-innovation in tourism, capacity building and support for adopting green and circular concepts, promotion of local supply chains, use of renewable energy sources) - Creation of joint cross-border eco-friendly tourism products and services focusing on integration of various tourism supply with cross-border relevance - Improvement of cross-border accessibility of tourism attractions

Priority	Specific Objective	Action
3. Cooperating border region	ISO 6.2 Enhance efficient public administration by promoting legal and administrative cooperation and cooperation between citizens, civil society actors and institutions, in particular with a view to resolving legal and other obstacles in border regions	3.1. Enhance efficient public administration by promoting legal and administrative cooperation and cooperation between citizens, civil society actors and institutions, in particular with a view to resolving legal and other obstacles in border regions <ul style="list-style-type: none"> - Elaboration of joint strategies to reduce legal and administrative obstacles of cooperation across the border - Joint and coordinated spatial planning for easier development activities - Joint cooperation activities in the field of low-carbon initiatives (energy efficiency, renewable energy, circular economy) - Conceiving joint educational, vocational training programmes complementing/supporting official curricula with special emphasis on language education - Joint skills development of the target groups and beyond - Revealing and defining possibilities and fields of cross-border social and health care service cooperation - Elaboration of joint strategies and action plans addressing social matters and a better integration of horizontal issues (e.g. gender equality and social inclusion, including youth, women and disabled) - Creating and coordinating joint programs by the media in the border area to better inform the local population
	ISO 6.3 Build up mutual trust, in particular by encouraging people-to-people actions	3.2. Build up mutual trust, in particular by encouraging people-to-people actions <ul style="list-style-type: none"> - Trust building activities of civil organisations in the field of arts and culture, sport, minorities, intercultural dialogue, inter-generational solidarity - Organisation of various events with involvement of the target groups and the general public

Current environmental conflicts and problems in the programme area and the likely evolution thereof without implementation of the programme

Based on the situation analysis, **the following main environmental conflicts and challenges can be identified in the programme area:**

- The programme area has extensive green territories with significant natural values and high rate of biodiversity. However, human activities and climate change affect the entire ecosystem that needs mitigation actions.
- Due to the topography and hydrology of the area, floods occur regularly in the Programme region, particularly along Drava, Dravinja and Mura river despite the past efforts to reduce flood risk. As a result, the risk of flooding remains a major challenge for natural disaster management in the border region, especially on the Slovenian side.
- Extreme weather conditions, posing serious hydrological danger, occur more frequently as a consequence of climate change. The number of annual average precipitation days decreases, but that of days when a large amount of precipitation (more than 20 mm/day) falls at once

increases.¹ As the soil is unable to absorb intense precipitation, surface run-off can significantly increase.

- The border region water management has particular challenges: decreasing annual precipitation and its increasingly extreme annual distribution negatively affects ground water and surface water quantity, which, in combination with intensive agriculture, may reduce biodiversity.
- In the hilly and mountainous areas, which are the most prevalent in the area, there is a significant risk of erosion, which, in addition to climate change, is exacerbated by inappropriate cultivation and tillage practices.
- In the assessment according to the criteria of the Water Framework Directive, the physicochemical variables showed 'Good' status for Kebele stream and Lendava, and 'Excellent' for Kerka stream and Mura river. At the same time, during the assessment of the biological elements, all the mentioned watercourses can be said to be of medium status, so the ecological status of the watercourses could be improved in terms of the studied groups of organisms (especially macroscopic invertebrates and coating algae).
- The common specificity of this area are the geothermal waters. Overexploitation of thermal waters was recognised in the last years therefore more sustainable ways of using them are being promoted.
- Although the amount of waste generated per inhabitant per year in the two countries is lower than the EU average, both countries have seen an increase in recent years.
- Comparing Slovenia's and Hungary's waste management, it is clear that the share of treatment-types is similar: landfill and deposit treatment are the major ways of waste management, even if they show decreasing trend in both countries.

A lack of implementation of the Programme might cause effects of different orientation on the state of the environmental elements and systems.

- The lack of implementing the actions explicitly addressing environmental challenges (under priority "*Green border region*") may result in the persistence or possible escalation of existing environmental conflicts. Due to the fact that the Programme's environment-focused actions contribute the most to the preservation of natural and semi-natural habitats, biodiversity, as well as to protection of surface water, the lack of planned developments would primarily have an adverse effect on these environmental systems. However, given the fact that a significant part of environmental development is directed at planning tasks, it is more appropriate to say that the lack of action reduces the chances of protecting environmental elements and systems.
- Contrary to the above, the absence of actions with an environmental risk, limited to tourism development within the Programme, would logically avoid environmental pressures arising potentially from this activity. However, due to the low level of associated environmental risks (see Chapter 4.1 of environmental report for details), the planned development of tourism is unlikely to have a significant impact on the state of the environment, i.e. the absence of these elements of the Programme would not result in significant environmental benefits.

Likely environmental effects of programme implementation

Based on the results of the environmental assessment performed, it can be concluded that **the Programme includes relatively few actions with significant environmental impacts**. This is mainly due

¹ Source of data: National Adaptation Geo-information System, <https://nater.mbfisz.gov.hu/en>

to the limited number of intervention areas and infrastructure developments covered by the Programme.

At the same time, **we welcome the fact that among the few intervention areas, the protection of the environment, nature and landscape is strongly represented.** The vast majority of interventions aimed at reducing the exploitation of and pressure on environmental elements and systems, as well as to improve the quality of human life, harmonized with environmental interests are included in the priority "*Green Border Region*". Some of the activities are of a planning and preparatory nature, i.e. they are aimed at developing action plans and strategies, developing monitoring systems and implementing research programmes mainly for water management and nature conservation. Their importance for environmental protection and nature conservation is unquestionable, but it is almost impossible to assess precisely what impact they may have on the quantitative and qualitative status of individual environmental elements. As planning tasks, awareness-raising programmes can also play an important role. However, given that the environmental effectiveness of these actions is influenced by a number of external factors being independent from the Programme, only a moderate environmental impact has been attributed to such actions in the evaluation.

Within the entire Programme, the possibility of potentially resulting in an increased exploitation of and pressure on environmental elements and systems might come up in case of only one intervention, that is tourism development. It is well known that tourism can have unfavourable environmental effects, above all by raising the demand for transport, operating tourism facilities, disturbing natural, semi-natural habitats, flora and fauna. At the same time, the volume of developments that can be implemented during the Programme **suggests that the Programme's tourism development actions will not lead to a large-scale use and stress on the environmental elements and systems**, especially because they focus on increasing quality and supporting micro-tourism. In this context, it is worth mentioning that the Programme places great emphasis on the need for eco-friendly way of implementation of its tourism-related activities. However, a special attention will have to be paid on its prevention when implementing the Programme, for which several recommendations are provided by the current environmental report. Full implementation of those recommendations and their continuation in the future would ensure that no negative impact occur.

Finally, **it is worth mentioning that many activities of the Programme are basically not related at all to the protection of environmental values.** In particular, both actions under priority "*Cooperating border region*" fall into this category. But even in these cases, some activities can contribute, even if only locally, to the conservation of environmental elements and systems, in particular the built environment and cultural heritage elements (e.g. joint cooperation activities in the field of low-carbon initiatives, trust building activities in the field of culture).

Considering the expected impacts driven by the Programme on various environmental elements and systems, it can be concluded that **surface water, as well as nature seem to be the most positively affected.** In addition to improving the quantity and quality of water, **the Programme also supports flood protection.** This will be achieved both directly, by improving natural disaster management, and

indirectly, by promoting a sustainable, ecosystem-based approach to water management, which, if planned in a complex way, can contribute to reducing flood peaks and thus mitigate the damaging effects of floods. A further positive environmental impact of the programme could be that **its implementation could support the adaptation to the already unavoidable impacts of climate change**. Climate adaptation aspects can be identified mainly in the activities on water management (see e.g. the emphasis on the importance of water retention), as well as in research on biodiversity conservation (modelling biodiversity impacts of climate change, elaboration of pilots for testing possible solutions), and in developments to improve protection against nature-related disasters. By implementing the Programme, the least progress is expected in the field of air pollution, as well as noise and vibration exposure prevention, which is, however, partly counteracted by the fact that these pressures are not considered to be significant in the programme area.

The table below summarizes the environmental impacts of each action presented in detail in the environmental report. The categories used are based on the Slovenian Decree laying down the content of environmental report and on detailed procedure for the assessment of the effects on certain plans and programmes on the environment (Uredba o okoljskem poročilu in podrobnejšem postopku celovite presoje vplivov izvedbe planov na okolje, Official Gazzette of Republic of Slovenia, no. 73/05).

However, it is worth noting that the interventions foreseen in the Programme are not yet defined in detail in terms of location and content, the specific projects will be assessed in the subsequent planning phases.

Actions	<u>Soil</u>	<u>Air</u>	<u>Noise, vibration</u>	<u>Water</u>	<u>Natural values</u>	<u>Climate</u>	<u>Built env., landscape, cult. heritage</u>	<u>Human health</u>	<u>Env. con- sciousness</u>
1.1. Elaboration of cross-border/common analytical studies, strategies, action plans and models for more effective preservation of natural assets, biodiversity and improvement or maintenance of natural assets	A	A	A	A	A	A	A	A	A
2. Implementing joint pilot actions contributing to protecting biodiversity, fostering joint water and disaster management and reduction of pollution	A	A	A	A	A	A	A	A	A
2.1. Establishment of joint tourism quality standards and joint tourism destination	A	A	A	A	A	A	A	A	A

Actions	Soil	Air	Noise, vibration	Water	Natural values	Climate	Built env., landscape, cult. heritage	Human health	Env. con- sciousness
management models on the basis of cooperation of tourism organisations									
2.2. Implementing pilot actions and joint solutions for development of quality tourism attractions and connected tourism services	B	A	B	C	C	A	X	X	A
3.1. Enhance efficient public administration by promoting legal and administrative cooperation and cooperation between citizens, civil society actors and institutions, in particular with a view to resolving legal and other obstacles in border regions	A	A	A	A	A	A	A	A	A
3.2. Build up mutual trust, in particular by encouraging people-to-people actions	A	A	B	A	A	A	A	A	A

Legend

A	no impact or positive impact on environmental objectives
B	the negative impact on environmental objectives is insignificant
C	the impact on environmental objectives is insignificant due to the implementation of mitigation measures
D	the negative impact on environmental objectives is significant
E	the negative impact on environmental objectives is devastating
X	the nature of the impact on environmental objectives cannot be determined

The results of the strategic environmental assessment carried out show that actions of the Programme are not expected to have any significant negative environmental impact due to their nature, i.e.:

- they DO NOT lead to significant greenhouse gas (GHG) emissions (*climate mitigation*);
- they DO NOT lead to an increased adverse impact of the current climate and the expected future climate, on the activity itself or on people, nature or assets (*climate adaptation*);

- they ARE NOT detrimental to the good status or the good ecological potential of bodies of water, including surface water and groundwater, or to the good environmental status of marine waters² (*sustainable use and protection of water and marine resources*);
- they DO NOT lead to significant inefficiencies in the use of materials or in the direct or indirect use of natural resources, they DO NOT significantly increase the generation, incineration or disposal of waste, and the long-term disposal of waste may DO NOT cause significant and long-term environmental harm (*circular economy, including waste prevention and recycling*);
- they DO NOT lead to a significant increase in emissions of pollutants into air, water or land (*pollution prevention and control*);
- they ARE NOT significantly detrimental to the good condition and resilience of ecosystems, or detrimental to the conservation status of habitats and species, including those of Union interest (*protection and restoration of biodiversity and ecosystems*)

Overall, it can be concluded that actions of the Interreg Programme Slovenia-Hungary 2021-2027 would do no significant harm to environmental objectives within the meaning of Article 17 of Regulation (EU) No 2020/852” (“The Taxonomy Regulation”).

Recommended measures to protect environment, guidelines for lower hierarchy levels

As stated above, the implementation of the Programme is not expected to lead to a significant deterioration of the state of the environment. On the contrary, it will help to resolve and mitigate many existing environmental conflicts. Nevertheless, the implementation manner of the Programme plays a key role in achieving the positive environmental impacts. The following is a summary of our recommendations in this regard, grouped according to priorities of the Programme (justification of proposals is provided in Chapter 4.1 of the environmental report).

Priority	Recommendation
1. Green border region	<ul style="list-style-type: none"> • It is suggested to include among the topics of environmental awareness raising the ways of clean domestic heating and avoiding the burning of duff • Strategies and plans for protection of natural values, nature conservation and biodiversity to be developed under this action should also address the prevention and mitigation of noise and vibration exposure on wildlife. • To maximise the positive impacts, it is proposed to implement green and blue infrastructure activities in a coordinated way (e.g. on the same site, based on a joint planning). • It is recommended that non-structural measures of the Flood Risk Reduction Plan are taken into account to improve flood conditions and achieve synergistic positive effects in areas of significant flood impact. • It is proposed that the programme should also support preparatory activities for the designation of new protected areas. • Strategies and action plans to be developed under the Programme should be based on projected climate conditions for the coming decades and pay particular attention to the possibilities for adaptation to them. • It is proposed to add climate mitigation and adaptation (or in general, climate change related knowledge) to the target areas of awareness-raising activities.

² This is a verbatim quotation of a Taxonomic Regulation condition. However, it should be noted that the programme area is not located by the sea.

Priority	Recommendation
2. Inclusive border region based on sustainable tourism	<ul style="list-style-type: none"> • The Programme should emphasize that tourism can only be developed in an environmentally sustainable way. • Environmental aspects should get high emphasis in activities aimed at the overall development of tourism in the area (see Action 2.1, e.g. in the context of standard setting, awareness raising programmes). For pilot activities under Action 2.2 thorough analysis and integration of environmental aspects into the project should be an advantage in the evaluation process. Tourism development should always consider the protection of ecological networks (core areas, ecological corridors, buffer zones). Pressures on protected areas should be avoided through appropriate siting of facilities and careful design of tourism products and services. • The development of tourist services and attractions should avoid investments that require significant land take. • During the implementation of the Programme, noise protection should also play a role in the design of tourism products and services (e.g. timing and location of events), taking into account also wildlife considerations. • In case of the development of tourist facilities, it is proposed to maintain or establish several metres of native species vegetation along the banks of surface waters and to remove invasive non-native species. • During the implementation of the Programme, projects aimed at the development of tourism products, services and attractions should include some small-scale complementary measures to mitigate the environmental impacts of tourism (e.g., developing additional infrastructure (waste disposal facilities, toilets) to cope with increased visitor numbers; promotion of public transport accessibility; development of low volume cycling infrastructure etc.). The fact that the area covered by the Programme has a long tradition of cycling and active and eco-tourism makes this much easier to achieve. • The design of tourism facilities must in all cases be largely adapted to the landscape and townscape, especially in cases where the object affected by the development is located at landmarks (e.g. lookout points). Cultural heritage aspects must be fully taken into account in the design. • Among the target groups of the tourism services and products to be developed, it is proposed to include the population of the region (see promotion of regional and sub-regional tourism). • It is proposed not to provide support for tourism development in quiet areas when implementing the Programme. • As the text of the Programme suggests that Action 2.2 puts more emphasis on tourism development than on enhancing the role of culture, it is proposed that in the implementation of the Programme, priority be given to developments for the latter objective, at least in the context of tourism development (e.g. restoration and presentation of cultural heritage). • We propose that all developments (e.g. cycle paths) with impacts on the water regime or water status (e.g. aquatic and coastal lands, water protection areas and endangered areas) should be subject to a water consent in accordance with the Water Act of the Republic of Slovenia (Art. 150).
3. Cooperating border region	-

Monitoring and Evaluation Plan

The analysis and assessment of the environmental and sustainability impacts of the Programme should be conducted primarily on the basis of data already recorded in existing databases and periodic monitoring reports. At the same time, it is essential to maintain a register of the main characteristics of environmentally relevant developments (especially infrastructure ones), that allows easier assignment of data available in national databases to the developments implemented in the framework of the Programme. These characteristics for infrastructural developments are the followings:

- exact location and extent of areas affected by a development, in ha or m²;
- land use classification of areas affected by a development;
- identification of potentially affected protected natural areas and Natura 2000 areas

It is recommended that all comprehensive evaluations of the Programme (mid-term and final) include a detailed assessment on the environmental, sustainability impacts of the Programme. It is however not necessary to cover all environmental elements or systems in these analyses, as the strategic environmental assessment has concluded that significant impacts are expected for only a few environmental systems, mainly due to the narrow intervention focus of the Programme. The analyses should focus on these. **The impact of the implemented activities on environmental elements and the environmental performance of the programme should be analysed against the following indicators and evaluation criteria as part of the overall evaluation of the Programme.**

Environmental system	Indicator/ evaluation criteria	Objective	Source of data and information	Relevant priority
Natural resources	Conservation status of habitat types and qualifying species in protected areas and/or Natura2000 sites affected by the activities of the Programme	Good status of habitat types and qualifying species in protected areas and/or Natura2000 sites affected by the activities of the Programme	<ul style="list-style-type: none"> • Reports on the status of listed species and habitat types prepared in the framework of the monitoring of the implementation of the Birds Conservation Directive and Habitats Directives • Reports on the implementation of projects • Ministry of Environment and Spatial Planning - spatial data under 	<ul style="list-style-type: none"> • “Green border region” • “Inclusive border region based on sustainable tourism” <i>(only for activities implemented in protected areas and/or Natura2000 sites)</i>

Environmental system	Indicator/ evaluation criteria	Objective	Source of data and information	Relevant priority
			<p>the INSPIRE Directive (SI)</p> <ul style="list-style-type: none"> • National Forest Inventory Database in Hungary (HU) • National Environmental Information System - Nature Information System (HU) 	
Surface water	<p>Percentage of surface water bodies with 'good' integrated status³ in the area covered by the activities under the Programme</p> <p><i>(with supporting explanation of the chemical and ecological status of the surface water bodies concerned)</i></p>	Achieve good condition of all water bodies	<ul style="list-style-type: none"> • National River Basin Management Plans • Water quality monitoring system developed under the Programme • Ministry of Environment and Spatial Planning - Water Agency databases (SI) • National Environmental Information System - Surface Water Protection (HU) 	<ul style="list-style-type: none"> • “Green border region” • “Inclusive border region based on sustainable tourism”
Ground-water	Proportion of groundwater bodies with an overall “good” status	Ensure that overall “good” status of groundwater	<ul style="list-style-type: none"> • National River Basin Management Plans • Water quality monitoring 	<ul style="list-style-type: none"> • “Green border region” • “Inclusive border region based on

³ The integrated status of surface water bodies includes the determination of ecological status (a combination of biological, physico-chemical, specific pollutant and hydromorphological quality elements) and chemical status. Integrated status can be defined on this basis, using the "one bad - all bad" principle. The indicator is defined according to the guidance document of the EC (Strategy for The Water Framework Directive (2000/60/EC) Guidance Document No 13 Overall Approach to the Classification of Ecological Status and Ecological Potential ISBN 92-894-6968-4).

Environmental system	Indicator/ evaluation criteria	Objective	Source of data and information	Relevant priority
	<i>(The indicator is determined by the worst of the classification of the quantitative and chemical status.)</i>	bodies does not decrease	system developed under the Programme <ul style="list-style-type: none"> Ministry of Environment and Spatial Planning - Water Agency databases (SI) National Environmental Information System - Surface Water Protection (HU) 	sustainable tourism”
Flood risk	Change of the total area of flood risk zones	Ensure that the area of flood risk zones does not increase	<ul style="list-style-type: none"> Ministry of Environment and Spatial Planning - Water Agency databases (SI) National Environmental Information System - Surface Water Protection (HU) 	• “Green border region”
Cultural heritage	State of cultural heritage affected by the activities of the Programme	Preservation of cultural heritage in good condition	Reports on the implementation of projects	• “Inclusive border region based on sustainable tourism”
Climate change	Road traffic volumes on national roads in the municipalities concerned by tourism development	Ensure stable or even lower road traffic in the municipalities concerned by tourism development	National traffic counting data	• “Inclusive border region based on sustainable tourism”

In relation to the above indicators and focus areas to be analysed it needs to be considered that the limited financial resources available under the Programme are likely to result in localised, small-scale

environmental impacts that might be difficult to detect, since the status of the above indicators is also influenced by circumstances independent of the Programme, in many cases to a greater extent than by the Programme itself. **The evaluations should therefore always include a combined analysis of the project implementation reports and the data available independently of the Programme.**

1. MAIN CHARACTERISTICS OF THE STRATEGIC ENVIRONMENTAL ASSESSMENT

1.1. Objective of the strategic environmental assessment

In accordance with *Directive 2001/42/EC of the European Parliament and of the Council on the assessment of the effects of certain plans and programmes on the environment*, main objectives of the strategic environmental assessment (hereinafter: SEA) are as follows:

- to describe and assess the likely significant effects on the environment of the programme implementation, which have to be taken into account in its preparation
- to provide relevant information to assess the environmental challenges and considerations which will help to ensure that environmental concerns are appropriately integrated in the decision-making and implementation processes of the programme
- to raise awareness for the potential environmental impact of envisaged activities among the programme partners
- to provide recommendations for adjustments of the programme thereby respecting the principle of proportionality
- to deliver all the documents in accordance with the necessary steps of the SEA in compliance with the relevant EU Directive as well as with the applicable national legislation of Slovenia and Hungary

The strategic environmental assessment is an integral part of the programming process, but for reasons of transparency, the outcomes of the SEA are published in a consolidated Environmental Report. However, although the Environmental Report is the main outcome of the environmental assessment, its most important goal is the continuous support of the process of Programme development.

1.2. SEA process and its relationship with the Interreg Programme Slovenia-Hungary 2021-2027

As mentioned above, most important goal of SEA is the effective support for programme development process. To achieve it, the SEA schedule has been aligned with the programming schedule to allow for effective communication between expert teams responsible for development of the Programme and SEA and to support the integration of environmental considerations into the Programme. The SEA experts formulated recommendations throughout the drafting of Chapter 2 of the Programme in an interactive way, maintaining close contact with the expert team responsible for planning during the whole SEA process.

The outcome of the SEA process is the draft environmental report, which is launched for consultation with national environmental authorities and the public in a way that allows incorporation of proposed amendments made to environmental report into the text of the Programme as well.

Finally, the environmental report will be approved as an integrated part of the Programme by the Programming Task Force and by the Governments of both Member States.

The figure below shows the relationship between the SEA and programme development processes.

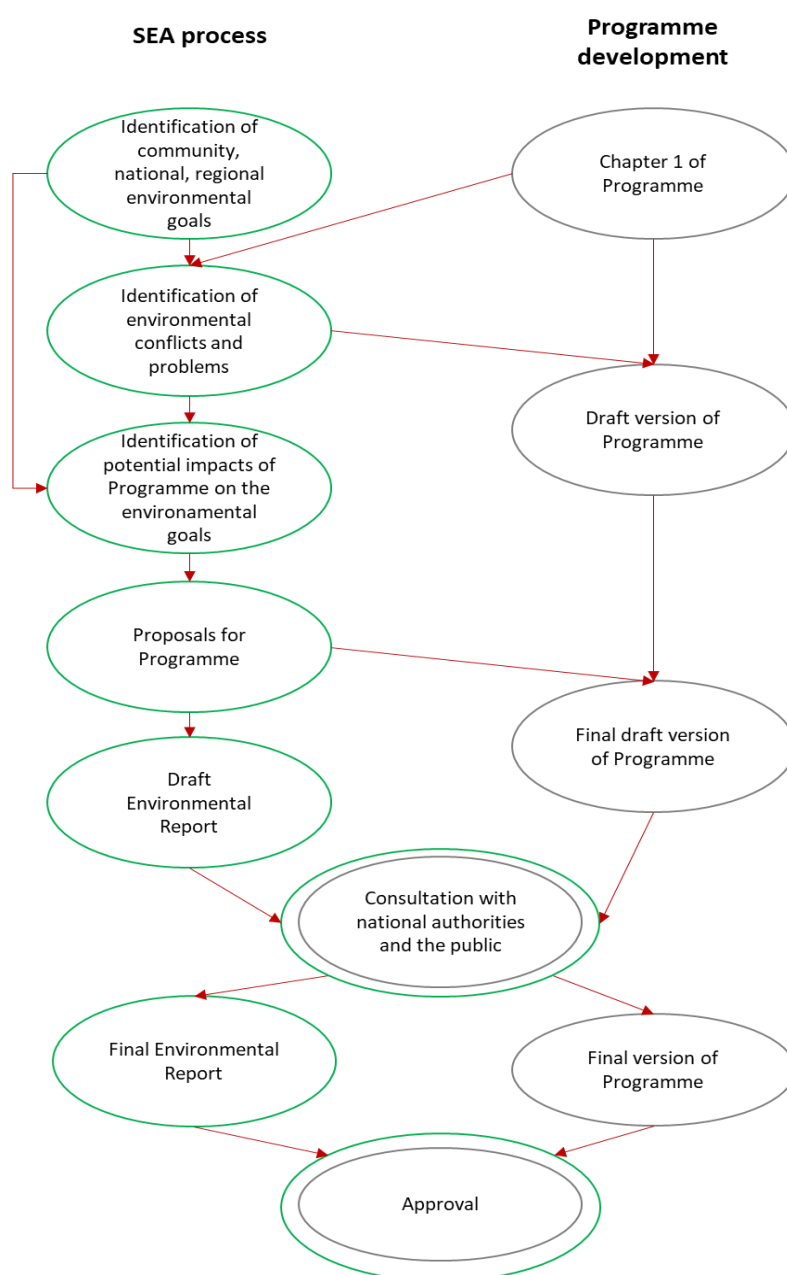


Figure 1: Relationship between the SEA and programme development processes

1.3. Incorporation of comments and proposals made during the SEA process

The environmental assessment was carried out in parallel with the development of the Programme, allowing the different versions of the Programme to be monitored from an environmental point of view and the environmental impact of each modification to be assessed. Since one of the main areas of intervention of the Programme is to address at least some of the environmental conflicts (see the development areas of the priority "Green Border Region") and the expected scale of potentially polluting activities (see the developments of the priority "Inclusive Border Region based on Sustainable Tourism") is not significant, the proposals made by the SEA expert team typically concerned minor modifications. Above all, it was encouraged that tourism development should be based on the principle of environmental sustainability and the need to fully respect the obligations and requirements for protected and Natura 2000 sites and sites with special requirements as per Water Framework Directive and areas of potential significant flood risk as per Floods Directive. For some actions, we have proposed to broaden the scope of eligible activities (e.g. support for development of preparatory studies for the designation of new protected areas, climate change related awareness raising activities) and have made technical clarifications.

In our view, the Programme in its current form does not include any action that would clearly result in increased pressure or stress on environmental elements. Nevertheless, the good "environmental performance" of the Programme could of course be further enhanced. Our recommendations for improving the quantitative and qualitative protection of environmental elements and systems, mainly for the implementation phase of the Programme, are set out in Chapter 5 of the environmental report.

The environmental authorities of both participating countries have had the opportunity to be actively involved in the strategic assessment process. First, they could comment on the Scoping Report of the strategic environmental assessment as follows: in Hungary, the consultation process on the Scoping Report took place between 19 October and 18 November 2021, while in Slovenia, the consultation of the Scoping Report started on 25 October 2021 and the opinions of Slovenian environmental authorities were summarised by the Ministry of Environment and Spatial Planning on 11 January 2022.

The draft Environmental Report has been prepared with due consideration of the comments received to the Scoping Report from environmental authorities of both Member States. The draft Environmental Report has been launched for consultation first in Hungary, on 4 February 2022. Comments and feedbacks from Hungarian environmental authorities have been collected by 7 March 2022. A summary of the opinions and considerations received and the reasons for taking them into account in the preparation of the environmental assessment is provided in Annex 1.

A final draft version of the Environmental Report has been compiled accordingly, and sent for consultation by Slovenian environmental authorities on 21 March 2022. The Ministry of Environment and Spatial Planning took care of inviting Slovenian environmental authorities to provide their opinion on the final draft version of the Environmental Report. A summary of opinions was issued on 6 May 2022. The SEA Expert team has considered the comments and recommendations, and amended the environmental report as necessary, and in parallel initiated further consultations with some of the

environmental authorities raising more substantial concerns as regards the environmental assessment. As a result of these consultations, comments could be properly addressed, and the Final Environmental Report has been completed. A summary of the opinions of Slovene environmental authorities and how they have been taken into account in the preparation of the environmental assessment is provided in Annex 1.

In addition to the above mentioned consultation processes, the draft environmental report and all public documents related to the procedure have been published on the official website of the Interreg VI-A Slovenia-Hungary Programme 2021-2027 (<http://www.si-hu.eu/>) and were open for public comments between 2 February and 4 March 2022. No comments were received on the draft environmental report from the public.

Several recommendations of the SEA have been already addressed during the finalisation of the Interreg Programme document (especially regarding the promotion of increased environmental sustainability of tourism development actions), while other recommendations will be duly taken into account during the implementation of the Programme (i.e. when preparing calls for proposals and defining guiding principles for applicants).

2. MAIN CHARACTERISTICS OF THE INTERREG PROGRAMME SLOVENIA-HUNGARY 2021-2027

2.1. The analysed territory

The programme area of the Interreg Programme Slovenia-Hungary 2021-2027 (hereinafter: IP SI-HU 2021-2027, or Programme) covers a territory of 10 627 km², homes for 962 thousand citizens.

The analysed area of the Programme on the Slovenian side includes two NUTS 3 regions, covers a territory of 3 507 km², giving home to 440 thousand people altogether:

- Pomurje region
- Podravje region

The analysed area of the Programme on the Hungarian side also includes two NUTS 3 regions ('megye'), covers a territory of 7 120 km², giving home to 522 thousand people altogether:

- Vas megye (county)
- Zala megye (county)

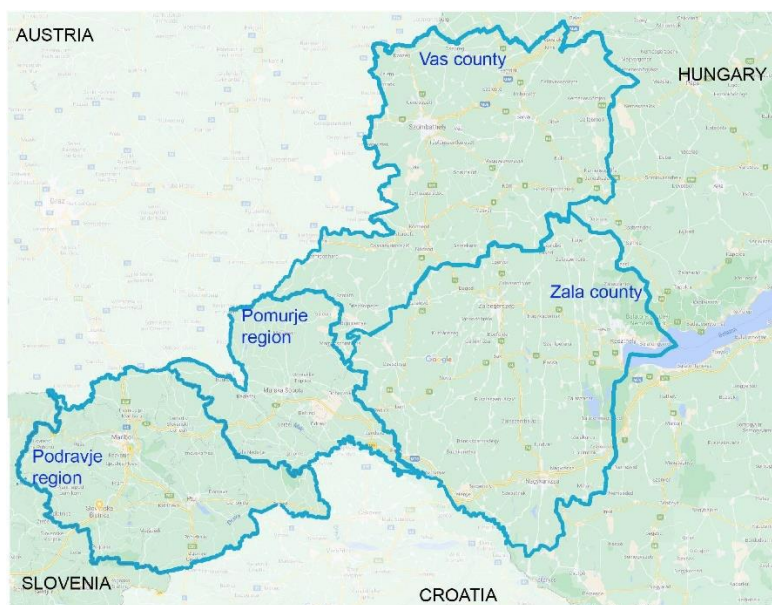


Figure 2: The analysed territory of the IP SI-HU 2021-2027

(Source: "Territorial and Socio-Economic Analysis, Interreg Programme Slovenia-Hungary 2021-2027"; 2021.)

2.2. Main objectives and actions of the Programme

The table below shows the intervention logic of the Programme.

Priority	Specific Objective	Action
1. Green border region	SO 2.7. Enhancing protection and preservation of nature, biodiversity and green infrastructure, including in urban areas, and reducing all forms of pollution	<p>1.1. Elaboration of cross-border/common analytical studies, strategies, action plans and models for more effective preservation of natural assets, biodiversity and improvement or maintenance of natural assets</p> <ul style="list-style-type: none"> - Analysis water resources in terms of quantity and quality, development of monitoring system - Research projects in the field of biodiversity, elaboration of cadastres of different species of flora and fauna and their presentation - Common strategies on nature conservation and biodiversity - Strategies and action plans for definition of joint measures of protection - Strategies and action plans for introduction of sustainable ecosystem-based water management approaches, including natural water retention measures and prioritizing nature-based solutions in the border area, particularly on cross-border waterflows - Improved spatial planning of urban areas and rural landscapes with focus on natural protection - Modelling biodiversity impacts of climate change for the future and elaboration of pilots for testing possible solutions, including innovative digital solutions - Elaboration of joint actions for management of nature-related disasters; strengthening the coordination role of municipalities therein - Action plans for reduction of various forms of pollution (water, air, soil etc.).
		<p>1.2. Implementing joint pilot actions contributing to protecting biodiversity, fostering joint water and disaster management and reduction of pollution</p> <ul style="list-style-type: none"> - Joint actions improving biodiversity, cross-border ecological connectivity and green infrastructure - Joint protocols, monitoring, intervention schemes for management of nature-related disasters - Revitalisation, improvement of water quality of and sustainable management of cross-border waterflows, including testing and application of sustainable ecosystem-based water management approaches, natural water-retention measures, including support of digital solutions in the border area - Awareness raising and prevention activities on biodiversity, nature and environment protection, disasters (e.g. forest fires), fight against various forms of pollution

Priority	Specific Objective	Action
2. Inclusive border region based on sustainable tourism	SO 4.6. Enhancing the role of culture and sustainable tourism in economic development, social inclusion and social innovation	2.1. Establishment of joint tourism quality standards and joint tourism destination management models on the basis of cooperation of tourism organisations <ul style="list-style-type: none"> - Mapping and collection of existing quality standards - Fostering establishment of joint quality cross-border green tourism standards and brands - Connection of micro tourism destinations to formulate cross-border sustainable tourism destination management systems - Application of creative tools for attracting tourists and promotion, including innovative use of digital solutions and ICT tools - Improvement the human capacity of local tourism sector (awareness raising actions, trainings)
		2.2. Implementing pilot actions and joint solutions for development of quality tourism attractions and connected tourism services <ul style="list-style-type: none"> - Quality improvement of cross-border tourism destinations with special focus on attractions of lesser-known areas (e.g. promotion and adoption of green standards and brands, promotion of sustainable mobility solutions in cross-border tourism product development (biking, hiking, use of public transport), increasing awareness on the climate change effects, promotion of eco-innovation in tourism, capacity building and support for adopting green and circular concepts, promotion of local supply chains, use of renewable energy sources) - Creation of joint cross-border eco-friendly tourism products and services focusing on integration of various tourism supply with cross-border relevance - Improvement of cross-border accessibility of tourism attractions

Priority	Specific Objective	Action
3. Cooperating border region	ISO 6.2 Enhance efficient public administration by promoting legal and administrative cooperation and cooperation between citizens, civil society actors and institutions, in particular with a view to resolving legal and other obstacles in border regions	3.1. Enhance efficient public administration by promoting legal and administrative cooperation and cooperation between citizens, civil society actors and institutions, in particular with a view to resolving legal and other obstacles in border regions <ul style="list-style-type: none"> - Elaboration of joint strategies to reduce legal and administrative obstacles of cooperation across the border - Joint and coordinated spatial planning for easier development activities - Joint cooperation activities in the field of low-carbon initiatives (energy efficiency, renewable energy, circular economy) - Conceiving joint educational, vocational training programmes complementing/supporting official curricula with special emphasis on language education - Joint skills development of the target groups and beyond - Revealing and defining possibilities and fields of cross-border social and health care service cooperation - Elaboration of joint strategies and action plans addressing social matters and a better integration of horizontal issues (e.g. gender equality and social inclusion, including youth, women and disabled) - Creating and coordinating joint programs by the media in the border area to better inform the local population
	ISO 6.3 Build up mutual trust, in particular by encouraging people-to-people actions	3.2. Build up mutual trust, in particular by encouraging people-to-people actions <ul style="list-style-type: none"> - Trust building activities of civil organisations in the field of arts and culture, sport, minorities, intercultural dialogue, inter-generational solidarity - Organisation of various events with involvement of the target groups and the general public

Figure 3: Intervention logic of the IP SI-HU 2021-2027

Source: own construction based on IP SI-HU 2021-2027

2.3. Relationship with other relevant plans, programmes, and environmental protection objectives established in these documents

The environmental assessment included an analysis of the relationship among actions of the Programme and environmentally relevant objectives of EU-level, national and regional strategies. We examined whether actions of the Programme support, jeopardise, or do not affect the achievement of environmental or sustainability goals set in strategic documents. Please note that the analysis included only objectives of strategies that are relevant in the programme area.

Results of the analysis are summarized in the table below.

Environmental and/or sustainability objectives of the documents	Action					
	1.1.	1.2.	2.1.	2.2.	3.1.	3.2.
INTERNATIONAL CONVENTIONS						
The Danube River Protection Convention						
The conservation, improvement and rational use of surface waters and groundwater	+	+	0	?	?	0
Preventive measures to control hazards originating from accidents involving floods, ice or hazardous substances	+	+	0	?	0	0
Measures to reduce the pollution loads entering the Black Sea from sources in the Danube River Basin	?	?	0	?	0	0
EUROPEAN UNION						
European Green Deal						
Increasing the EU's climate ambition for 2030 and 2050	0	0	0	?	0	0
Supplying clean, affordable and secure energy	0	0	0	0	0	0
Mobilising industry for a clean and circular economy	0	0	0	0	0	0
Building and renovating in an energy and resource efficient way	0	0	0	0	0	0
A zero pollution ambition for a toxic-free environment	+	+	0	?	0	0
Preserving and restoring ecosystems and biodiversity	+	+	0	?	0	0
From "Farm to Fork": a fair, healthy and environmentally friendly food system	0	0	0	0	0	0
Accelerating the shift to sustainable and smart mobility	0	0	0	0	0	0
8th Environmental Action Programme (proposal)						
Achieving the 2030 greenhouse gas emission reduction target and climate neutrality by 2050	0	0	0	?	0	0
Enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change	+	+	0	?	0	0
Advancing towards a regenerative growth model, decoupling economic growth from resource use and environmental degradation, and accelerating the transition to a circular economy	0	0	0	?	0	0
Pursuing a zero-pollution ambition, including for air, water and soil and protecting the health and well-being of Europeans	+	+	0	?	+	+
Protecting, preserving and restoring biodiversity, and enhancing natural capital (notably air, water, soil, and forest, freshwater, wetland and marine ecosystems)	+	+	0	?	0	0
Reducing environmental and climate pressures related to production and consumption (particularly in the areas of energy, industrial development, buildings and infrastructure, mobility and the food system)	0	0	0	?	0	0
EU Biodiversity Strategy for 2030						
Bringing nature back to agricultural land	0	0	0	0	0	0
Addressing land take and restoring soil ecosystems	+	+	0	?	0	0
Increasing the quantity of forests and improving their health and resilience	+	+	0	?	0	0
Win-win solutions for energy generation	0	0	0	0	0	0
Restoring freshwater ecosystems	+	+	0	?	0	0
Greening urban and peri-urban areas	+	+	0	0	0	0
Reducing pollution	+	+	0	?	0	0
Addressing invasive alien species	0	0	0	0	0	0
Improving knowledge, education and skills	+	+	0	0	0	0

Environmental and/or sustainability objectives of the documents	Action					
	1.1.	1.2.	2.1.	2.2.	3.1.	3.2.
HUNGARY						
National Framework Strategy on Sustainable Development of Hungary						
Natural resources: Biodiversity, renewable natural resources	+	+	0	?	0	0
Natural resources: Reducing the environmental impact on human well-being	+	+	0	?	0	0
Natural resources: Rational use of non-renewable natural resources	0	0	0	0	0	0
National Development 2030 - National Development and Territorial Development Concept of Hungary						
Demographical change, healthy and renewable society	0	0	0	0	+	+
Sustainable use of our natural resources, preservation of our values and protection of our environment	+	+	0	?	0	0
Sustainable spatial structure based on regional potentials	+	+	0	?	0	0
National Climate Change Strategy of Hungary						
Decarbonization	0	0	0	?	0	0
Adaptation and preparation	+	+	0	?	0	0
Ensuring a climate partnership	+	0	0	0	0	0
National Energy and Climate Plan of Hungary						
Decarbonization	0	0	0	?	0	0
Energy efficiency	0	0	0	0	0	0
Energy security	0	0	0	0	0	0
Research, innovation, and competitiveness	0	0	0	0	0	0
National Water Strategy (Kvassay Jenő Plan) of Hungary						
Water retention to make better use of our waters	+	+	0	0	0	0
Preventive flood and inland water protection	+	+	0	0	0	0
Gradual improvement of water quality until good status / potential is reached	+	+	0	?	0	0
High quality water utility service, implementation of rainwater management, with tolerable consumer load	0	0	0	0	0	0
Improving the relationship between society and water (at individual, economic and decision-making levels)	+	0	0	0	0	0
National Landscape Strategy of Hungary						
Landscape utilization based on landscape features	+	+	0	?	0	0
Liveable landscape - liveable settlement - wise land use	+	+	0	?	0	0
Increasing landscape identity	+	0	0	0	0	+
Territorial development program of Vas County 2021-2030						
A stable, crisis-resilient, competitive economy	0	0	0	+	0	0
Liveable communities and improving environment	+	+	0	?	+	0
Growing knowledge capital	+	0	0	0	0	0
Climate Change Strategy of Vas County						
Reducing the county's GHG emissions	0	0	0	0	0	0
Supporting the development of building energy action plans and measures	0	0	0	0	0	0

Environmental and/or sustainability objectives of the documents	Action					
	1.1.	1.2.	2.1.	2.2.	3.1.	3.2.
Supporting the development of Sustainable Energy Action Programmes (SEAPs) of municipalities	0	0	0	0	0	0
Support for GHG reduction measures in transport	0	0	0	?	0	0
Minimising the risks of heatwave periods	+	+	0	0	0	0
Assessing the resilience of vulnerable natural habitats	+	0	0	0	0	0
Enhancing the climate-proofing of residential buildings	0	0	0	0	0	0
Reducing exposure of drinking water sources	0	0	0	0	0	0
Reducing the risk of flash floods	+	+	0	0	0	0
Developing tourism to take advantage of the potential of climate change	0	0	+	+	0	0
Enhancing climate adaptation in agriculture	0	0	0	0	0	0
Enhancing climate adaptation of forestry	0	0	0	0	0	0
Mainstreaming climate protection in the practices of chambers and municipalities	0	0	0	0	0	0
Territorial development program of Zala County 2021-2027						
Improving the liveability of settlements: jobs, transport, services, built environment	0	0	0	+	0	0
Protection of the natural environment	0	0	0	0	0	0
Climate change Strategy of Zala County						
40% reduction in emissions from buildings sector by 2050 compared to 2015 levels	0	0	0	0	0	0
50% reduction in emissions from transport by 2050 compared to 2015 levels	0	0	0	?	0	0
20% reduction in emissions from agriculture by 2050 compared to 2015 levels	0	0	0	0	0	0
60% reduction in emissions from waste management, including the wastewater sector, by 2050 compared to 2015	0	0	0	0	0	0
Protection and preservation of forest areas, planned afforestation and restoration of spontaneously afforested areas to maintain CO ₂ absorption capacity	+	+	0	?	0	0
Maintaining the conservation status state of natural and semi-natural habitats under changing climatic conditions	+	+	0	?	0	0
Reducing the vulnerability of the main tourism attractions of the county	0	0	?	?	0	0
Reducing the probability of water damage events	+	+	0	0	0	0
Facilitate adaptation of agriculture to changing climatic conditions	0	0	0	0	0	0
Mitigating the indirect impacts of climate change on human health	0	0	0	0	0	0
Preservation of specific natural values threatened by climate change	?	?	0	?	0	0
Preservation of the wooden bell towers and folk architecture monuments, which are characteristic landscape features of the settlements in Zala, under extreme climatic conditions	0	0	0	?	0	0
REPUBLIC OF SLOVENIA						
National Environment Protection Programme with programmes of measures until 2030						
Protection, preservation and improvement of Slovenia's natural capital	+	+	0	0	?	0
Ensuring the transition to a low-carbon, resource-efficient, waste-preventing and efficient waste management society	0	0	0	?	?	0
Protection of the population from environmental risks	+	+	0	0	0	0
Operational Programme - Natura 2000 Site Management Program for the period 2015-2020 (based on Decree on special protection areas (Natura 2000 areas))						

Environmental and/or sustainability objectives of the documents	Action					
	1.1.	1.2.	2.1.	2.2.	3.1.	3.2.
Maintaining or achieving a favorable status of plant and animal species and habitat types for which a Natura site is designated, with the following indicators indicating a favorable status	+	+	0	?	0	0
Preservation of the integrity of Natura sites in terms of preserving their ecological structures, functions and protection potential	+	+	0	?	0	0
Maintaining the connectivity of Natura sites	+	+	0	?	0	0
Danube River Basin Management Plan for 2016-2021						
Preservation and regulation of water quantities	+	+	0	?	?	0
Maintenance of water and coastal lands	+	+	0	?	?	0
Improvement of the hydromorphological state of surface waters	+	+	0	?	0	0
Protection, improvement and restoration of surface water bodies by achieving their good ecological and chemical status	+	+	0	?	0	0
Protection and improvement of all artificial and heavily modified water bodies to achieve good ecological potential and good chemical water status	?	?	0	0	0	0
Gradual reduction of pollution of surface waters with priority substances and cessation or gradual elimination of emissions, discharges and leakages of priority hazardous substances	0	0	0	0	0	0
Good chemical status of groundwater bodies	+	+	0	?	0	0
Good quantitative status of groundwater bodies	+	+	0	?	0	0
Reversal of any significant and constantly increasing trend in the concentration of any pollutant in groundwater bodies, which is the result of human activity and seriously threatens the quality of aquatic or terrestrial ecosystems, human health or the actual or potentially permissible use of the aquatic environment	?	?	0	0	0	0
Prevention from introduction of dangerous pollutants and the limited introduction of other pollutants into the groundwater	+	+	0	0	0	0
Danube River Basin Management Plan for 2022-2027						
Preservation and regulation of water quantities	+	+	0	?	?	0
Maintenance of water and coastal lands	+	+	0	?	?	0
Improvement of the hydromorphological state of surface waters	+	+	0	?	0	0
Protection, improvement and restoration of surface water bodies in such a way as to achieve good ecological and chemical status of surface water in accordance with regulations governing environmental protection	+	+	0	?	0	0
Protection, improvement and restoration of groundwater bodies and ensuring balance during abstraction and remediation of groundwater so as to achieve its good chemical and quantitative status	+	+	0	?	0	0
Protection and improvement of all artificial and heavily modified water bodies in order to achieve good ecological potential and good chemical status of the water	?	?	0	0	0	0
Reversal of any significant and sustained upward trend in the concentration of any pollutants in groundwater resulting from human activity and significantly endangering the quality of aquatic or terrestrial ecosystems, human health or human groundwater use	?	?	0	0	0	0
Prevention or limiting of the introduction of pollutants into groundwater	+	+	0	0	0	0
Gradual reduction of pollution by priority substances and cessation or phasing out of emissions, discharges and losses of priority hazardous substances both in surface waters and groundwater	0	0	0	0	0	0

Environmental and/or sustainability objectives of the documents	Action					
	1.1.	1.2.	2.1.	2.2.	3.1.	3.2.
Ensuring protection against the harmful effects of water, mainly by reducing or preventing the risk of harmful effects of water and eliminating their consequences	+	+	0	0	0	0
Mitigation of adverse effects of water use on the quantitative status of groundwater bodies (promotion of return pumped water in thermal aquifers)	?	?	0	0	0	0
Eliminating excessive water use and promoting water reuse	?	?	0	?	?	0
Mitigating the effects of droughts and floods	+	+	0	0	?	0
Raising public awareness of sustainable water use	+	+	0	?	?	0
Strengthening inspections on water use and ensuring environmentally friendly flow	0	0	0	0	0	0
The creation of maintenance programs that will follow the objectives, thus reducing the harmful effects	0	0	0	0	0	0
Flood Risk Management Plan for 2017-2021 period, and draft document for preparation of Flood Risk Management Plan for 2022- 2027						
Avoiding new flood risks	+	+	0	0	0	0
Reducing the existing flood risk	+	+	0	?	0	0
Reducing the existing flood risk during and after floods	+	+	0	0	0	0
Raising awareness of flood risks	+	+	0	0	0	?
Waste Management Programme and Waste Reduction Programme of the Republic of Slovenia						
Prevention or reduction the harmful effects of waste generation and management (waste prevention, prevention of illegal dumping)	0	0	0	0	0	0
A recycling society with a high level of efficiency of natural resource use, applying the priority order of waste prevention and management (waste hierarchy) and ensuring proper record keeping, tracking and analyzing of waste management data	0	0	0	0	0	0
Ensuring Slovenia's independence in waste disposal and recovery of mixed municipal waste, with possibility of cooperation with other Member States due to the need for specialized processing plants for certain types of waste	0	0	0	0	0	0
Resolution on the Slovenian climate long-term strategy 2050						
Reducing GHG emissions and increasing abstractions by sinks	0	0	?	?	+	0
Increased energy efficiency	0	0	?	?	+	0
Increased use of renewable energy	0	0	?	?	+	0
Draft Strategy of Spatial Development of Republic of Slovenia 2050						
Rational and efficient spatial development	?	0	0	0	+	0
Competitiveness of Slovenian cities	0	0	?	?	0	0
Quality life in urban and rural areas	?	?	?	?	+	+
Strengthening spatial identity and multifunctionality of space and adaptability to change	?	?	?	0	+	0
Cultural Heritage Strategy						
Raising awareness of the social values of heritage	0	0	0	0	0	?
Encouraging the involvement of individuals, communities and other stakeholders in heritage activities	0	0	0	?	0	+
Improving access to heritage	0	0	0	+	0	?
Achieving greater recognition of heritage in Slovenia and internationally	0	0	0	0	0	?
Encouraging the diversified use and reuse of heritage and the exploitation of its potential	0	0	?	?	0	?

Environmental and/or sustainability objectives of the documents	Action					
	1.1.	1.2.	2.1.	2.2.	3.1.	3.2.
Increasing the effectiveness of the legal and financial framework for heritage protection and preservation	0	0	0	0	0	0
Ensuring greater capacity and efficiency of the public heritage protection sector and improving inter-ministerial cooperation	0	0	0	0	0	0
Improving the quality of life by preserving heritage and promoting heritage activities	0	0	?	?	0	+
Raising the level of knowledge, skills and values related to heritage	0	0	0	0	0	+
Getting young people involved with heritage	0	0	0	0	0	+
Encouraging high-quality heritage research	0	0	0	0	0	?
Integrating heritage into the information society	0	0	0	0	0	0

Legend

- +** Action of the Programme is in line with environmental/ sustainability objective
- !** Action of the Programme jeopardizes the achievement of the environmental/ sustainability goal
- ?** Action's impact on the environmental objective depends on the way of implementation
- 0** Action of the Programme and environmental/ sustainability objective are not related to each other

Figure 4: Relationship between actions of the Programme and objectives of EU-level, national and regional strategies relevant from an environmental point of view

Overall, the actions in the Programme support relatively few environmental and sustainability objectives, which is mainly due to the narrow intervention focus of the Programme. Of the environmental objectives set out in the various strategies, the Programme's actions will contribute most to the protection of surface water, natural assets and biodiversity. On the basis of the information available under the Programme, the planned actions are not expected to prevent the achievement of any of the 'green objectives'.

2.4. Internal consistency of the programme document

Chapter 1 of the Programme, besides economic and social characteristics, also explores the environmental characteristics of the development area, and identifies the most important environmental conflicts. According to the planning logic, the objectives and actions of the Programme set out in the second chapter are aimed at resolving these.

2.4.1. Contradictions between Chapter 1 and Chapter 2 of the programme documents

Overall, the intervention logic of the Programme adequately reflects the environmental challenges identified in Chapter 1. Most of these, especially vulnerability of natural values, increasingly extreme weather conditions, water regime, and water balance and surface water quality problems are responded in a substantive manner by the relevant actions of the Programme under priority “*Green border region*”. Still, the Programme does not address all the environmental and sustainability challenges identified in the first chapter, which is due to its limited resources and relevantly, the necessity of focusing on the planned developments.

2.4.2. Internal consistency of the programme document

The internal synergy of the Programme was examined at the level of each action. The assessment sought to clarify whether the individual actions together amplify the expected positive or possibly the adverse environmental impacts, further on, whether there are any of them that have conflicting environmental consequences. The results may differ in terms of the effects on different environmental elements. Therefore, for the sake of clarity, in the table below presenting the results of the assessments we have focused on the processes having the greatest impact.

Actions	1.1.	1.2	2.1.	2.2	3.1.	3.2.
1.1.		+	0	><	0	0
1.2.	+		0	><	0	0
2.1.	0	0		! +	0	0
2.2.	><	><	! +		0	0
3.1.	0	0	0	0		0
3.2.	0	0	0	0	0	

Legend

+	Actions jointly contributing to a positive environmental impact
!!	Actions significantly and clearly contributing jointly to an adverse environmental impact
!	Actions potentially causing some adverse but preventable environmental impacts
><	Actions potentially causing contradictory environmental impacts
0	Actions not interrelated in terms of environmental impact

Figure 5: Synergies of actions from an environmental point of view

The main findings of the internal environmental consistency assessment of the Programme are the following:

- The document does not contain any actions whose simultaneous implementation would certainly lead to an increase in environmental conflicts.
- The two actions under priority "Green Border Region" reinforce each other's positive environmental effects, so it is advisable to implement them in parallel (i.e. to support at least partial implementation of the strategies developed under Action 1.1 under Action 1.2).
- The two tourism-themed actions may be able to amplify each other's environmental impacts, but the direction of the impact will be determined by the precise content of the actions (e.g. the combination of active tourism programmes that carefully integrate environmental considerations and creative tools that encourage them will lead to increased positive environmental impacts; while large-scale promotion of wellness spas by supporting smart solutions that encourage car access may lead to increased negative environmental impacts).
- The Programme also includes pairs of actions that could have opposite environmental effects. In practice, this small number of elements includes pairs of actions where one member supports tourism development and the other supports habitat and/or wildlife conservation activities. Again, the key problem is the potential - but largely avoidable - negative environmental impacts of tourism development, which are discussed in more detail in Chapter 4.1.

3. CURRENT STATE OF THE ENVIRONMENT IN THE PROGRAMME AREA AND THE LIKELY EVOLUTION THEREOF WITHOUT IMPLEMENTATION OF THE PROGRAMME

This chapter has been completed based on section 2. of the Territorial analysis.

3.1. The environmental characteristics of the areas which are likely to be affected by the programme objectives

3.1.1. Landscape structure

The spatial structure of the Slovenia-Hungary programme area is shown on Figure 6. As it is seen from the map the border area is characterised by urbanised areas and a relatively large share of protected areas (national and Natura 2000). The landscape is also relatively varied: flat areas combined with hilly terrain.

Both countries are quite centralised with the capitals as the main decision-making centres are located in the geographical centres of the countries. Both programme country areas are located relatively far away from the national capitals and main country's transport nodes adding to the isolation of this region. Although the regions and counties of the Hungarian-Slovenian border area are similar in economic structure, they differentiate in some other characteristics. However, both the more touristic and cultural areas (e.g. thermal spas), as well as the typically rural areas and, are struggling with the disadvantages arising from the peripheral nature of border areas: ageing and declining population, low levels of entrepreneurial spirit and initiative, innovation, economic grouping and networking.

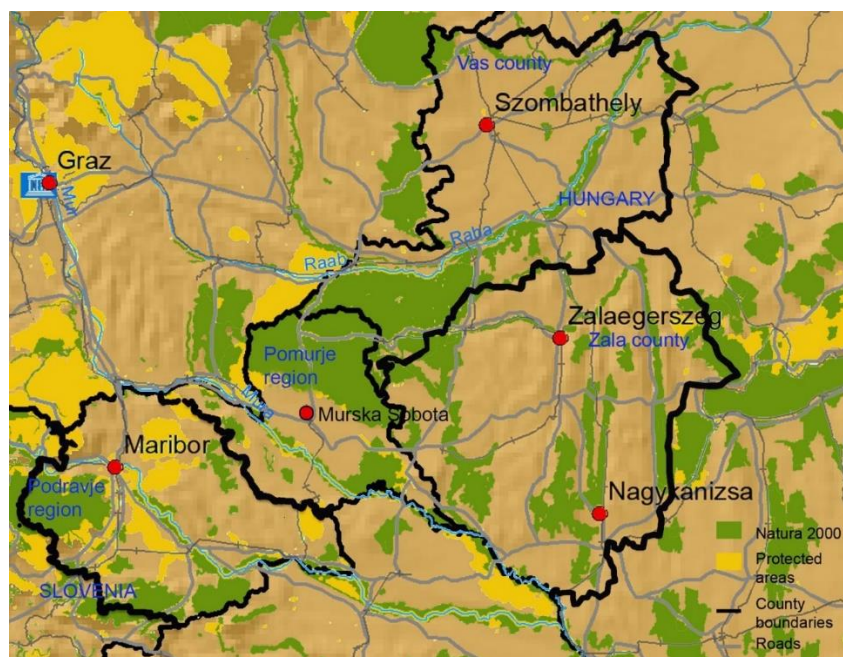


Figure 6: Programme area with the main cities and topography data.

(Source: Territorial and socio-economic analysis Interreg Programme Slovenia-Hungary, 2021)

3.1.2. Soil conditions

The soil conditions in the area covered by the Programme are highly variable, depending on the topography and hydrology of the area, as illustrated by the FAO soil map below.

In the hilly and mountainous areas, which are the most prevalent in the area, **there is a significant risk of erosion**, which, in addition to climate change, is exacerbated by inappropriate cultivation and tillage practices.

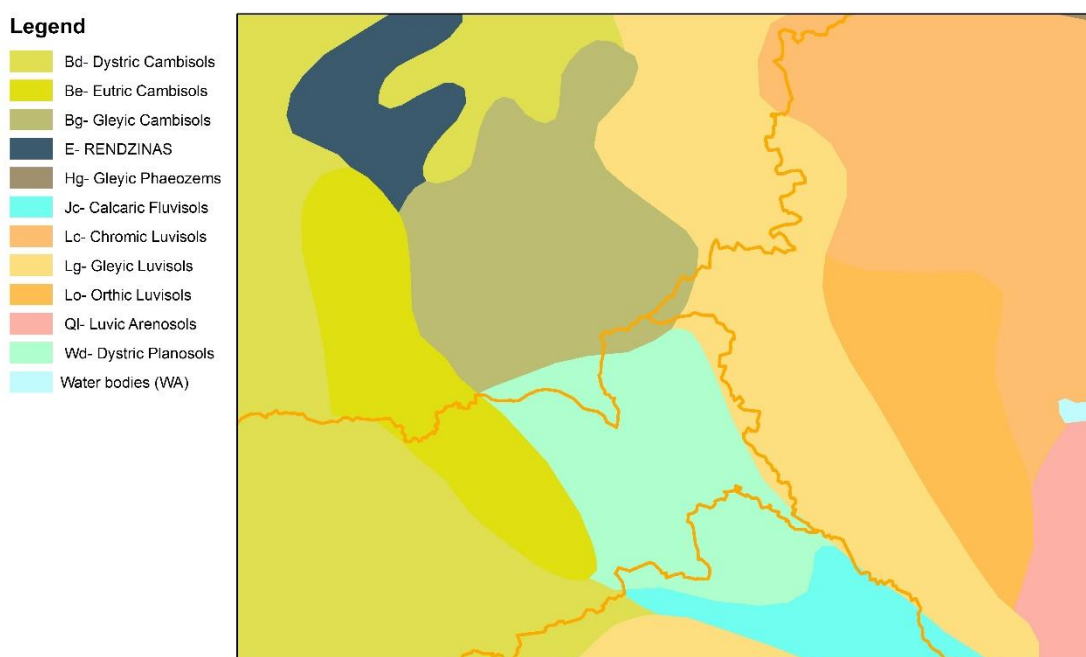


Figure 7: Soil conditions of the Programme area based on the FAO international soil classification
(Source: FAO)

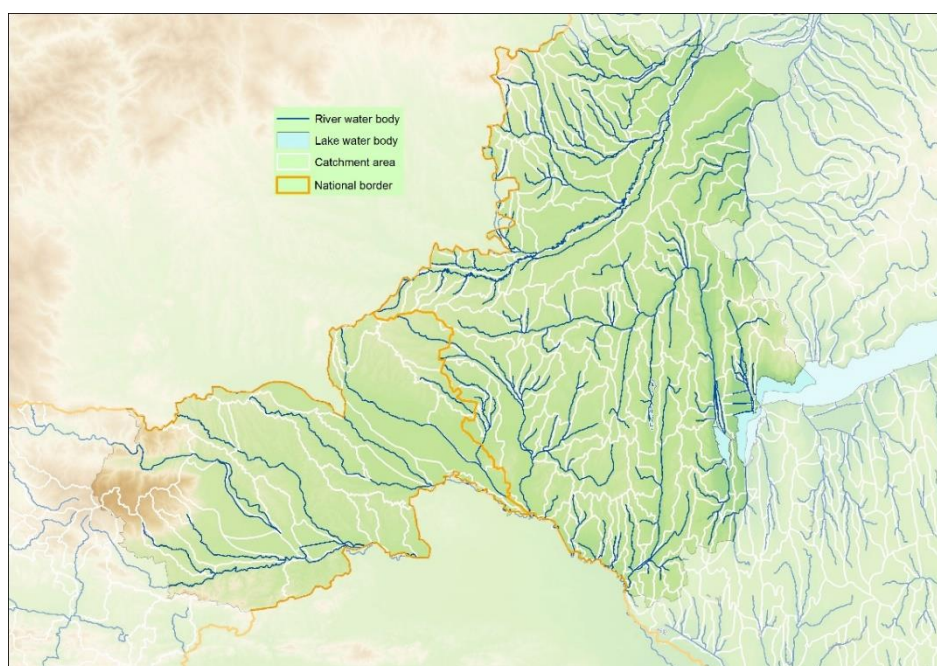
3.1.3. River basins and their water resources, water protection, water use and water regulation

Slovenia is rich in water resources, although they are not spatially uniformly distributed. Water covers about 272 km² of Slovenia's territory and most of it (98,7%) is in a good chemical state, however, only 49% of surface water bodies are in good ecological state, the main reason being hydromorphological change and general degradation. Fewer surface water bodies achieved good ecological status than in the previous assessment period, however, this was also due to improved assessment methods⁴. Water quality is impacted especially by agriculture, so great attention is paid to agro-environmental measures. In comparison to the previous period, significant improvements have been carried out in

⁴ <http://kazalci.arso.gov.si/en/content/chemical-and-ecological-status-surface-water-bodies-0>

the field of water management. In recent years, numerous municipal treatment facilities have been constructed, and some are still being built, resulting in strong increase of the amount of wastewater treated by secondary or tertiary treatment. While only just over 40% of Slovenian population had their urban waste water treated in 1998, the share has increased to 67% in 2019⁵. More than half of the population's wastewater is treated in municipal or communal facilities. This resulted in reduction in organic loading observed by monitoring of nutrient load and biochemical oxygen demand in rivers, which has been on decline since 1996, however Mura and Drava river remain above national average in terms of average annual concentration of ammonium, and in Mura the average annual concentration of nitrates is well above the national average, while Drava has slightly higher concentration of orthophosphates⁶. While the levels of pesticides in groundwater are decreasing, the Drava and Mura Basins still exceed quality standards for some phytopharmaceuticals.

The water quality status of cross-border watercourses in Hungary are overall very favourable in terms of water chemistry. In the assessment according to the criteria of the Water Framework Directive, the physicochemical variables showed 'Good' status for Kebele stream and Lendava, and 'Excellent' for Kerka stream and Mura river. At the same time, it must be said that during the assessment of the biological elements, all the mentioned watercourses can be said to be of medium status, so the ecological status of our watercourses could be improved in terms of the studied groups of organisms (especially macroscopic invertebrates and coating algae). (Source: Western Transdanubia Water Directorate).



*Figure 8: Surface water bodies of the Programme area
(Source: own construction based on data available at evode.gov.si and vizugy.gov.hu)*

⁵ <http://kazalci.arso.gov.si/en/content/wastewater-treatment-0>

⁶ <http://kazalci.arso.gov.si/en/content/nutrient-and-biochemical-oxygen-demand-rivers-1?tid=16>

In terms of water management Hungary strongly depends on river outflow from other countries: 95% of the surface waters are of foreign origin. One of the serious consequences of the climate change in the country is that less water is available for an increased water demand, especially for irrigation. From a strategic point of view impacts of climate are an additional negative element added to the already existing problem of water shortage. In Slovenia there are some negative trends that might get exacerbated with climate change. The river runoff shows a downward trend, and three of the five driest years in 60-year period occurred in the last 20 years⁷. In addition, in 2019 the total renewable amount of groundwater in shallow aquifers in Slovenia was below the average of the comparative hydrological water balance period 1981-2010.

The total water abstraction in Hungary at present is about 6,000 million m³/year, thereof 75% for industrial use - cooling water. For the remaining part, the public is the major user with 40%, industry takes a little more than one quarter and agriculture uses the rest. 75% of the total abstraction (except for cooling water) is from groundwater. Besides the traditional dominance of groundwater in drinking water supply (94%), abstraction of groundwater for industry and for irrigation has been gradually increasing, and nowadays it exceeds the amount used from surface water (Somlyódy, Simonffy, 2004). This new situation may lead to non-sustainable exploitation. Water abstraction in Slovenia is lower, however Podravje and particularly Pomurje have relatively low precipitation and thus different water regime and lower groundwater recharge. In 2019, 80% (755 million m³) of water was pumped from surface water sources, mostly (748 million m³) for industrial activities, including energy production. Very small part of surface water sources was pumped for public water supply (4 million m³) and irrigation (slightly less than 3 million m³). Of the 189 million m³ of pumped groundwater most (almost 88%) was exploited for the public water supply network, while almost 12% was pumped for industrial processes, and less than half a million m³ was pumped for irrigation⁸.

⁷ <http://kazalci.arso.gov.si/en/content/river-balance-8>

⁸ <https://www.stat.si/StatWeb/News/Index/9173>



Figure 9: Groundwater bodies of the Programme area
(Source: own construction based on data available at evode.gov.si and vizugy.gov.hu)

As a result of relatively low precipitation in the region (as compared to other parts of Slovenia), the groundwater recharge in Pomurje and Podravje is among the weakest in Slovenia. Besides, the emissions from agriculture are high and relatively large amount of water is used for irrigation as this is an agriculturally intensive area. Because of all these factors, water bodies in the north-eastern part of Slovenia are the most polluted, namely in aquifers with predominantly intergranular porosity. In 2018, poor chemical status was found for the Savinjska, Drava and Mura basins⁹, caused by high levels of nitrate and, in the case of the Drava Basin, also atrazine. However, a statistically significant trend of decreasing nitrate content was found in all three water bodies¹⁰. Groundwater is the primary source of public water supply and drinking water monitoring in 2019 showed that Podravska statistical region has the third highest share of non-compliant samples of drinking water supply from faecal contamination, but the highest in the Danube River Basin, while Pomurska statistical region had no non-compliant samples¹¹. Water protection areas are designated to protect public water supply resources, and Podravje has the largest water protection areas in Slovenia, comprising Dravsko polje, Ptujsko Polje, Ruše area, Vrbanski plato and Limbuška dobrava. While the national objective is to protect all water sources for public water supply with a regulation on national level, many water sources are protected only on local level, particularly in Goričko area.

⁹ Regional development program Podravje 2021-2027, draft

¹⁰ <http://kazalci.arso.gov.si/en/content/groundwater-quality-1>

¹¹ <http://kazalci.arso.gov.si/en/content/clone-drinking-water-quality-0>

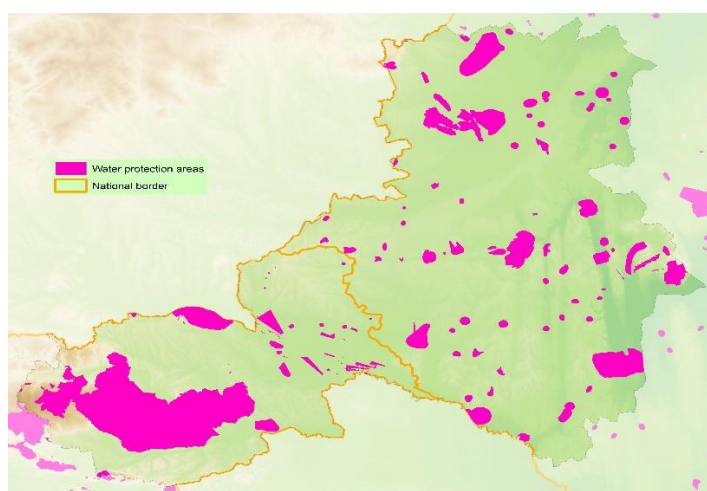


Figure 10: Water protection areas of the Programme area
 (Source: own construction based on data available at evode.gov.si and vizugy.gov.hu)

Some groundwater is used for wellnes/spa tourism as thermal, mineral or thermomineral water. The spa centres often use such water also for heating, and use of this potential is increasing in agriculture, particularly for heating of greenhouses (see chapter on natural resources and energy potential). This may lead into conflicting interests over the same geothermal resources.

Due to the topography and hydrology of the area (see the steep slopes of a large part of the Programme area and areas upstream of it, as well the uneven flow of the Drava and Mura rivers), floods occur regularly in the Programme region, including flash floods in the hilly areas. However, in the case of smaller watercourses, the construction of reservoirs in recent decades has reduced the flood risk locally. Nevertheless, the risk of flooding remains a major challenge for natural disaster management in the border region, especially on the Slovenian side, with several areas of high flood risk along Drava, Dravinja, Polskava and Mura, and an extensive area of low flood risk along lower Polskava, southern stretch of Mura and along Ledava river.

The extent of the different types of flood risk areas within the Programme area are as follows:

Programme area in each country	Sqm of different types of flood risk areas		
	High	Medium	Low
SLO	35,992	147,243	460,564
HU	47,231	94,556	103,319

Source: own calculation based on data available at evode.gov.si and vizugy.gov.hu

In Podravje and Pomurje, 11 areas of significant flood impact were identified with total area of 9,22 km² and 13.332 inhabitants at risk. These are areas with potentially the greatest damage in the event of flooding - where there is a possibility of significant adverse consequences of floods for human health, the environment, cultural heritage and economic activities. This is an increase from earlier cycles of Floods Directive implementation when the total area was 1,93 km² with 3.198 inhabitants, as five new areas were identified, one (Ptuj) was remodelled into two and one (Lendava) dropped due to changes in methodology, improved data availability and public consultation process (Preliminary Flood Risk Assessment, 2019). Areas of significant flood impact affect the quality of life of their inhabitants because of the ever present flood risk.

Both countries have prepared flood hazard maps and flood risk maps, as well as Flood Risk Management Plan based on Floods Directive. According to Report on the implementation of non-

structural and structural anti-flood measures of Flood Risk Management Plan for Slovenia, construction works were implemented on Drava, Rogoznica, Grajena and Mura in 2017-2019 period as the main flood risk management measures, the ones on Mura as part of INTERREG Slovenia – Austria implementation.



Figure 11: Flood risk areas in the Programme area
(Source: own construction based on data available at evode.gov.si and vizugy.gov.hu)

In addition to flood risk areas, there are several erosion and landslide-prone areas in the Programme area. An overview of information presented in the Flood Risk Assessment of Republic of Slovenia shows that landslides are both consequence of extreme weather events as well as sources of floods in cases of blocking a water stream.

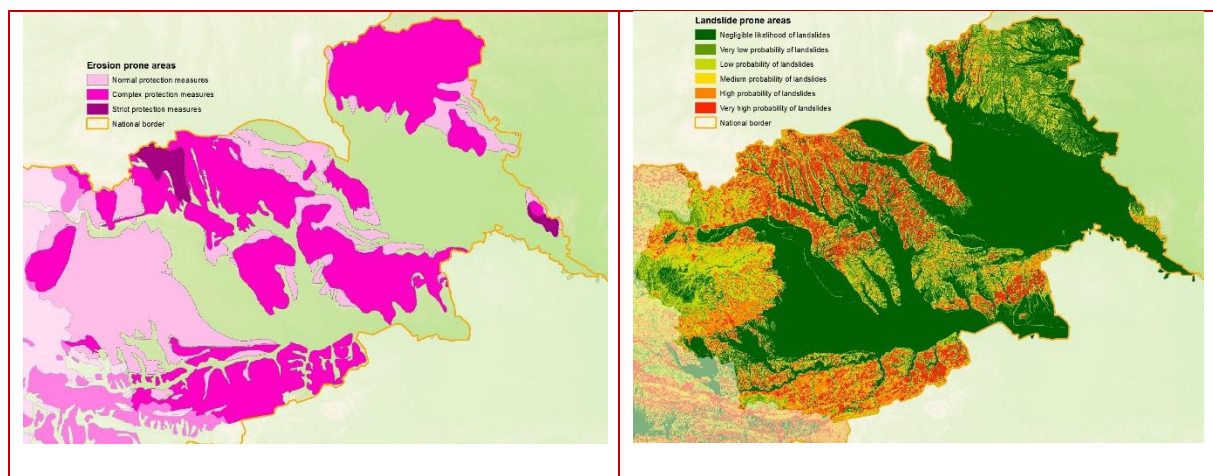


Figure 12: Erosion and landslide-prone areas in the Slovenian part of the Programme area.

3.1.4. Natural values, protected areas, biodiversity

The Programme area is rich in environmental resources and natural values including diverse flora and fauna resulting in rich biodiversity to be protected.

In Slovenia, protected natural areas cover 12,5 % of the country surface and include one national park, three regional parks and 73 landscape parks. Moreover, 37% (7,683 km²) of the country's territory is protected under Natura 2000, which is the highest percentage of national territory of all EU Member States.

- In Pomurje, 46% of the region's territory (596,9 km²) is under Natura 2000. It covers the main protected territory of the Slovenian part of the Programme area, the picturesque Goričko Landscape Protection Park with a centre in the Grad castle. 96% of its territory is under Natura 2000 protection. The whole valley part of the pristine Mura river is under Natura protection as well.
- In Podravje 28% of the region's territory (611.5 km²) is under Natura 2000. It covers the protected areas along Drava valley, mountain massif of Pohorje and Boč – Donačka mountain Nature park. In the urban environment the protected Lake of Maribor provides a series of ecosystem services for Maribor inhabitants and its visitors.

A review of the state of the natural and semi-natural habitats has shown that those habitat types are most at risk in the Slovenian part of programme area:

- Flowing waters and associated wetlands (Mura, Drava)
- Dry grasslands (Goričko)

The total Natura 2000 coverage amounts to 21% of the territory of Hungary. In Hungary 10 national parks and several national landscape parks ensure the protection of the main natural values. Within the Programme area, Vas county contains 71, Zala county 79 protected areas out of the total 1195 local protected areas of the country. Three national parks cover partly the territory of the Programme area:

- In Vas county, the Őrség National Park and Fertő-Hanság National Park (only a very small part of it is located in the Vas county) cover the main protected areas, besides numerous landscape parks and local protected areas. Natura 2000 covers 21% of the territory. The total territory of the Őrség National Park is under Natura 2000 protection due to its special birdlife.
- In Zala county, the Balaton Uplands National Park with a territory of 57 ha is the most important protected area. Kis-Balaton is also protected by the international Ramsar Convention, serving the protection of wetland habitats and having tourism potential. However, only small western part of the Balaton is located in Zala county. The valley of the Mura River is a valuable habitat as well. The county has 258 settlements, out of which 42 has protected area on its territory. Natura 2000 covers 22% of the territory.

An important part of natural protection is also the 5-country Transboundary UNESCO Biosphere Reserve Mura-Drava-Danube, which combines the cluster of thirteen protected areas along the Mura-Drava-Danube region. The Biosphere Reserve in the programme area stretches along the Mura river, covering significant territories in Pomurje and Zala county.

5-country Biosphere Reserve Mura-Drava-Danube (TBR MDD)*

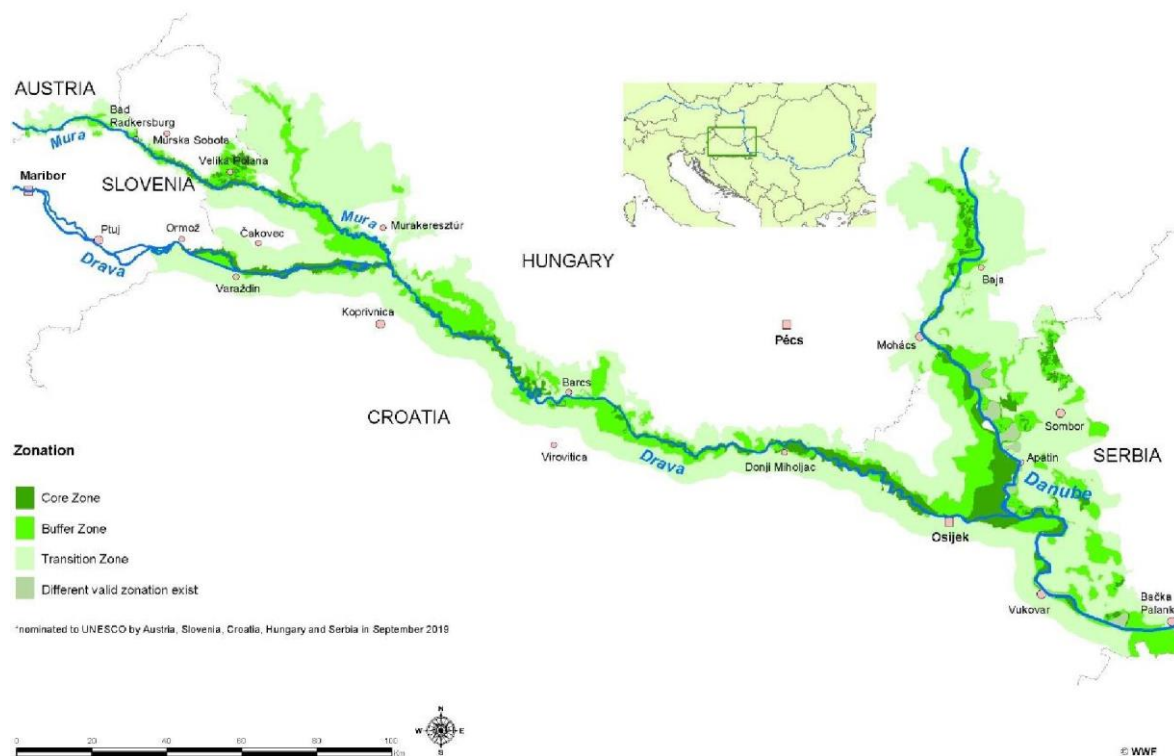


Figure 13: Transboundary UNESCO Biosphere Reserve

(Source: Territorial and socio-economic analysis Interreg Programme Slovenia-Hungary, 2021)

3.1.5. Cultural heritage

In terms of UNESCO-protected world cultural heritage, the border area is included in the Intangible Cultural Heritage of Humanity item “Door-to-door rounds of Kurenti”, which is a tradition of the area in Ptuj, celebrated in the carnival period. Being a living tradition, there are many Kurenti associations in the area, moreover it is included in education of kindergartens and elementary schools. On the tentative list of UNESCO World Heritage since 2017 the Balaton Uplands Cultural Landscape is included, which covers the north coast of the Lake Balaton, including the Lake Hévíz, the Festetics Castle of Keszthely with its park, the historic building of the Georgikon Farm that are located in Zala county, being also among the most significant tourism magnets of the Hungarian side. The Hungarian side of the border area is rich in traditional rural heritage buildings – most well-known are the objects in Göcsej and the Órség – which is also included in the tentative list since 2017.

Beyond world heritage items it is worth to point out the nationally and regionally significant heritage elements, which are bases of the border area’s image and important foundation of the tourism attractions. The most important sites in regional breakdown:

- Podravje: the City of Maribor (including natural, built and sacral heritage), Ptuj (the oldest town of Slovenia), the Ormož castle, winemaking tradition concentrated in Jeruzalem and its surroundings;

- Pomurje: the historic centres of Murska Sobota and Lendava, Grad na Goričkem (the largest baroque castle in Slovenia), the Romanesque rotunda in Selo, pottering culture of Dobrovnik and Ljutomer, wine making in the area of Lendava, the numerous lakes in the region;
- Vas county: the urban centres of Szombathely, Szentgotthárd, Körmend (castle), the Őrség area (Őriszentpéter and the surrounding villages), the Ják Church, pottering culture of Magyarszombatfa;
- Zala county: rural architecture of Göcsej, the Hetés ethnographic area, rural churches and belfries, the bunker of Lovászi, natural and industrial heritage in the area of Bázakerettye, the Kis-Balaton reserve, the numerous lakes in the county, Lake Hévíz as an outstanding natural value, the Roman monuments of Keszthely-Fenékpuszt, Festetics Castle in Keszthely and the historic town centre of Keszthely.

3.1.6. Climate characteristics, the impacts of climate change

In recent decades, climate change has been clearly detectable in the Programme area. Analysis of data measured in Nagykanizsa (Zala County)¹² shows that at the turn of the millennium (in the 3 decades between 1981 and 2010) the increase rate of average annual mean temperature (0.376 C°/10 years) was the highest since the beginning of instrumental measurements in Hungary (1901). At the same time, the average annual precipitation has decreased significantly (by 6-10%) over the last 40 years on the eastern edge of the Programme area.

According to the forecast, years affected by drought will increase on both the Hungarian and the Slovenian side. The frequency of droughts increased in the inspected areas over the 50 years between 1962 and 2011. Extreme droughts have become more and more frequent in the second half of the period, besides the increasing trend. Between 1901 and 2016, extremities regarding warm temperature increased and extremities regarding cold temperature decreased because of climate change.

Water scarcity and aridification will not only become more frequent and prolonged, it will also affect the natural environment, natural resources, and agricultural forestry production bases. They also draw attention to the increasing uncertainties of the population's water and food supply and the deteriorating quality of drinking water and food ingredients, while production costs and the risks of corporations and investors increase. Since these risks and challenges are of a regional nature, a close cross-border cooperation is needed to solve the problems.

Extreme weather conditions, posing serious hydrological danger, occur more frequently as a consequence of climate change. The number of annual precipitation days decreases, but that of days when a large amount of precipitation (over 20 mm/day) falls at once increases. This tendency affects the forestry and agricultural sector negatively on both sides of the border, damages soil erosion and flood control systems, and as the soil is unable to absorb intense precipitation, surface run-off can significantly increase. The extremely severe storms and hails are becoming increasingly common environmental phenomena, and they are posing significant risks to agricultural production.

¹² Source: Gálos B. – Víg P. (2015): Climate trends in the Carpathian Basin and Zala County, in: AGRATER project, Final report, Chapter 1

A further consequence of climate change is the increased frequency and severity of floods in the warmer and wetter water period. The risk of floods can also be increased by factors like the mismanagement of floodplains, mud silting up or the incapacity of protection systems. Overall, the annual water balance shows a decreasing trend in the region regarding both surface and groundwater.

3.1.7. Natural resources, energy potentials

The common specificity of this area are the geothermal waters.

Hungary is well known for its richness in thermal waters. A large part of them is recognised as world-famous mineral and thermal waters with a favourable composition and therefore are under protection. The Western Transdanubian Region is one of the most popular health tourism destination of the country due to its rich thermal water resources. The most well-known area is the lake of Hévíz, with a significant healing effect, providing traditional medical and healing wellness treatments. Further thermal spas and wellness facilities are available, among others, in Zalakaros, Sárvár, Bük, Szentgotthárd, Kehidakustány, Celldömölk and Lenti. Geothermal energy is used also for heating in spa facilities.

In Pomurje and Podravje geothermal energy is used primarily for heating and bathing. There are six thermal spas and health resorts, and an additional four recreation centres (three of them as part of hotels) where swimming pools are directly or indirectly heated by geothermal energy. The main thermal spas are located in Moravske Toplice, Murska Sobota, Banovci and Ptuj. Increasingly, geothermal energy is used for heating of greenhouses for highly specialised horticulture, such as production of orchids in Dobrovnik and Lušt brand tomatoes in Renkovci.

Overexploitation of thermal waters was recognised in the last years therefore more sustainable ways of using them are being promoted. Besides, the tourism is trying to move the main focus from the spas to other attractions in the rural areas.

In Slovenia, Drava river is dammed and is heavily used for hydropower production. There have been long-lasting plans for use of of hydropower potential of Mura river, however they have been re-evaluated several times, largely due to high biodiversity and Natura 2000 sites (SPA and SAC) along the entire Mura river in Slovenia and further downstream. Small-scale hydropower plants are located mainly in Pohorje and Haloze area. Use of solar energy was supported through Rural Development Programme (EARDF) and Slovenian Ecofund, but data on the amount of electricity produced in this way in the programme area are not available. Currently, an assessment of potential for renewable energy resources is being prepared on national level, focusing on the potential for use of solar energy, hydropower, wind energy and geothermal energy, that will provide useful information also for the project area.

3.1.8. Waste management

Although the amount of waste generated per inhabitant per year in the two countries is lower than the EU average, both countries have seen an increase in recent years. Slovenia started from a much higher base, with an average of 2500 kg/person of total waste generated per year until 2016, but

reached 4000 kg/person in 2018. Hungary managed to reduce it to 1300 kg/person by 2010, but since then it has been increasing, exceeding 1700 kg/person in 2018.

The largest increase in Hungary is in construction and demolition waste. This fraction shows a similar increase in Slovenia. For Slovenia, the other significantly increasing component is soil. It can be concluded that the increase in waste in both countries is mainly related to the increasing performance of the construction industry.

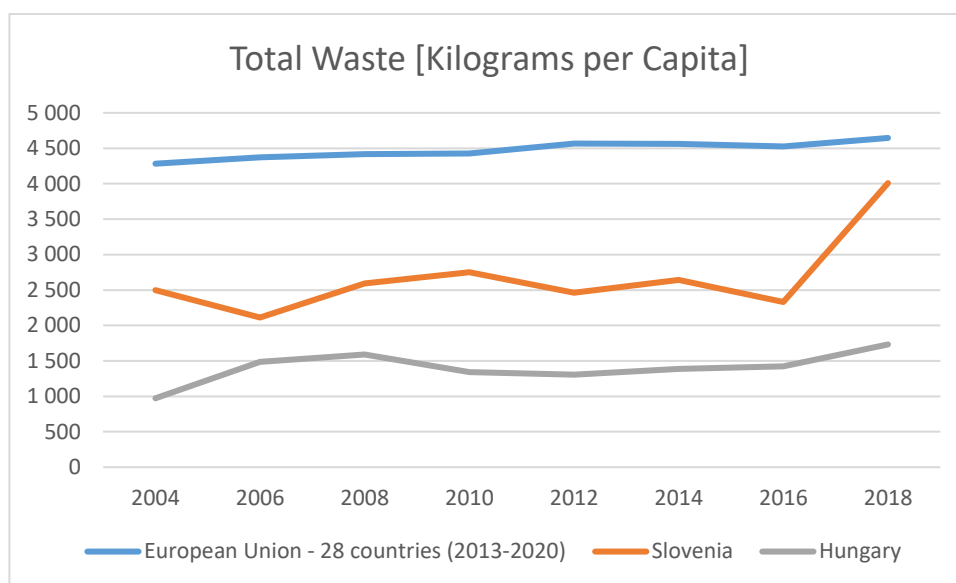


Figure 14: Change in waste generated per capita
(Source: EUROSTAT)

Comparing Slovenia's and Hungary's waste management, it is clear that the share of treatment-types is similar: landfill and deposit treatment are the major ways of waste management, even if they show decreasing trend in both countries. Slovenia is stronger in recycling rate 58% and Hungary is weaker at rate 35% compared to rate of EU 46%¹³. Recycling rates indicate the percentage of municipal waste generated that is recycled, composted and anaerobically digested, and might also include that prepared for reuse. Hungary has much higher rate of waste originated from households, 73% in 2014 and in Slovenia 12% in 2018.

3.2. Relevant environmental conflicts and problems

Based on the above, the following main environmental conflicts and challenges can be identified in the Programme area:

- The programme area has extensive green territories with significant natural values and high rate of biodiversity. However, human activities and climate change affects the entire ecosystem that needs mitigation actions.

¹³ Source: <https://www.eea.europa.eu/data-and-maps/indicators/waste-recycling-1/assessment-1>

- Due to the topography and hydrology of the area, floods occur regularly in the Programme region, particularly along Drava, Dravinja and Mura river despite the past efforts to reduce flood risk. As a result, the risk of flooding remains a major challenge for natural disaster management in the border region, especially on the Slovenian side.
- Extreme weather conditions, posing serious hydrological danger, occur more frequently as a consequence of climate change. The number of annual precipitation days decreases, but that of days when a large amount of precipitation (over 20 mm/day) falls at once increases.¹⁴ As the soil is unable to absorb intense precipitation, surface run-off can significantly increase.
- The border regions water management has particular challenges: decreasing precipitation and its increasingly extreme annual distribution negatively affects ground water and surface water quantity, which, in combination with intensive agriculture, may reduce biodiversity.
- In the hilly and mountainous areas, which are the most prevalent in the area, there is a significant risk of erosion, which, in addition to climate change, is exacerbated by inappropriate cultivation and tillage practices.
- In the assessment according to the criteria of the Water Framework Directive, the physicochemical variables showed 'Good' status for Kebele stream and Lendava, and 'Excellent' for Kerka stream and Mura river. At the same time, during the assessment of the biological elements, all the mentioned watercourses can be said to be of medium status, so the ecological status of the watercourses could be improved in terms of the studied groups of organisms (especially macroscopic invertebrates and coating algae).
- The common specificity of this area are the geothermal waters. Overexploitation of thermal waters was recognised in the last years therefore more sustainable ways of using them are being promoted.
- Although the amount of waste generated per inhabitant per year in the two countries is lower than the EU average, both countries have seen an increase in recent years.
- Comparing Slovenia's and Hungary's waste management, it is clear that the share of treatment-types is similar: landfill and deposit treatment are the major ways of waste management, even if they show a decreasing trend in both countries.

3.3. Likely evolution of the environment without implementation of the Programme

The lack of implementation of the Programme might cause effects of different orientation on the state of the environmental elements and systems.

The lack of implementing the actions explicitly addressing environmental challenges (under priority "*Green border region*") may result in the persistence or possible escalation of existing environmental conflicts. Due to the fact that the Programme's environment-focused actions contribute the most to the preservation of natural and semi-natural habitats, biodiversity, as well as to protection of surface water and reduction of flood risk, the lack of planned developments would primarily have an adverse effect on these environmental systems. However, given the fact that a significant part of environmental development is directed at planning tasks, it is more appropriate to say that the lack of action reduces the chances of protecting environmental elements and systems. The exception is the flood risk, where the inaction (i.e. absence of planning and activities for flood risk reduction and rapid

¹⁴ Source of data: National Adaptation Geo-information System, <https://nater.mbfisz.gov.hu/en>

response to floods) would lead to preservation of the areas of significant flood impact, or even increasing their size or number of their inhabitants.

Contrary to the above, the absence of actions with an environmental risk, limited to tourism development within the Programme, would logically avoid environmental pressures arising potentially from this activity. However, due to the low level of associated environmental risks (see Chapter 4.1 for details), the planned development of tourism is unlikely to have a significant impact on the state of the environment, i.e. the absence of these elements of the Programme would not result in significant environmental benefits.

4. LIKELY ENVIRONMENTAL EFFECTS OF PROGRAMME IMPLEMENTATION

4.1. Potential impacts on environmental systems

The assessment of the potential effects on the environment through the programme implementation has been carried out by environmental systems.

As it was considered important that all potential impacts of the implementation of the Programme were identified in the SEA, we did not pre-identify environmental objectives that would have served as basis for the analysis. On the contrary, all the environmental systems listed in Annex I, point (f) of the SEA Directive have been included in the assessment, which examined how their status is likely to change as a result of the implementation of the Programme. Chapter 4 summarises the results of these assessments. After the full analysis has been carried out it has been possible to identify the environmental systems likely to be most affected by the Programme, either positively or negatively. Environmental objectives have been set only for these systems, based on Programme characteristics and objectives of various strategic documents (strategies, programmes, Action Plans). Our proposals for measuring progress towards these targets are presented in the monitoring plan (Chapter 6).

Environmental system	Objective
Natural resources	Good status of habitat types and qualifying species in protected areas and/or Natura2000 sites affected by the activities of the Programme
Surface water	Achieve good condition of all water bodies
Ground-water	Ensure that overall “good” status of groundwater bodies does not decrease
Flood risk	Ensure that the area of flood risk zones does not increase

Environmental system	Objective
Cultural heritage	Preservation of cultural heritage in good condition
Climate change	Ensure stable or even lower road traffic in the municipalities concerned by tourism development

It is worth noting that the interventions foreseen in **the Programme are not yet defined in detail in terms of location and content, the specific projects will be assessed in the subsequent planning phases.**

4.1.1. Soil

None of the interventions in the Programme have been identified as potentially leading to permanent and significant pressures on soils. The document defines the soils as an important natural resource of Programme area, and several activities are therefore aimed at protecting and improving them, in particular through planning and awareness-raising. Several activities, although not targeted, also have a positive impact on soils, including interventions to improve surface water status and to develop green infrastructure.

A) Actions with no impact on soil

- 2.1. Establishment of joint tourism quality standards and joint tourism destination management models on the basis of cooperation of tourism organisations
- 3.1. Enhance efficient public administration by promoting legal and administrative cooperation and cooperation between citizens, civil society actors and institutions, in particular with a view to resolving legal and other obstacles in border regions
- 3.2. Build up mutual trust, in particular by encouraging people-to-people actions

B) Actions with likely positive effect on soil conditions

Specific objective / Action	Likely positive impact on environmental system			
1.1. Elaboration of cross-border/common analytical studies, strategies, action plans and models for more effective preservation of	Likelihood of the impact	Duration and frequency of the impact	Reversibility of the impact	Geographical scope of the impact
	low	lasting	reversible	regional
	The action also includes an activity aimed directly at improving soil condition: developing action plans to reduce pollution (including soil). Most of the other measures may also have an indirect impact on soil condition, by improving the water balance and physical characteristics of the area's soils, increasing biodiversity, which may improve			

Specific objective / Action	Likely positive impact on environmental system			
natural assets, biodiversity and improvement or maintenance of natural assets	soil organic matter content, etc. However, it is important to stress that the actual positive effects expected from the activities supported under this action are uncertain, as they depend on the implementation of the strategies and plans developed under the action.			
1.2. Implementing joint pilot actions contributing to protecting biodiversity, fostering joint water and disaster management and reduction of pollution	Likelihood of the impact	Duration and frequency of the impact	Reversibility of the impact	Geographical scope of the impact
	medium	lasting	reversible	regional
	Similar to Action 1.1, a positive impact is expected through the improvement of biodiversity and soil water balance, but the magnitude of the impact may be higher than in Action 1.1, as the action includes concrete interventions, not "only" planning and preparation activities.			

C) Actions with adverse effect on soil

None of the actions

D) Actions potentially also causing adverse effect on soil

Specific objective / Action	Potential negative impact on environmental system			
2.2. Implementing pilot actions and joint solutions for development of quality tourism attractions and connected tourism services	Likelihood of the impact	Duration and frequency of the impact	Reversibility of the impact	Geographical scope of the impact
	low	lasting	reversible	local
	<p>Development of tourist attractions can result in pressure on the soils if the intervention generates a significant increase in visitor numbers and motorised traffic. Additional pressures may arise if activities are carried out in previously less visited areas, as mentioned in the action. All the natural resources, including soils, in the areas that have hitherto been less stressed should be protected and their stress avoided.</p> <p>Recommended measures:</p> <ul style="list-style-type: none"> The development of tourist services and attractions should avoid investments that require significant land take. 			

4.1.2. Air

Based on the assessment carried out, **no action under the Programme can be identified that would have an adverse effect on air quality**. On the contrary, support is also given to activities that have the potential to reduce air pollutant emissions and air pollution, even though their primary objective is not to protect air quality. These include strategic planning and awareness-raising activities aimed at preventing pollution of various kinds, and activities aimed at protecting natural assets, in particular vegetation.

A) Actions not affecting air quality

- 2.1. Establishment of joint tourism quality standards and joint tourism destination management models on the basis of cooperation of tourism organisations
- 2.2. Implementing pilot actions and joint solutions for development of quality tourism attractions and connected tourism services
- 3.1. Enhance efficient public administration by promoting legal and administrative cooperation and cooperation between citizens, civil society actors and institutions, in particular with a view to resolving legal and other obstacles in border regions
- 3.2. Build up mutual trust, in particular by encouraging people-to-people actions

B) Actions with a likely positive impact on air quality

Specific objective / Action	Likely positive impact on environmental system			
	Likelihood of the impact	Duration and frequency of the impact	Reversibility of the impact	Geographical scope of the impact
1.1. Elaboration of cross-border/common analytical studies, strategies, action plans and models for more effective preservation of natural assets, biodiversity and improvement or maintenance of natural assets	low	lasting	reversible	regional
	Although the focus of the action is not on protecting air quality, the protection of this environmental element is also mentioned as a possible target area for action plans for reduction of various forms of pollution, which is certainly welcome. Spatiational planning of urban areas with a focus on protecting natural assets, through the development of green spaces, can also contribute to improving air quality in urban areas. However, the scale of the expected positive effects is determined by the fact that the programme supports preparatory activities, and the actual impact will depend on the implementation of the strategies and plans developed and on the use of research results.			
1.2. Implementing joint pilot actions contributing to protecting biodiversity,	Likelihood of the impact	Duration and frequency of the impact	Reversibility of the impact	Geographical scope of the impact
	low	lasting	reversible	regional
In contrast to Action 1.1, air quality protection is not mentioned in the description of this action. Nevertheless, it is worth noting that the development of green				

Specific objective / Action	Likely positive impact on environmental system
fostering joint water and disaster management and reduction of pollution	<p>infrastructure almost always has a positive impact on air quality, which is of course also the case for this action. Awareness-raising activities are also identified as an opportunity for air quality protection, as they can, inter alia, target air quality problems (e.g. burning of grass, polluting heating methods).</p> <p>Recommended measures:</p> <ul style="list-style-type: none"> It is suggested to include among the topics of environmental awareness raising the ways of clean domestic heating and avoiding the burning of duff.

C) Actions with adverse effect on air quality

None of the actions.

D) Actions potentially also causing adverse effect on air quality

None of the actions.

4.1.3. Noise and vibration

Overall, it can be concluded that none of the actions supported under the Programme are expected to have a significant impact on the noise and vibration exposure of the population and wildlife in the area. In general, the maintenance and planting of multi-level vegetation, encouraged by the Programme through various means, will lead to a reduction in noise and vibration, but the actual effects will depend on local conditions, which are not known at the detailedness of the Programme. In contrast, tourism developments have the potential for intermittent, localised, low-level noise impacts, which are, however, of low probability and can be effectively prevented by appropriate measures.

A) Actions not having an effect related to noise and vibration exposure

- 1.2. Implementing joint pilot actions contributing to protecting biodiversity, fostering joint water and disaster management and reduction of pollution
- 2.1. Establishment of joint tourism quality standards and joint tourism destination management models on the basis of cooperation of tourism organisations
- 3.1. Enhance efficient public administration by promoting legal and administrative cooperation and cooperation between citizens, civil society actors and institutions, in particular with a view to resolving legal and other obstacles in border regions

B) Actions with a likely positive impact related to noise and vibration exposure

Specific objective / Action	Likely positive impact on environmental system			
	Likelihood of the impact	Duration and frequency of the impact	Reversibility of the impact	Geographical scope of the impact
1.1. Elaboration of cross-border/common analytical studies, strategies, action plans and models for more effective preservation of natural assets, biodiversity and improvement or maintenance of natural assets	low	lasting	reversible	local
	<p>The action has a very indirect, yet noteworthy, link to noise and vibration pollution. Spatial planning that prioritises the protection of natural assets, by preserving vegetated areas, can lead to the prevention and reduction of noise and vibration pollution for both humans and wildlife.</p> <p>Recommended measures:</p> <ul style="list-style-type: none"> Strategies and plans for protection of natural values, nature conservation and biodiversity to be developed under this action should also address the prevention and mitigation of noise and vibration exposure on wildlife. 			

C) Actions with adverse effect related to noise and vibration exposure

None of the actions.

D) Actions potentially also causing adverse effect related to noise and vibration exposure

Specific objective / Action	Potential negative impact on environmental system			
	Likelihood of the impact	Duration and frequency of the impact	Reversibility of the impact	Geographical scope of the impact
2.2. Implementing pilot actions and joint solutions for development of quality tourism attractions and connected tourism services	low	periodic, yearly	reversible	local
	<p>Development of tourism products and services, if it includes the organisation of musical events, may cause noise pollution to the population and wildlife concerned, locally and intermittently. Events of local importance but with a potential noise impact are also supported under Action 3.2. However, the likely magnitude and likelihood of this impact is low and can be effectively prevented by appropriate measures.</p> <p>Recommended measures:</p> <ul style="list-style-type: none"> During the implementation of the Programme, noise protection should also play a role in the design of tourism products and services (e.g. timing and location of events), taking into account also wildlife considerations. 			
3.2. Build up mutual trust, in particular by encouraging people-to-people actions				

4.1.4. Surface waters and groundwater, including protection areas and risk areas, water regulation

The Programme includes a number of activities specifically for water management purposes, with the main objective of improving the status of surface waters. However, some of these (mainly water retention) may also have an indirect positive impact on groundwater status. The dissemination of ecosystem-based water management approaches, as described above, will contribute to reducing flood peaks and thus water damage, while helping to control soil erosion and prevent landslides in the hilly parts of the programme area. This could help to reduce risks in the areas of potential significant flood risk (APSMR), erosion risk areas and in landslide-prone areas. However, given that some of these are planning and preparatory activities, the actual impacts will depend on the implementation of the plans and programmes. Within the Programme, there is a theoretical possibility of pressures on surface and groundwater in the case of tourism development, the actual occurrence of which cannot be excluded at the detailedness of the Programme, nor can it be justified, but which can be effectively prevented by conscious planning and complementary measures.

A) Actions not having an effect on surface water and groundwater, including protection areas and risk areas

- 2.1. Establishment of joint tourism quality standards and joint tourism destination management models on the basis of cooperation of tourism organisations

The activities supported by this action will focus on improved quality and cooperation in marketing and quality control, i.e. management aspects of tourist activities. This will unlikely affect the water resources and could only indirectly affect activities under specific objective 2.2., where practical projects for quality tourism attractions and connected tourism services in the form of pilot actions are expected.

- 3.1. Enhance efficient public administration by promoting legal and administrative cooperation and cooperation between citizens, civil society actors and institutions, in particular with a view to resolving legal and other obstacles in border regions
- 3.2. Build up mutual trust, in particular by encouraging people-to-people actions

B) Actions with a likely positive impact on surface water and groundwater, including protection areas and risk areas

Specific objective / Action	Likely positive impact on environmental system			
	Likelihood of the impact	Duration and frequency of the impact	Reversibility of the impact	Geographical scope of the impact
1.1. Elaboration of cross-border/common analytical studies, strategies, action plans and models for more effective preservation of	medium	lasting	reversible	regional
	The action typically involves strategic planning and preparatory activities. Instead of the traditional drainage-based water management of previous decades, the action includes preparation of ecologically-based activities based on water retention, which is			

Specific objective / Action	Likely positive impact on environmental system			
natural assets, biodiversity and improvement or maintenance of natural assets	<p>clearly the right solution in terms of protecting surface and especially for smaller watercourses also groundwater quantity, but also helps to improve the quality of the water resources of the area by applying appropriate solutions (e.g. if water retention is designed with a complex spatial approach, i.e. planned interventions affect not only the river bed and floodplain, but also the surrounding agricultural areas, the pollutant load on the water body can be reduced). Moreover, projects that will focus on improved spatial planning of urban areas and rural landscapes with focus on natural protection may not only reduce pressures on water quality, but also help to control or even reduce flood risk, erosion and landslide risk in and near human settlements. Special mention should be made of interventions in transboundary water systems. Interventions to eliminate and prevent water pollution can also greatly improve the status of surface and groundwater. Overall, all the activities in the action can have an improving, but indirect impact on the status of natural waters.</p> <p>In addition, sustainable, ecosystem-based water management approaches can help reduce flood peaks by increasing the rate of stormwater infiltration, reducing the rate of runoff, thereby reducing the damage caused by floods. At the same time, complex catchment-based planning is of particular importance in the application of these solutions, since if interventions aimed at water retention or restoration of natural riverbeds only affect part of the water body or catchment area, slowing down runoff in some sections may lead to an increase in flood risk in other sections. We therefore welcome the fact that the Programme also supports strategic planning for sustainable, ecosystem-based water management practices. The actions for joint management of natural disasters and related coordination mechanisms will clearly contribute to the protection against flood damage. Development of coordination mechanisms is of particular importance for cross-border watercourses in terms of their quality, quantity, flood risk reduction as well as civil protection activities in case floods occur.</p>			
1.2. Implementing joint pilot actions contributing to protecting biodiversity, fostering joint water and disaster management and reduction of pollution	Likelihood of the impact	Duration and frequency of the impact	Reversibility of the impact	Geographical scope of the impact
	high	lasting	reversible	regional
	<p>As in Action 1.1, all measures can contribute to improving the status of surface water and groundwater, and to reducing flood risk. Given the predominance of non-preparatory activities, the magnitude and likelihood of positive impacts is also higher than for Action 1.1. It is considered appropriate that revitalisation of transboundary water systems, improvement of water quality, development of ecosystem-based water management systems and water retention measures are all included in the Programme. Indirectly, the other activities of the action (in particular the development of green infrastructure) can also have a positive impact on the status of natural waters, protection areas and also on prevention of floods by reducing the rate of run-off. Awareness raising and prevention activities to fight against various forms of pollution might on the long term contribute to improved water quality, for example in case of activities for farmers to reduce agricultural pollution. The Programme contributes to the prevention and reduction of damage caused by floods and flash floods mainly by</p>			

Specific objective / Action	Likely positive impact on environmental system
	<p>supporting the development of joint intervention protocols and monitoring procedures to prevent natural disasters. Recommended measure:</p> <ul style="list-style-type: none"> To maximise the positive impacts, it is proposed to implement green and blue infrastructure activities in a coordinated way (e.g., on the same site, based on a joint planning). It is recommended that non-structural measures of the Flood Risk Reduction Plan are taken into account to improve flood conditions and achieve synergistic positive effects in areas of significant flood impact.

C) Actions with adverse effect on surface waters and groundwater, including protection areas and risk areas

None of the actions.

D) Actions potentially also causing adverse effect on surface waters and groundwater, including protection areas and risk areas

Specific objective / Action	Potential negative impact on environmental system			
2.2. Implementing pilot actions and joint solutions for development of quality tourism attractions and connected tourism services	Likelihood of the impact	Duration and frequency of the impact	Reversibility of the impact	Geographical scope of the impact
	low	lasting	reversible	local
	<p>In general, development of tourist destinations linked to natural heritage and natural areas may in some cases have a negative impact on water resources due to increased visitor numbers. However, at the level of detail of the Programme, without precise knowledge of the interventions, it is not possible to determine whether these potential negative impacts could actually occur for the action under consideration. The pressures generated by expanding access infrastructure and increased traffic are particularly damaging to wetlands and water-related destinations in general. The greatest negative impacts could come from the potential development of aquatic tourism and the development of spa tourism. The environmental impacts of thermal tourism should be highlighted, as current practice shows that the exploitation of thermal water is, in most cases, a major pressure on both groundwater and surface water resources. However, at the level of detail of the Programme, it is not certain that such tourism development will be supported at all under the Programme. Their emphasis is more justified by the precautionary principle. Inappropriate siting of tourism investments (e.g. building in flood-prone areas, construction of structures that restrict water run-off, e.g. access roads/paths and bridges) can contribute to increased flood damage. Recommended measures:</p> <ul style="list-style-type: none"> During the implementation of the Programme, projects aimed at the development of tourism products, services and attractions should include some small-scale complementary measures to mitigate the environmental 			

Specific objective / Action	Potential negative impact on environmental system
	<p>impacts of tourism (e.g. creating opportunities for rainwater or/and greywater utilisation; developing additional infrastructure (e.g. toilets, waste disposal facilities) to cope with increased visitor numbers).</p> <ul style="list-style-type: none"> • In case of the development of tourist facilities, it is proposed to maintain or establish several metres of native species vegetation along the banks of surface waters and to remove invasive non-native species. • We propose that all developments (e.g. cycle paths) with impacts on the water regime or water status (e.g. aquatic and coastal lands, water protection areas and endangered areas) should be subject to a water consent in accordance with the Water Act of the Republic of Slovenia (Art. 150).

4.1.5. Biodiversity, flora, fauna, habitats, Natura 2000 territories, nature reserves

The Programme does not support major infrastructural developments; periodic pressure on habitats is likely to be caused only by some types of tourism actions. Consequently, no significant negative impacts on the status of biodiversity or protected or Natura 2000 sites are expected. At the same time, the Programme also supports a number of activities specifically aimed at habitat conservation and improving biodiversity, where there is a high likelihood of positive and lasting impacts. However, for activities supporting planning, the actual realisation of these impacts will depend on the implementation of the plans prepared. It is also worth noting that interventions involving water management and pollution reduction may also indirectly improve the status of habitats and protected areas and as well as increase the biodiversity of the area concerned.

In terms of meeting the requirements of Article 6(3) of Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora, **our findings** presented in the following sub-chapters **indicate that the measures included in the Programme are not expected to have a significant impact on the conservation status of the species and habitat types on which the Natura 2000 sites are based.** However, the level of detail of the Programme does not allow for more specific statements and recommendations than those set out below. This is because the Programme, by its nature, does not contain precise information on the expected locations and details of the developments. However, in the case of investments in specific Natura 2000 sites, the final beneficiaries are required to carry out a detailed Natura 2000 impact assessment, which will allow the identification and prevention of potential risks. Protection against potential damage is also ensured by the legislation of the participating Member States, which contain detailed rules on the interventions that can be carried out in Natura 2000 sites.¹⁵

¹⁵ Republic of Slovenia: Nature Protection Act (Zakon o ohranjanju narave - ZON; Official Gazette of the Republic of Slovenia, No 56/99)

Hungary: Government Decree No 275/2004 (X. 8.) on nature conservation sites of European Community importance

A) Actions not having an effect on biodiversity, flora, fauna, and Natura 2000 territories, nature reserves

- 2.1. Establishment of joint tourism quality standards and joint tourism destination management models on the basis of cooperation of tourism organisations
- 3.1. Enhance efficient public administration by promoting legal and administrative cooperation and cooperation between citizens, civil society actors and institutions, in particular with a view to resolving legal and other obstacles in border regions
- 3.2. Build up mutual trust, in particular by encouraging people-to-people actions

B) Actions with a likely positive impact on biodiversity, flora, fauna, and Natura 2000 territories, nature reserves

Specific objective / Action	Likely positive impact on environmental system			
1.1. Elaboration of cross-border/common analytical studies, strategies, action plans and models for more effective preservation of natural assets, biodiversity and improvement or maintenance of natural assets	Likelihood of the impact	Duration and frequency of the impact	Reversibility of the impact	Geographical scope of the impact
	medium	lasting	reversible	regional
	<p>The action typically involves planning and preparatory activities, which can have an indirect impact if they enter the implementation phase once they have been completed. Support for research and strategic planning activities specifically related to biodiversity is also foreseen. But all actions related to water management, pollution reduction, spatial planning and climate change can also have a positive impact on the condition of habitats, protected areas, the quality of ecological services and biodiversity.</p> <ul style="list-style-type: none"> • It is proposed that the programme also supports preparatory activities for the designation of new protected areas. 			
1.2. Implementing joint pilot actions contributing to protecting biodiversity, fostering joint water and disaster management and reduction of pollution	Likelihood of the impact	Duration and frequency of the impact	Reversibility of the impact	Geographical scope of the impact
	high	lasting	reversible	regional
	<p>The action also includes interventions specifically aimed at improving biodiversity. Development of green infrastructure and improving biodiversity will significantly increase the organic matter content of soils, which will increase the water storage capacity of soils and improve the quality of soil-related ecosystem services, thus complementing the positive effects of conservation interventions.</p> <p>Encouraging ecosystem-based water management and water retention and improving the quality of surface water bodies will lead to improvements in the status of habitats associated with natural water bodies.</p>			

C) Actions with adverse effect on biodiversity, flora, fauna, and Natura 2000 territories, nature reserves

None of the actions

D) Actions potentially also causing adverse effect on biodiversity, flora, fauna, and Natura 2000 territories, nature reserves

Specific objective / Action	Potential negative impact on environmental system			
	Likelihood of the impact	Duration and frequency of the impact	Reversibility of the impact	Geographical scope of the impact
2.2. Implementing pilot actions and joint solutions for development of quality tourism attractions and connected tourism services	low	lasting	reversible	local
	<p>Development of destinations linked to natural heritage and natural areas can have a negative impact on biodiversity, flora and fauna and protected areas. Increased visitor numbers and traffic can have a disturbing effect on nature. Additional pressures may arise if interventions are carried out in previously less visited areas, as mentioned in the action. All the natural resources of the less stressed areas should be protected, and their stress avoided. We therefore welcome the fact that, as a result of the July 2022 revision of the Programme, the need for eco-friendly tourism development is much more emphasised than in previous versions for actions supported under Priority 2. Recommended measures:</p> <ul style="list-style-type: none"> Tourism development should always consider the protection of ecological networks (core areas, ecological corridors, buffer zones). Pressures on protected areas should be avoided through appropriate siting of facilities and careful design of tourism products and services. 			

4.1.6. Climate

With regard to climate, the expected effects of the planned actions are worth to be examined from two perspectives: first, their consequences on greenhouse gas emissions, second, their role in facilitating adaptation to the increasingly extreme climatic conditions.

Overall, the Programme contributes more to effective adaptation to the already unavoidable impacts of climate change than to their mitigation. The former objective is supported by a number of activities, mainly in the areas of habitat protection, water management and flood protection. In some of these, climate adaptation is also an explicit objective (e.g. research on the impact of climate change on biodiversity), while in others the nature of the action is clearly in line with adaptation considerations (e.g. promoting water retention). Activities to develop green infrastructure and protect plant communities, including forests, are also beneficial for climate protection, as they remove atmospheric carbon dioxide. However, development of tourism, due to increased transport demand, implies the potential for a small increase in greenhouse gas emissions, which can be mitigated by complementary measures.

A) Actions not having an effect on climate as an environmental system

- 2.1. Establishment of joint tourism quality standards and joint tourism destination management models on the basis of cooperation of tourism organisations
- 3.2. Build up mutual trust, in particular by encouraging people-to-people actions

B) Actions with a likely positive impact on climate as an environmental system

Specific objective / Action	Likely positive impact on environmental system			
	Likelihood of the impact	Duration and frequency of the impact	Reversibility of the impact	Geographical scope of the impact
1.1. Elaboration of cross-border/common analytical studies, strategies, action plans and models for more effective preservation of natural assets, biodiversity and improvement or maintenance of natural assets	medium	lasting	reversible	regional
	<p>The action is of great importance for effective adaptation to the local impacts of climate change, for two reasons. First, the focus areas of the action plans and strategies being developed are the environmental systems most affected by climate change: natural habitats, surface water and through the water retention the groundwater. On the other hand, the research, modelling and monitoring activities supported under this action are an essential basis for successful climate change adaptation, i.e. planning based on local assessments and data. Of particular importance among the local impacts of climate change is the increase in the frequency of extreme hydrological events (floods, floods) and the increase in erosion, also linked to extreme annual rainfall patterns. By supporting the establishment of sustainable, ecosystem-based water management practices, the Programme will also contribute to the prevention of these problems. We welcome the fact that the assessment of the impacts of climate change on biodiversity is explicitly mentioned as one of the possible intervention areas of the action. The emphasis on the importance of water retention in water management is also a positive development. The vulnerability of the population to climate change is reduced by improving the management of natural-related disasters, which are becoming more frequent. The Programme does not specify the type of natural disasters. Given that the main challenges in the Programme area are floods, flash floods and storm water run-off, it is assumed that this will be the primary target area of the action, along with the prevention and management of vegetation fires, and other types of natural disasters (e.g. erosion), which are of course also important.</p> <p>Recommended measures:</p> <ul style="list-style-type: none"> • Strategies and action plans to be developed under the Programme should be based on projected climate conditions for the coming decades and pay particular attention to the possibilities for adaptation to them. 			
1.2. Implementing joint pilot actions	Likelihood of the impact	Duration and frequency of the impact	Reversibility of the impact	Geographical scope of the impact
	high	lasting	reversible	regional

Specific objective / Action	Likely positive impact on environmental system			
contributing to protecting biodiversity, fostering joint water and disaster management and reduction of pollution	<p>Some of the activities carried out under this action are directly related to climate change adaptation. Elaboration of joint protocols, monitoring, intervention schemes for better management of nature-related disasters, as well as the implementation of ecosystem-based water management projects favouring water retention, are all relevant in adapting to an increasingly extreme climate. In addition, although not specified in the action, awareness-raising activities also offer an opportunity to transfer knowledge on climate change.</p> <p>Recommended measures:</p> <ul style="list-style-type: none"> It is proposed to add climate mitigation and adaptation (or in general, climate change related knowledge) to the target areas of awareness-raising activities. 			
3.1. Enhance efficient public administration by promoting legal and administrative cooperation and cooperation between citizens, civil society actors and institutions, in particular with a view to resolving legal and other obstacles in border regions	Likelihood of the impact	Duration and frequency of the impact	Reversibility of the impact	Geographical scope of the impact
	low	lasting	reversible	local
	<p>Although the action does not aim to mitigate climate change, it is worth noting that it also provides an opportunity to support, joint cooperation activities in the field of low-carbon initiatives (energy efficiency, renewable energy, circular economy). Although these are not expected to have a significant direct climate change impact, they could form the basis for future developments in the region to this end.</p>			

C) Actions with adverse effect on climate as an environmental system

None of the actions.

D) Actions potentially also causing adverse effect on climate as an environmental system

Specific objective / Action	Potential negative impact on environmental system			
2.2. Implementing pilot actions and joint solutions for development of quality tourism attractions and	Likelihood of the impact	Duration and frequency of the impact	Reversibility of the impact	Geographical scope of the impact
	low	lasting	reversible	regional
	<p>Development of tourism products, services and attractions, their installation, operation and, above all, the transport needs associated with their use, generate greenhouse gas emissions. Of these sources of emissions, only an increase in transport demand is expected to result from the implementation of the activities planned under action 2.2,</p>			

Specific objective / Action	Potential negative impact on environmental system
connected tourism services	<p>as the programme is not expected to support the development of large-scale tourism facilities requiring significant energy consumption. However, improving accessibility to tourist attractions and the inclusion of less known areas in the tourist offer are likely to increase transport demand. The extent of this cannot be determined at the detailness of the programme. However, based on the fact that motorised road traffic for tourism purposes is already predominant in the region and that no large-scale developments are expected due to the limited funding available, it is unlikely that car traffic on the roads concerned will increase by more than a few percent on average per year. From this point of view, it is useful that latest version of Programme also supports the promotion of sustainable mobility solutions in cross-border tourism product development (biking, hiking, use of public transport).</p> <p>Recommended measures:</p> <ul style="list-style-type: none"> • The Programme should emphasize that tourism can only be developed in an environmentally sustainable way. • It is recommended that, during the implementation of the Programme, projects aimed at the development of tourism products, services and attractions should include complementary activities to promote low-emission modes of transport (e.g. development of low-volume cycling infrastructure, development of cycling programmes, promotion of public transport, etc.). The fact that the area covered by the Programme has a long tradition of cycling and active and eco-tourism makes this much easier to achieve.

4.1.7. Built environment, settlement surroundings, landscape and cultural heritage

Overall, no actions within the IP SI-HU 2021 – 2027 have been identified that would endanger the built and urban environment, cultural heritage, and landscape values. On the contrary, implementation of majority of the planned developments is expected to have a positive effect on the state of the systems and values in question. This is due to the reduction of the vulnerability of the built environment to nature-related disasters, the development of strategic plans for protection of natural and landscape values, and the preservation of cultural heritage elements for tourism and local community development purposes.

A) Actions not having an effect on the built environment, settlement surroundings, landscape and cultural heritage:

- 2.1. Establishment of joint tourism quality standards and joint tourism destination management models on the basis of cooperation of tourism organisations
- 3.1. Enhance efficient public administration by promoting legal and administrative cooperation and cooperation between citizens, civil society actors and institutions, in particular with a view to resolving legal and other obstacles in border regions

B) Actions with a likely positive impact on the built environment, settlement surroundings, landscape and cultural heritage

Specific objective / Action	Likely positive impact on environmental system			
1.1. Elaboration of cross-border/common analytical studies, strategies, action plans and models for more effective preservation of natural assets, biodiversity and improvement or maintenance of natural assets	Likelihood of the impact	Duration and frequency of the impact	Reversibility of the impact	Geographical scope of the impact
	low	lasting	reversible	regional
	The expected positive impact of the action on the built environment, and landscape is due first of all to the fact that it explicitly supports, among others, the development of spatial planning that takes into account natural values, both in urban and rural environments. However, as with all planning activities, the actual impact depends on the implementation of the action plans and strategies to be developed, so that the likelihood of its occurrence can only be assessed with great uncertainty at present. In addition to the above, it should be noted that the action will not have a significant impact on any of the cultural heritage elements, but can nevertheless play a role in improving the quality of the natural environment and landscape of heritage sites.			
1.2. Implementing joint pilot actions contributing to protecting biodiversity, fostering joint water and disaster management and reduction of pollution	Likelihood of the impact	Duration and frequency of the impact	Reversibility of the impact	Geographical scope of the impact
	medium	lasting	reversible	regional
	Among the activities of the action, improving management of nature-related disasters directly contribute to the preservation and, in extreme cases, the maintenance of buildings and structures (including monuments, archaeological heritage and national heritage sites). The other activities of the action (cross-border green infrastructure, development of ecological corridors; protection and sustainable use of watercourses) have less impact on the built environment but will undoubtedly contribute to the protection of the landscape values of the area covered by the Programme.			
3.2. Build up mutual trust, in particular by encouraging people-to-people actions	Likelihood of the impact	Duration and frequency of the impact	Reversibility of the impact	Geographical scope of the impact
	medium	lasting	reversible	local
	Cultural partnerships and cultural events planned under this action provide an opportunity to preserve local cultural heritage and increase their acceptance by local communities.			

C) Actions with adverse effect on the built environment, settlement surroundings, landscape and cultural heritage

None of the actions

D) Actions potentially also causing adverse effect on the built environment settlement surroundings, landscape and cultural heritage

None of the actions.

E) The nature of effects on the built environment, settlement surroundings, landscape, and cultural heritage cannot be determined at the planning level of the Programme

Specific objective / Action	Environmental impact cannot be determined on the basis of the plan			
	Likelihood of the impact	Duration and frequency of the impact	Reversibility of the impact	Geographical scope of the impact
2.2. Implementing pilot actions and joint solutions for development of quality tourism attractions and connected tourism services	low	lasting	reversible	local
	<p>Among the activities under action 2.2., quality improvement of tourist attractions and the exploitation of unexplored tourism potential could have a significant impact on the state of the built environment and cultural heritage. It is important to note, however, that the nature of this impact may vary depending on the way of Programmes's implementation. Development of local cultural heritage sites (archaeological heritage, monuments, national monuments, their settings and cultural goods) for tourism purposes, if carried out in a way that includes cultural heritage protection aspects, will obviously have a positive impact on their condition. The promotion of cultural heritage can also contribute to their preservation and revitalisation. At the same time, the increase in tourism threatens to lead to the phenomenon of 'over-tourism', which, in extreme cases, could jeopardise the physical conservation of local heritage elements. However, due to the small scale of the infrastructural improvements, this impact is not expected to be significant. It is also worth noting that the development of local attractions and tourist products could indirectly contribute to the preservation of the intellectual/non-material heritage (traditions, local customs), in addition to the cultural heritage elements, by raising awareness of their value among the local population.</p> <p>Recommended measure:</p> <ul style="list-style-type: none"> The design of tourism facilities must in all cases be largely adapted to the landscape and townscape, especially in cases where the object affected by the development is located at landmarks (e.g. lookout points). Cultural heritage aspects must be fully taken into account in the design. As the text of the Programme suggests that Action 2.2 puts more emphasis on tourism development than on enhancing the role of culture, it is proposed that in the implementation of the Programme, priority is given to developments for the latter objective, at least in the context of tourism development (e.g. restoration and presentation of cultural heritage). 			

4.1.8. Human health, and quality of life

Overall, we have not identified any actions within the Programme that would threaten the mental and physical health of people living in the area covered by the Programme, or would contribute to increasing health inequalities. That means that the level of risk to human health is unlikely to be higher than covered by the environmental limits set for the legislation. On the contrary, the majority of the planned developments are expected to have positive impacts on mental, physical, emotional and social well-being. This is due to a number of factors, of which the development of natural habitats and cross-border cooperation in the health, social and cultural fields are of the greatest importance, since they contribute directly, even if only to a small extent due to the scale of the developments, to maintaining and improving the physical and mental health of the people living in the area. In addition, maintaining and improving the condition of natural habitats has a direct impact on the physical and mental health of people living in and visiting the area. It is expected that joint activities in partnerships across the border will help to establish and/or strengthen social networks in the Programme area and provide for better understanding, as well as joint efforts to improve the quality of life in the Programme area.

However compliance with the limit values does not necessarily mean that there are no health effects at all. There is also a risk of some negative impacts on tourism development, particularly in two types of location: around tourist attractions which are already very busy, and in the areas which the Programme intends to include as tourist destinations. However, the proposed activities are not expected to result in such a large increase in visitor numbers that would degrade the quality of life for a wide range of the population. At the same time, tourism development contributes to increasing the incomes of local population, thereby raising their standard of living, reducing the outward migration and creating a strong local society proud of its traditions and values which is key to mental, physical, emotional and social well-being.

A) Actions not having an effect on human health and quality of life

2.1. Establishment of joint tourism quality standards and joint tourism destination management models on the basis of cooperation of tourism organisations

B) Actions with a likely positive impact on human health and quality of life

Specific objective / Action	Likely positive impact on environmental system			
	Likelihood of the impact	Duration and frequency of the impact	Reversibility of the impact	Geographical scope of the impact
1.1. Elaboration of cross-border/common analytical studies, strategies, action plans and models for more effective	low	lasting	reversible	regional
	The activities under action 1.1. have a positive, but indirect impact on the health and quality of life of the population living in the Programme area. The protection of natural			

Specific objective / Action	Likely positive impact on environmental system			
preservation of natural assets, biodiversity and improvement or maintenance of natural assets	assets, preservation of ecosystem services, reduction of pollution of environmental elements and improvement of disaster management (for example, initiatives for joint flood risk management and flood response) are objectives which serve to safeguard the physical and mental health of the inhabitants and to preserve their safety of life and property. However, these effects can only be identified as possibilities, since their realisation depends on the details of the strategies and action plans to be developed and, above all, on their implementation.			
1.2. Implementing joint pilot actions contributing to protecting biodiversity, fostering joint water and disaster management and reduction of pollution	Likelihood of the impact	Duration and frequency of the impact	Reversibility of the impact	Geographical scope of the impact
	low	lasting	reversible	local
	The impacts of action 1.1 on health and quality of life are also relevant in this case, with the difference that the probability of the indicated impacts is higher in the case of action 1.2, since these activities are not of planning nature but aimed at implementing concrete improvements. However, it is worth noting that the planned developments are concentrated in a few areas of a specific watercourse or natural area, so that only a small part of the population covered by the Programme will benefit from their positive effects. The quality of life of the wider population is expected to be affected by activities aimed at improving management of nature-related disasters (e.g. flood prevention and flood protection, likely to reduce the areas of significant flood impact).			
3.1. Enhance efficient public administration by promoting legal and administrative cooperation and cooperation between citizens, civil society actors and institutions, in particular with a view to resolving legal and other obstacles in border regions	Likelihood of the impact	Duration and frequency of the impact	Reversibility of the impact	Geographical scope of the impact
	low	lasting	reversible	local
	Although the impact of the action 3.1. on human health and quality of life may be very indirect, they are still worth mentioning. The exploration of opportunities and areas for cross-border cooperation in social and health services, as well as joint strategic planning on social issues, could provide a basis for future cooperation in the social and health field and thus for more effective care for the population of the region and a reduction of health inequalities.			
3.2. Build up mutual trust, in particular by encouraging people-to-people actions	Likelihood of the impact	Duration and frequency of the impact	Reversibility of the impact	Geographical scope of the impact
	medium	lasting	reversible	local
	Activities under this action will directly contribute to maintaining and improving the quality of life and the physical and mental health of the population, partly through the provision of community experiences and partly through healthy lifestyle programmes.			

Specific objective / Action	Likely positive impact on environmental system
	It is likely that some of these activities will either directly target or just involve minorities and vulnerable groups in the Programme area.

C) Actions with adverse effect on human health and quality of life

None of the actions.

D) Actions potentially also causing adverse effect on human health and quality of life

None of the actions.

E) The nature of effects on human health and quality of life cannot be determined at the planning level of the Programme

Specific objective / Action	Environmental impact cannot be determined on the basis of the plan			
2.2. Implementing pilot actions and joint solutions for development of quality tourism attractions and connected tourism services	Likelihood of the impact	Duration and frequency of the impact	Reversibility of the impact	Geographical scope of the impact
	low	lasting	reversible	local
	<p>The impacts of tourism development on human health and quality of life may vary from one stakeholder to another. For tourists, developments typically have positive impacts on mental, physical health, although the extent depends on the type of tourism (most favourable are active and ecotourism, and visits to spas and health resorts). For the local population, there are clear positive impacts on the quality of life of those who benefit from tourism and those who use tourism-related services (see economic benefits and their positive social impacts). However, any increase in the number of visitors may be a disturbing factor for other residents, increasing the risk of health hazards such as air pollution, noise and vibration for people living along tourist corridors and attractions. However, the proposed activities are not expected to result in such a large increase in visitor numbers that would degrade the quality of life for a wide range of the population. On the contrary, positive consequences for the majority of the population are likely, particularly in terms of mental health and improvement of the local economic situation. The development of new tourist destinations and their integration into the region's tourism offer in less developed socio-economic areas will create job opportunities for local people and thus contribute to the strengthening of local communities, which is a key to the mental, physical, emotional, and social well-being of residents. Moreover, most of the Programme Area is rural, with only several larger tourist resorts which are mostly wellness/spa centres and thus striving for low volume, non-conflicting activities. Recommended measures:</p> <ul style="list-style-type: none"> • Among the target groups of the tourism services and products to be developed, it is proposed to include the population of the region (see promotion of regional and sub-regional tourism). 			

Specific objective / Action	Environmental impact cannot be determined on the basis of the plan
	<ul style="list-style-type: none"> It is proposed not to provide support for tourism development in quiet areas when implementing the Programme.

4.1.9. Environmental consciousness

Overall, no actions within the Programme have been identified that could in any way damage the environmental consciousness level of those living in the area covered by the Programme or even its visitors. On the contrary, most of the planned developments are to raise the level of environmental consciousness either in a targeted way or as a spillover effect.

The various actions' effects on environmental consciousness are assessed in a framework being different from the above chapters. It is because this effect is the result of different processes at each and every activity.

A) Awareness raising actions with a direct impact on environmental consciousness

Under action 1.2. the Programme supports specifically environmental protection related awareness raising activities. The actual effects depend on the quality, quantity and frequency of the programmes organized, which is impossible to estimate in advance; however, involving professionals and organizations with relevant experience and references in the implementation will increase the environmental awareness raising impact of the initiatives.

B) Actions with an indirect impact on environmental consciousness

In addition to the above mentioned activity specifically aimed at awareness raising, the Programme also includes a number of actions which indirectly call the attention of people living in the area (or at least those affected by the given projects) on the importance of protecting environmental elements via providing information on, preserving and protecting the local environmental, natural, landscape and cultural values and heritage. This category includes the following actions of the Programme:

- 1.1. Elaboration of cross-border/common analytical studies, strategies, action plans and models for more effective preservation of natural assets, biodiversity and improvement or maintenance of natural assets
- 3.2. Build up mutual trust, in particular by encouraging people-to-people actions

C) Actions with no effect or without an identifiable effect on environmental consciousness

Finally, the Programme of course also includes actions that are not directly or indirectly related to formation of environmental consciousness. At the same time, even in case of these, it may arise that these also have the potential to raise the level of population's environmental consciousness to a certain extent (e.g.: development of tourism attraction based on natural values, low-carbon initiatives). The following actions fall into this category:

- 2.1. Establishment of joint tourism quality standards and joint tourism destination management models on the basis of cooperation of tourism organisations
- 2.2. Implementing pilot actions and joint solutions for development of quality tourism attractions and connected tourism services
- 3.1. Enhance efficient public administration by promoting legal and administrative cooperation and cooperation between citizens, civil society actors and institutions, in particular with a view to resolving legal and other obstacles in border regions

Although the above actions, in their current form, have no or only indirect impact on environmental consciousness, they have the potential to improve them. This can be achieved by giving priority to environmental considerations when implementing the actions, especially in the case of tourism developments.

In line with the above, it is proposed that environmental aspects should be emphasised in activities aimed at the overall development of tourism in the area (see Action 2.1, e.g. in the context of standard setting, awareness raising programmes). For pilot activities under Action 2.2, it is recommended that thorough analysis and integration of environmental aspects into the project is considered as an advantage in the evaluation process.

4.2. Summary of environmental impacts

The table below summarizes the environmental impacts of each action presented in detail in Chapter 4.1. The categories used are based on the Slovenian Decree laying down the content of environmental report and on detailed procedure for the assessment of the effects on certain plans and programmes on the environment (Uredba o okoljskem poročilu in podrobnejšem postopku celovite presoje vplivov izvedbe planov na okolje, Official Gazette of Republic of Slovenia, no. 73/05)

Actions	Soil	Air	Noise, vibration	Water	Natural values	Climate	Built env., landscape, cult. heritage	Human health	Env. con- sciousness
1.1. Elaboration of cross-border/common analytical studies, strategies, action plans and models for more effective preservation of natural assets, biodiversity and improvement or maintenance of natural assets	A	A	A	A	A	A	A	A	A
1.2. Implementing joint pilot actions contributing to protecting biodiversity, fostering joint water and	A	A	A	A	A	A	A	A	A

Actions	Soil	Air	Noise, vibration	Water	Natural values	Climate	Built env., landscape, cult. heritage	Human health	Env. con- sciousness
disaster management and reduction of pollution									
2.1. Establishment of joint tourism quality standards and joint tourism destination management models on the basis of cooperation of tourism organisations	A	A	A	A	A	A	A	A	A
2.2. Implementing pilot actions and joint solutions for development of quality tourism attractions and connected tourism services	B	A	B	C	C	A	X	X	A
3.1. Enhance efficient public administration by promoting legal and administrative cooperation and cooperation between citizens, civil society actors and institutions, in particular with a view to resolving legal and other obstacles in border regions	A	A	A	A	A	A	A	A	A
3.2. Build up mutual trust, in particular by encouraging people-to-people actions	A	A	B	A	A	A	A	A	A

Legend

A	<i>no impact or positive impact on environmental objectives</i>
B	<i>the negative impact on environmental objectives is insignificant</i>
C	<i>the impact on environmental objectives is insignificant due to the implementation of mitigation measures</i>
D	<i>the negative impact on environmental objectives is significant</i>
E	<i>the negative impact on environmental objectives is devastating</i>
X	<i>the nature of the impact on environmental objectives cannot be determined</i>

Figure 15: Environmental impacts of the actions in IP SIHU 2021-2027

Based on the results of the environmental assessment performed, it can be concluded that **the Programme includes relatively few actions with significant environmental impacts**. This is mainly due to the limited number of intervention areas and infrastructure developments covered by the Programme.

At the same time, **we welcome the fact that among the few intervention areas, the protection of the environment, nature and landscape is strongly represented**. The vast majority of interventions aimed at reducing the exploitation of and pressure on environmental elements and systems, as well as to improve the quality of human life, harmonized with environmental interests are included in the priority "*Green Border Region*". Some of the activities are of a planning and preparatory nature, i.e. they are aimed at developing action plans and strategies, developing monitoring systems and implementing research programmes mainly for water management and nature conservation. Their importance for environmental protection and nature conservation is unquestionable, but it is almost impossible to assess precisely what impact they may have on the quantitative and qualitative status of individual environmental elements. As planning tasks, awareness-raising programmes can also play an important role. However, given that the environmental effectiveness of these actions is influenced by a number of external factors being independent from the Programme, only a moderate environmental impact has been attributed to such actions in the evaluation.

Within the entire Programme, the possibility of potentially resulting in an increased exploitation of and pressure on environmental elements and systems might come up in case of only one intervention, that is tourism development. It is well known that tourism can have unfavourable environmental effects, above all by raising the demand for transport, operating tourism facilities, disturbing natural, semi-natural habitats, flora and fauna. At the same time, the volume of developments that can be implemented during the Programme **suggests that the Programme's tourism development actions will not lead to a large-scale use and stress on the environmental elements and systems**, especially because it focuses on increasing quality and supporting micro-tourism. In this context, it is worth mentioning that the Programme places great emphasis on the need for eco-friendly way of implementation of its tourism-related activities. However, a special attention will have to be paid on its prevention when implementing the Programme, for which several recommendations are provided by the current environmental report. Full implementation of those recommendations and their continuation in the future would ensure that no negative impact occur.

Finally, **it is worth mentioning that many activities of the Programme are basically not related at all to the protection of environmental values**. In particular, both actions under priority "*Cooperating border region*" fall into this category. But even in these cases, some activities can contribute, even if only locally, to the conservation of environmental elements and systems, in particular the built environment and cultural heritage elements (e.g. joint cooperation activities in the field of low-carbon initiatives, trust building activities in the field of culture).

Considering the expected impacts driven by the Programme on various environmental elements and systems, it can be concluded that **surface and groundwater, as well as nature seem to be the most positively affected**. In addition to improving the quantity and quality of water, **the Programme supports also flood protection**. This will be achieved both directly, by improving natural disaster management, and indirectly, by promoting a sustainable, ecosystem-based approach to water management, which, if planned in a complex way, can contribute to reducing flood peaks and thus mitigate the damaging effects of floods. A further positive environmental impact of the programme could be that **its implementation could support the adaptation to the already unavoidable impacts of climate change**. Climate adaptation aspects can be identified mainly in the activities on water management (see e.g. the emphasis on the importance of water retention), as well as in research on biodiversity conservation (modelling biodiversity impacts of climate change, elaboration of pilots for testing possible solutions), and in developments to improve protection against nature-related disasters. By implementing the Programme, the least progress is expected in the field of air pollution, as well as noise and vibration exposure prevention, which is, however, partly counteracted by the fact that these pressures are not considered to be significant in the programme area.

The results of the strategic environmental assessment carried out show that actions of the Programme are not expected to have any significant negative environmental impact due to their nature, i.e.:

- they DO NOT lead to significant greenhouse gas (GHG) emissions (*climate mitigation*);
- they DO NOT lead to an increased adverse impact of the current climate and the expected future climate, on the activity itself or on people, nature or assets (*climate adaptation*);
- they ARE NOT detrimental to the good status or the good ecological potential of bodies of water, including surface water and groundwater, or to the good environmental status of marine waters¹⁶ (*sustainable use and protection of water and marine resources*);
- they DO NOT lead to significant inefficiencies in the use of materials or in the direct or indirect use of natural resources, they DO NOT significantly increase the generation, incineration or disposal of waste, and the long-term disposal of waste may DO NOT cause significant and long-term environmental harm (*circular economy, including waste prevention and recycling*);
- they DO NOT lead to a significant increase in emissions of pollutants into air, water or land (*pollution prevention and control*);
- they ARE NOT significantly detrimental to the good condition and resilience of ecosystems, or detrimental to the conservation status of habitats and species, including those of Union interest (*protection and restoration of biodiversity and ecosystems*)

Overall, it can be concluded that actions of the Interreg Programme Slovenia-Hungary 2021-2027 would do no significant harm to environmental objectives within the meaning of Article 17 of Regulation (EU) No 2020/852” (“The Taxonomy Regulation”).

However, it is worth noting that the interventions foreseen in the Programme are not yet defined in detail in terms of location and content, the specific projects will be assessed in the subsequent planning phases.

¹⁶ This is a verbatim quotation of a Taxonomic Regulation condition. However, it should be noted that the programme area is not located by the sea.

5. RECOMMENDED MEASURES TO PROTECT ENVIRONMENT, GUIDELINES FOR LOWER HIERARCHY LEVELS

As stated above, the implementation of the Programme is not expected to lead to a significant deterioration of the state of the environment. On the contrary, it will help to resolve and mitigate many existing environmental conflicts. Nevertheless, the implementation manner of the Programme play a key role in achieving the positive environmental impacts. The following is a summary of our proposals in this regard, grouped according to the priorities of the Programme (justification of proposals is provided in Chapter 4.1 of the environmental report).

Priority	Recommendation
1. Green border region	<ul style="list-style-type: none"> • It is suggested to include among the topics of environmental awareness raising the ways of clean domestic heating and avoiding the burning of duff • Strategies and plans for protection of natural values, nature conservation and biodiversity to be developed under this action should also address the prevention and mitigation of noise and vibration exposure on wildlife. • To maximise the positive impacts, it is proposed to implement green and blue infrastructure activities in a coordinated way (e.g. on the same site, based on a joint planning). • It is recommended that non-structural measures of the Flood Risk Reduction Plan are taken into account to improve flood conditions and achieve synergistic positive effects in areas of significant flood impact. • It is proposed that the programme should also support preparatory activities for the designation of new protected areas. • Strategies and action plans to be developed under the Programme should be based on projected climate conditions for the coming decades and pay particular attention to the possibilities for adaptation to them. • It is proposed to add climate mitigation and adaptation (or in general, climate change related knowledge) to the target areas of awareness-raising activities.

Priority	Recommendation
2. Inclusive border region based on sustainable tourism	<ul style="list-style-type: none"> • The Programme should emphasize that tourism can only be developed in an environmentally sustainable way. • Environmental aspects should get high emphasis in activities aimed at the overall development of tourism in the area (see Action 2.1, e.g. in the context of standard setting, awareness raising programmes). For pilot activities under Action 2.2 thorough analysis and integration of environmental aspects into the project should be an advantage in the evaluation process. Tourism development should always consider the protection of ecological networks (core areas, ecological corridors, buffer zones). Pressures on protected areas should be avoided through appropriate siting of facilities and careful design of tourism products and services. • The development of tourist services and attractions should avoid investments that require significant land take. • During the implementation of the Programme, noise protection should also play a role in the design of tourism products and services (e.g. timing and location of events), taking into account also wildlife considerations. • In case of the development of tourist facilities, it is proposed to maintain or establish several metres of native species vegetation along the banks of surface waters and to remove invasive non-native species. • During the implementation of the Programme, projects aimed at the development of tourism products, services and attractions should include some small-scale complementary measures to mitigate the environmental impacts of tourism (e.g., developing additional infrastructure (waste disposal facilities, toilets) to cope with increased visitor numbers; promotion of public transport accessibility; development of low volume cycling infrastructure etc.). The fact that the area covered by the Programme has a long tradition of cycling and active and eco-tourism makes this much easier to achieve. • The design of tourism facilities must in all cases be largely adapted to the landscape and townscape, especially in cases where the object affected by the development is located at landmarks (e.g. lookout points). Cultural heritage aspects must be fully taken into account in the design. • Among the target groups of the tourism services and products to be developed, it is proposed to include the population of the region (see promotion of regional and sub-regional tourism). • It is proposed not to provide support for tourism development in quiet areas when implementing the Programme. • As the text of the Programme suggests that Action 2.2 puts more emphasis on tourism development than on enhancing the role of culture, it is proposed that in the implementation of the Programme, priority is given to developments for the latter objective, at least in the context of tourism development (e.g. restoration and presentation of cultural heritage). • We propose that all developments (e.g. cycle paths) with impacts on the water regime or water status (e.g. aquatic and coastal lands, water protection areas and endangered areas) should be subject to a water consent in accordance with the Water Act of the Republic of Slovenia (Art. 150).
3. Cooperating border region	-

6. MONITORING AND EVALUATION PLAN

The primary goal of the Programme's monitoring system is to record the scope of jointly implemented activities, regardless of the exact location of each activity. As a consequence, the current indicators assigned to the Programme objectives are not suitable for measuring the impact of the implemented projects on the environment or sustainability, neither for monitoring many other significant horizontal objectives (e.g. gender equality). But that is neither their role.

At the same time, databases operated by various national bodies and periodic assessments in both participating countries provide an opportunity for assessment and evaluation of the changes in environmental status induced by the Programme. Spatial breakdown of the data recorded in these does not always allow a precise identification of the impacts attributable to the Programme. Nevertheless, their indisputable advantage is collecting and registering data on the basis of a professionally sound, uniform methodology.

Based on the above, **the analysis and assessment of the environmental and sustainability impacts of the Programme should be conducted primarily on the basis of data already recorded in existing databases and periodic monitoring reports.** At the same time, it is essential to maintain a register of the main characteristics of environmentally relevant developments (especially infrastructure ones), that allows easier assignment of data available in national databases to the developments implemented in the framework of the Programme.

These characteristics for infrastructural developments are the followings:

- exact location and extent of areas affected by a development, in ha or m²;
- land use classification of areas affected by a development;
- identification of potentially affected protected natural areas and Natura 2000 areas

It is recommended that all comprehensive evaluations of the Programme (mid-term and final) include a detailed assessment on the environmental, sustainability impacts of the Programme. It is however not necessary to cover all environmental elements or systems in these analyses, as the strategic environmental assessment has concluded that significant impacts are expected for only a few environmental systems, mainly due to the narrow intervention focus of the Programme. The analyses should focus on these.

The impact of the activities on environmental elements and the environmental performance of the programme should be analysed against the following indicators and evaluation criteria as part of the overall evaluation of the Programme.

Environmental system	Indicator/ evaluation criteria	Objective	Source of data and information	Relevant priority
Natural resources	Conservation status of habitat types and qualifying species in protected areas and/or Natura2000 sites affected by the activities of the Programme	Good status of habitat types and qualifying species in protected areas and/or Natura2000 sites affected by the activities of the Programme	<ul style="list-style-type: none"> • Reports on the status of listed species and habitat types prepared in the framework of the monitoring of the implementation of the Birds Conservation Directive and Habitats Directives • Reports on the implementation of projects • Ministry of Environment and Spatial Planning - spatial data under the INSPIRE Directive (SI) National Forest Inventory Database in Hungary (HU) • National Environmental Information System - Nature Information System (HU) 	<ul style="list-style-type: none"> • “Green border region” • “Inclusive border region based on sustainable tourism” <i>(only for activities implemented in protected areas and/or Natura2000 sites)</i>
Surface water	Percentage of surface water bodies with 'good' integrated status ¹⁷ in the area affected by the activities	Achieve good condition of all water bodies	<ul style="list-style-type: none"> • National River Basin Management Plans • Water quality monitoring system developed under the Programme • Ministry of Environment and Spatial Planning - 	<ul style="list-style-type: none"> • “Green border region” • “Inclusive border region based on sustainable tourism”

¹⁷ The integrated status of surface water bodies includes the determination of ecological status (a combination of biological, physico-chemical, specific pollutant and hydromorphological quality elements) and chemical status. Integrated status can be defined on this basis, using the "one bad - all bad" principle. The indicator is defined according to the guidance document of the EC (Strategy for The Water Framework Directive (2000/60/EC) Guidance Document No 13 Overall Approach to the Classification of Ecological Status and Ecological Potential ISBN 92-894-6968-4).

Environ- mental system	Indicator/ evaluation criteria	Objective	Source of data and information	Relevant priority
	under the Programme <i>(with supporting explanation of the chemical and ecological status of the surface water bodies concerned)</i>		Water Agency databases (SI) • National Environmental Information System - Surface Water Protection (HU)	
Ground- water	Proportion of groundwater bodies with an overall “good” status <i>(The indicator is determined by the worst of the classification of the quantitative and chemical status.)</i>	Ensure that overall “good” status of groundwater bodies does not decrease	<ul style="list-style-type: none"> • National River Basin Management Plans • Water quality monitoring system developed under the Programme • Ministry of Environment and Spatial Planning - Water Agency databases (SI) • National Environmental Information System - Surface Water Protection (HU) 	<ul style="list-style-type: none"> • “Green border region” • “Inclusive border region based on sustainable tourism”
Flood risk	Change of the total area of flood risk zones	Ensure that the area of flood risk zones does not increase	<ul style="list-style-type: none"> • Ministry of Environment and Spatial Planning - Water Agency databases (SI) • National Environmental Information System - Surface Water Protection (HU) 	<ul style="list-style-type: none"> • “Green border region”
Cultural heritage	State of cultural heritage affected by the activities of the Programme	Preservation of cultural heritage in good condition	Reports on the implementation of projects	<ul style="list-style-type: none"> • “Inclusive border region based on sustainable tourism”

Environ- mental system	Indicator/ evaluation criteria	Objective	Source of data and information	Relevant priority
Climate change	Road traffic volumes on national roads in the municipalities concerned by tourism development	Ensure stable or even lower road traffic in the municipalities concerned by tourism development	National traffic counting data	<ul style="list-style-type: none"> • “Inclusive border region based on sustainable tourism”

Figure 16: Recommended indicators and evaluation criteria for the assessment of the Programme’s environmental impacts

In relation to the above indicators and focus areas to be analysed it needs to be considered that the limited financial resources available under the Programme are likely to result in localised, small-scale environmental impacts that might be difficult to detect, since the status of the above indicators is also influenced by circumstances independent of the Programme, in many cases to a greater extent than by the Programme itself. **The evaluations should therefore always include a combined analysis of the project implementation reports and the data available independently of the Programme.**

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ANNEX 1: COMMENTS RECEIVED TO THE DRAFT VERSION OF THE ENVIRONMENTAL REPORT

Number	Organisation	Comment	Response
REPUBLIC OF SLOVENIA			
1.	Institute of the Republic of Slovenia for Nature Conservation, Maribor Regional Unit	In its opinion No 3563-0169/2021-5, dated 05/04/2022, received on 06/04/2022, concludes that the environmental report for the subject plan is adequate and allows for the assessment of the impacts of the Interreg Programme Slovenia - Hungary for the period 2021-2027 on nature and protected areas.	No response needed.
2.		The Institute stated that the impacts of the implementation of the draft Interreg Slovenia-Hungary Programme for the period 2021-2027 are not acceptable, as the plan in question has not been prepared in accordance with the ZRSVN opinion No 3563-0169/2021-2 of 08.12.2021 and does not take into account the findings of the environmental report. The plan should include a statement that specific projects will be assessed from the point of view of protected areas, natural values and biodiversity at a more detailed planning level.	The latest version of the Programme includes the following statement (section 1.2.8.): "The types of actions have been assessed as compatible with the DNSH principle, since they are not expected to have any significant negative environmental impact due to their nature. Where the proposed project activities will involve Natura 2000 territories appropriate SEA assessment will be required as guiding principle."
3.	Ministry of the Environment and Spatial Planning, Slovenian Water Agency	The Scoping Report for the elaboration of the Strategic Environmental Assessment of the Interreg Programme Slovenia-Hungary 2021-2027, October 2021, which has already been commented on by letter No 35025-30/2021-6 of 17.12.2021, also includes chapter 3.6. Environmental objectives of the Programme and likely environmental effects of programme implementation. Please explain why there is no specific chapter on environmental objectives with associated environmental indicators and data sources in the subject Environmental Report. The objectives are mentioned in connection with the monitoring of the programme activities in Chapter 6 Monitoring and evaluation plan, where the table on pages 63-64 shows the recommended indicators and	As it was considered important that all potential impacts of the implementation of the Programme were identified in the SEA, we did not pre-identify environmental objectives that would have served as basis for the analysis. On the contrary, all the environmental systems listed in Annex I, point (f) of the SEA Directive have been included in the assessment, which examined how their status is likely to change as a result of the implementation of the Programme. Chapter 4 summarizes the results of these assessments. After the full analysis has been carried out it has been possible to

Number	Organisation	Comment	Response
		assessment criteria for assessing the environmental impacts of the programme for selected environmental systems, including surface waters	identify the environmental systems likely to be most affected by the Programme, either positively or negatively. Environmental objectives have been set only for these systems, based on Programme characteristics and objectives of various strategic documents (strategies, programmes, Action Plans). Our proposals for measuring progress towards these targets are presented in the monitoring plan (Chapter 6).
4.		We consider that the environmental objectives for the 'Water' environmental system should take into account, in addition to the objective relating to surface water status, objectives relating to groundwater status, water use and water management, including flooding issues.	Environmental objectives and indicators on groundwater status, floods have been added to the Environmental Report. In our view, water use is an output indicator, while the monitoring plan contains result indicators.
5.		Action 1.1 relates to flood-related issues, and includes the development of strategies and action plans for the introduction of sustainable and ecosystem-based approaches to water management, as well as natural water retention measures (i.e. non-structural measures in agriculture, forestry, water management and spatial planning). Under Action 1.1.2, the implementation of joint measures in the field of disaster protection and water management (joint monitoring and intervention protocols in the framework of protection and rescue plans) is foreseen, as well as the testing and application of concepts from Action 1.1. Programme and Environmental Report deal with this issue only on the level of objectives.	Due to the nature and purpose of the Programme, the planned interventions are defined only at the level of measures, and the activities will be defined later, through selecting specific projects via calls for proposals. The level of detail of the Environmental Report is in line with that of the Programme.
6.		In assessing environmental impacts, we propose to consistently place flooding issues in the chapters related to water management and, where appropriate, in the chapters on human health (natural disasters) and climate change (stormwater).	Based on the comment, we have added descriptions of flood-related impacts to sections 4.1.4. (water), 4.1.6. (climate change) and 4.1.8. (human health) of the Environmental Report.
7.		We also suggest adding the following wording to the Environmental Report: as the interventions foreseen in the programme are not yet defined in detail in terms of location and content, the specific projects will be assessed in the subsequent planning phases.	The suggested sentence has been added to the Environmental Report (section 4.1.)

Number	Organisation	Comment	Response
8.		Page 18 highlights the recommendation that tourism development should respect Natura 2000 sites but does not mention other sites with special requirements as per WFD.	In line with the comment, the recommendation has been amended.
9.		In the table on pages 23-27, the objectives of the current Danube River Basin Management Plan for 2016-2021 ("Danube River Basin Management Plan for 2016-2021") should be taken into account instead of the objectives for the "Draft Danube River Basin Management Plan for 2022-2027". When referring to the objectives of the Draft Danube River Basin Management Plan for 2022-2027, the objectives should be supplemented with the following objectives: conservation and regulation of water quantities, maintenance of water and coastal land and improvement of the hydromorphological status of surface waters. In addition to the Flood Risk Reduction Plan, the Danube Plan (ICPDR, 2015, 2021) should also be referred to and its Chapter 4 (objectives) should be taken into account. There is no reference to the Floods Directive in the document.	The table on pages 23-27 has been amended in the proposed way.
10.		It should be checked whether the tourism development in Action 2.2 could be rated as orange in relation to 2.1 and 2.2 (Figure 5), as the development may worsen flood conditions.	The indications in Table 5 reflect whether each pair of actions in the Programme reinforce or weaken each other's positive or negative environmental effects, generate conflicting effects (one pair of actions has positive and the other negative environmental effects) or are neutral in this respect. In terms of the interactions between Actions 2.1 and 2.2, it is indeed possible that the two actions under consideration may amplify each other's negative effects on certain environmental elements, such as water, and this is why this pair of actions is marked in orange in the table. This is in line with the proposal. However, for other environmental systems, e.g., built environment, the two actions may reinforce each other's positive effects, hence the green coloring for action pairs 2.1 and 2.2.

Number	Organisation	Comment	Response
11.		Sources should be cited in the text and a section on Sources of data cited in the report should be added at the end of the report.	Sources of data cited in the report has been added at the end of the Environmental Report.
12.		For Slovenia, the text should be checked and appropriately replaced by selected ARSO environmental indicators on water status and use (http://kazalci.arso.gov.si/sl/teme/water and http://kazalci.arso.gov.si/en/teme/water). For example, the indicator '[VD12] Chemical and ecological status of surface waters' states that 49% of surface water bodies are assessed to be in good or better ecological status (for the period 2014-2019), while the first paragraph of the chapter states that the majority of waters are in good ecological status.	The text has been amended with relevant information from the Environment Agency.
13.		Water protection areas should also be shown. The use of thermal water, to which Action 2.2 is linked, is also shown by concessions involving bathing areas where thermal, mineral or thermo-mineral water is used. As the chapter also covers flood zones, it would make sense to add "and water regulation" or "water engineering" to the title. In addition to flood zones, erosion and landslide zones should also be shown.	Taking into account the nature, frequency and volume of the potential impacts as a result of the Programme implementation, the environmental report presents two of the proposed categories (flood risk zones and water protection zones) in map form. Based on the comment the title of section 4.1.4. has been amended.
14.		In order to properly assess the impacts of the Programme, the flooding issues of the area need to be described in some detail in Section 3.1.3, based on the available strategic documents.	Based on the comment, section 3.1.3. of the Environmental Report has been amended extensively with information of flood risk and activities to contain it.
15.		It may be useful to compare the number and size of the Areas of Significant Flood Influence (ASFIs) and their associated hazards, or maps classifying flood-prone areas in terms of human health, area of flood hazard potential areas, etc., in the light of the results of the first and second cycles of the implementation of the Floods Directive, and to compare the number and size of flood risk areas.	Statistics on the extent of flood risk areas have been added to Chapter 3.1.3 of the Environmental Report.
16.		The importance of flooding is highlighted several times in the document, but is not mentioned in section 3.2, only future extreme weather events in the context of climate change are described, and the existing flooding problem is not perceived as a problem. Sources	Based on the comment, section 3.2. has been amended, and sources has been added.

Number	Organisation	Comment	Response
		for claims of increases in rainfall intensities and other quantitative estimates should be provided.	
17.		The situation without the implementation of the programme measures is described (the zero alternative), but no other alternatives are used. Please explain why no other alternatives are used.	At an early stage of the Programme development process, before the SEA team was involved in the planning process, it was decided that the Programme will support the three specific objectives included in the current version of the Programme. As these were acceptable from an environmental point of view and there seemed to be no intention to change the chosen specific objectives, there were practically no other reasonable alternatives whose impacts could be assessed in the SEA.
18.		It would also be useful to address flooding issues in the chapter, which are now placed in Chapter 4.1.6 (climate) and Chapter 4.1.8 (human health). Chapter 4.1.4 mentions "risk areas", but it is not clear which risk areas these are, perhaps "areas of potential significant flood risk" (APSFR) under the Floods Directive, or are all areas at risk under the Water Act (including erosion and landslide areas)?	Chapter 4 under risk area refers to all types of risk areas defined under the Water Act.
19.		Under action 1.1., which has a positive impact on water (A rating), it is also stated that interventions to eliminate and prevent water pollution can significantly improve the status of surface waters. It should be explained why they do not also have an impact on improving groundwater status.	The relevant section (4.1.4) of the Environmental Report was incomplete. Indeed, action 2.1 may also have a positive impact on groundwater, although this impact is indirect, as for surface water. Section 4.2.4. of the Environmental Report has been amended accordingly.
20.		For Action 2.1 on the establishment of common quality standards for tourism and common management models for tourist destinations, please explain why there is no impact on water (rating A). Does this action in any way support the other action related to tourism (Action 2.2), for which a non-significant negative impact (rating B) has been identified?	Action 2.1 includes only soft measures (e.g. fostering establishment of tourism standards and brands; formulating cross-border tourism destination management systems; use of digital solutions and ICT tools; awareness raising actions, trainings in local tourism sector) that do not directly affect water status. Their potential

Number	Organisation	Comment	Response
			environmental effects are so indirect, that their extent and nature cannot be determined on the basis of the information available in the Programme. In contrast, Action 2.2 also supports specific investments which, although unlikely, may pose a risk of stressing environmental elements. This justifies the different classification of actions 2.1 and 2.2.
21.		We propose to add that all developments (e.g. cycle paths) with impacts on the water regime or water status (e.g. aquatic and coastal lands, water protection areas and endangered areas) will be subject to a water consent in accordance with the Water Act (Art. 150).	The recommendation has been added to the Environmental Report (section 4.1.4.)
22.		The third indent of the first paragraph on page 12 and the last paragraph on page 60 state that the actions of the programme are not detrimental to the good status or good ecological potential of water bodies, including surface waters and groundwater, or to the good environmental status of marine waters (sustainable use and protection of water and marine resources). We do not consider it necessary to refer to marine waters, as there are no marine waters present in the programme area.	The paragraphs of the Environmental Report referred to are intended to state that the Programme is not expected to cause any significant harm within the meaning of the Taxonomy Regulation. Consequently, it quotes the relevant conditions of the Taxonomy Regulation verbatim, among which marine waters are mentioned. Thus, we are not able to delete the sections on marine waters, but we do make a brief reference in the text of the Environmental Report to the fact no marine waters are present in the programme area.
23.		The validity of the assessment of the environmental impacts of Action 2.2 on water in the table on page 11 and on pages 58-59 should be checked, where the siting of the buildings in the vicinity of water would require mitigation measures to be implemented, so that a rating of C could also be appropriate.	As proposed, the water-related classification of Action 2.2 has been changed from B to C.
24.		The conclusions on page 60 should also address the impact on flooding in the context of the water treatment and be summarized accordingly in the Non-technical summary section.	Based on the comment, the conclusions have been amended.

Number	Organisation	Comment	Response
25.		For the measure proposing to maintain or establish multi-metre vegetation of native species along the banks of surface waters (in the case of the development of tourism facilities), we propose to add the removal of invasive non-native species.	Based on the comment, the recommendation referred to has been amended.
26.		It is also reasonable to recommend that non-structural measures of the Flood Risk Reduction Plan be taken into account to improve flood conditions and achieve synergistic positive effects in areas of significant flood impact.	Based on the comment, a new recommendation has been added with the proposed content.
27.		The table on pages 14-15 and pages 63-64 provide recommended indicators and evaluation criteria for assessing the environmental impacts of the programme for selected environmental systems, including objectives. Please explain why only surface waters are considered under the "Water" environmental system	The table has been amended with environmental objectives and indicators on groundwater status, water use and floods.
28.		Clarification should also be provided on the term 'integrated status' in the name of the indicator.	The integrated status of surface water bodies includes the determination of ecological status (a combination of biological, physico-chemical, specific pollutant and hydromorphological quality elements) and chemical status. Integrated status can be defined on this basis, using the "one bad - all bad" principle. The indicator is defined according to the guidance document of the EC (<i>Strategy for The Water Framework Directive (2000/60/EC) Guidance Document No 13 Overall Approach to the Classification of Ecological Status and Ecological Potential ISBN 92-894-6968-4</i>). This explanation has also been included in the Environmental Report (Chapter 6 – Monitoring and Evaluation Plan).
29.		The proposal to evaluate the environmental impact of the implementation of the programme through indicators does not include, for example, the number of people or buildings at risk or the area of flood-prone or flood-prone areas. An indicator related to	Based on the comment, new indicators have been added to table in Chapter 6.

Number	Organisation	Comment	Response
		flooding (e.g. number of inhabitants, buildings at risk) should be added.	
30.	Ministry of Culture	Based on a review of the material received, we consider that the Environmental Report sufficiently assesses the impact of the draft Interreg Programme Slovenia - Hungary 2021 - 2027 on cultural heritage. However, we suggest a minor revision of the environmental report and an amendment of the programme in line with the suggestions made below.	See responses below.
		We believe that the Environmental Report could have pointed out that Actions 2.1 (Establishment of joint tourism quality standards and joint tourism destination management models on the basis of cooperation of tourism organizations) and 2.2 (Implementing pilot actions and joint solutions for development of quality touristic attractions and connected tourism services) could have better integrated culture and cultural heritage, as they relate to the specific objective SO 4. Enhancing the role of culture and sustainable tourism in economic development, social inclusion and social innovation. In our view, unlike support for tourism development, the actions do not sufficiently address the development and integration of culture, including cultural heritage.	We agree with the comment, under Priority 2 of the Programme tourism development is given far greater emphasis than cultural interventions. However, the Programme states that tourism development is partly aimed at the restoration and presentation of cultural heritage. Notwithstanding this, a new recommendation has been included in the environmental report which encourages the prioritization of cultural and heritage conservation developments in the implementation of the Programme.
31.		We suggest that the Interreg Programme should give more emphasis to culture and cultural heritage in the selected objective SO 4.6 (Enhancing the role of culture and sustainable tourism in economic development, social inclusion and social innovation). It is proposed to complement the activities under this objective as follows: <ul style="list-style-type: none"> • 2.1 Establishment of joint tourism quality standards and joint tourism destination management models on the basis of significant cultural (and natural) potentials and of cooperation of tourism organisations, • 2.2 Implementing pilot actions and joint solutions for better inclusion of culture and cultural heritage in development 	The comment does not concern the Environmental Report, but the Programme itself.

Number	Organisation	Comment	Response
		of quality tourism attractions and connected tourism services	
32.		In the Environmental Report, it would be useful to complete the Table on page 11 to make it clear from the heading of column 8 (Built environment, settlement surroundings, landscape and cultural heritage) that there is an assessment of cultural heritage and a link to section 4.1.7 (Built environment, settlement surroundings, landscape and cultural heritage).	Based on the comment, the heading of column 8 of Figure 14 has been amended (this is the same table as on page 11) and links have been inserted to all headings of table on page 11, pointing to the relevant sections (from 4.1.1 to 4.1.9).
33.	Ministry of Agriculture, Forestry and Food	In its agricultural opinion No 35423/2021/7 of 13.04.2021, received on 13.04.2021, stated that it had no objections to the environmental report and to the subject plan.	No response needed.
34.	Ministry of Health National Institute of Public Health	The environmental report should also address the "Health Inequalities" aspect. Health inequalities should be considered in the context of the WHO definition of health, i.e. not only the absence of disease, but also mental, physical, emotional and social well-being. The health impact assessment should emphasize the ambition to improve the situation of all inhabitants, while ensuring that socio-economic inequalities between populations (poorer, more vulnerable, etc.) are reduced.	In our view, the chapter on the health impacts of the Programme, as it stands, has also made reference to the effects on mental health as well as physical health, and to the consequences for human and social well-being of the economic processes triggered by the Programme. At the same time, the section 4.1.8. on health issues has been expanded. However, it is noted that the narrow intervention focus of the Programme and its level of detail do not allow for a significant expansion of the description of the expected human health related impacts.
35.		We suggest that the presence and impact of air traffic through green and protected areas should be assessed, as well as the presence of motorcycle traffic, which, especially in quiet areas, can be very disruptive (an example is traffic through Vršič, although this is not relevant to this programme). The existing situation of quiet areas should be assessed, and it may be possible to foresee where new areas of this kind could provide an increase in the quality of the	The environmental pressures indicated in the comment (air traffic, motor traffic) are real problems, but either cannot be addressed by the Programme or the expected level of impact cannot be determined on the level of detail of the Programme (as a framework programme, it does not contain specific information on future developments). Although the draft version of the Environmental Report also addressed noise

Number	Organisation	Comment	Response
		environment/nature, as well as in the quality of people's livelihoods (i.e., for recreational purposes, for recreation, for regeneration)	pollution of tourism, the issue of quiet areas has been added to the document in form of a new recommendation. Noise from tourist traffic such as airplanes and motorcycles is not a problem in the Programme area yet and it is unlikely to become significant, but quiet areas could help to mitigate potential noise impacts and ensure good quality of life.
36.	Slovenia Forest Service	In its opinion concludes that the environmental report for the subject plan is appropriate.	No response needed.
HUNGARY			
37.	Government Office of Zala County Agricultural Department Plant and Soil Protection Unit	The draft version of the environmental report assesses the potential impacts of the Programme on environmental systems, including soil as a natural resource in sufficient depth.	No response needed.
38.	Government Office of the Capital Budapest Department of Building and Heritage Protection	The Environmental Assessment Report of Slovenia-Hungary Cross-border Cooperation Programme 2021- 2027 is adequate in terms of heritage protection.	No response needed.
39.	Government Office of Zala County Agricultural Department Forestry Unit	It agrees with the document, has no comments.	No response needed.
40.	Vas County Directorate of Disaster Management Disaster Management Authority Department	According to the submitted version of the environmental report, the programme area covers part of Slovenia (Pomurje-Podravje) and part of Hungary (Vas-Zala counties), but in several sections of the document the regional data are replaced by national data (sections 3.1.3 and 3.1.8). The statement in section 3.1.3 that Hungary's water supply depends on surface water is untrue. Water	The sentence in the Environmental Report on water supply indicated by the comment has been clarified. The occasional use of national data was primarily necessary due to the different spatial breakdown of data for the two countries concerned (where only national data are available for a given topic in one country, national data are

Number	Organisation	Comment	Response
		supply in the terminology basically means abstraction of water and not surface run-off.	used for the other country, in order to ensure comparability).
41.		The spatial data provided are incomplete, e.g. the thermal water utilisation sites in Hungary reported in section 3.1.7 are given in an ad hoc way. The environmental assessment is superficial in its description of the natural conditions of the area, there is only partial literature data, the underlying groundwater flow and groundwater balance characteristics are not provided for the programme areas covered by the report, and the climate data are not site-specific.	Based on the website https://termalonline.hu/termal-hirek/magyarorszagi-gyogyfurdok-listaja the list of thermal spas has been updated and site-specific information has been added to section 3.1.6 of the Environmental Report. It's worth to mention, that Chapter 3 provides a comprehensive overview of the current environmental status, focusing on its key elements. The main reason for this is the fact that, due to the nature of the Programme, the developments under the Programme are only known in general terms. A detailed environmental assessment will be possible once the exact parameters (e.g. location) of the developments are known.
42.		Figures 6-10 need more captioning, Figure 9 needs a legend, and a justification for the absence of water bodies marked pt and kt.	Based on the comment, legends of the figures have been expanded and supplemented. The primary impacts of the Programme are expected to be on higher-lying water bodies, which is why section 3.1.4 of the Environmental Report concentrates on their presentation (see omission of porous thermal and thermal karst water bodies).
43.		The document refers to the region as a low rainfall area, although the 650-770 mm/year precipitation in the region is considered as high amount within Hungary. The dimensionless use of the term 'low rainfall' several times in the documentation is particularly confusing, and in some places the meaning of 'rainfall' is probably confused with 'infiltration'.	The findings in the Environmental Report concerning the annual rainfall, its annual distribution, future projections and impacts on water management have been clarified.

Number	Organisation	Comment	Response
44.		The study's statement (page 10) that the Programme is likely to have a positive impact on groundwater is not transparent, since groundwater as an area of intervention is not mentioned at all in the Programme objectives (pages 6-8), nor in the table on pages 14-15 (Programme evaluation criteria), and the near-bank retention of surface water in larger rivers or in a water-lock area does not necessarily have an impact on groundwater. As the programme does not identify a specific location or river section in this respect, the rating of positive impact on groundwater is uncertain.	The findings in the Environmental Report concerning the expected impacts of the Programme on groundwater status have been clarified.
45.		It is ambivalent that the situation assessment of the Programme (Conflicts and Challenges) contains several statements (thermal water, waste management) for which the Programme does not contain any measures, proposals, etc. According to Article 8 (2) of the Government Decree, it is not necessary to emphasise them.	Even if not in full depth, but we wish to provide a comprehensive overview of the environmental challenges and conflicts in the region, regardless of whether the Programme contains proposals for their resolution. On the one hand, the measures in the Programme may have an indirect, unintended impact on their development. On the other hand, due to the comprehensive nature of the Programme, during its implementation, impacts may occur which are not necessarily visible at present, but which may affect current environmental problems.
46.		The submitted Programme is a combination of different programmes (sub-programmes), rather a declaration of intent. In the part of the Programme examined by us (point 1.2), the specific activities are not described, it is not known in which areas and in which way the watercourse revitalisation, water quality improvement and water retention measures would be implemented.	The comment does not concern the Environmental Report, but the Programme itself. The statement made in the comment is due to the nature of the Programme.
47.		Because of the preparatory nature of the Programme and the fact that most of it has only a very indirect connection with surface and groundwater, it is not expected that a different situation from that described in the environmental report (pages 10-11) will arise. However, it is noted that in the absence of a specific activity, the documentation does not include the impact factors according to the	We agree with the comment that the level of detail of the Programme does not allow for specific statements on concrete actions. However, this is broadly in line with the type of the Programme, and accordingly, the Environmental Report also makes mainly conceptual proposals

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		Environmental Act and the Government Decree 314/2005 (XII. 25.) on the Environmental Impact Assessment and the Uniform Environmental Authorisation Procedure (in the Government Decree: triggering factors). In our opinion, in the absence of these, a substantiated impact assessment is not possible for the part of the Programme under examination (point 1.2), and it is therefore not known whether any part of the Programme will be subject to an environmental impact assessment or a prior assessment during its implementation.	for its implementation. Detailed findings in accordance with Government Decree 314/2005 can be made during the individual environmental impact assessments of projects under the Programme.
48.	Government Office of Vas County	In the "Monitoring and Evaluation" section of the document, on pages 13-14, it is proposed to include the National Environmental Information System (NEIS) to allow the identification of protected natural areas and Natura 2000 sites.	Based on this comment, Chapter 6 of the Environmental Report has been amended.
49.		Regarding section 4.1.4, it is proposed to refer to the Government Decree 275/2004 (X. 8.) on sites of European Community importance for nature conservation, which contains detailed provisions on the interventions that can be carried out in Natura 2000 sites.	Based on this comment, section 4.1.4 of the Environmental Report has been amended (in addition to the Hungarian legislation, the relevant legislation of the Republic of Slovenia has been also added).
50.		Regarding the protection of soil, surface water, groundwater, air and human health, we agree with the environmental assessment report from a public health perspective. The documentation includes an assessment of the actions and programmes likely to affect soil quality, the report is acceptable in terms of soil protection, forestry and the built environment.	No response needed.
51.	Government Office of Zala County Office of the Chief State Architect	The Report notes that, in terms of tourism development, the Programme focuses mainly on quality improvement and the development of micro-tourism, which can also have a positive impact on the state of the built environment. I agree with the measures proposed to mitigate the potential negative impacts of tourism development ("over-tourism"), the development of tourist attractions should be adapted to the landscape and townscape, and the protection of the built environment is a basic requirement for project development. I have no objections to the content of the Programme and the Environmental Report.	No response needed.

Number	Organisation	Comment	Response
52.		The title "National Development and Regional Development Concept" in the table on page 23 of the Report does not correspond to the title in the Parliamentary Decision 1/2014 (3 January 2014).	The title of the strategic document has been corrected in Figure 4.
53.		On page 34, in the last paragraph of the report, please delete the word 'planned'. The Mura-Drava-Danube Biosphere Reserve was officially established on 15 September 2021.	The comment concerns only the Hungarian translation of the Environmental Assessment, which has been corrected.
54.		On page 36 of the report, in the section 3.1.5 "Cultural Heritage", I propose to list Lake Hévíz as an outstanding natural value, as well as the Roman monuments of Keszthely-Fenékpuszt, the Festetics Castle of Keszthely and the historic centre of the town as an area of historic monumental importance.	Based on this comment, we have added the proposed sites to the list in section 3.1.5 of the Environmental Report.
55.		On page 52, the wording "with great uncertainty" is grammatically incorrect.	The comment concerns only the Hungarian translation of the Environmental Assessment, which has been corrected.
56.	Government Office of Zala County Department of Public Health	Based on the documentation, the Department has concluded that, from a public health perspective, no significant environmental effects are expected during the 2021-2027 programming period that could pose a risk to human health and the environment. Consequently, the Department supports the adoption of the Evaluation Report and the contents of the documentation from a public health perspective.	No response needed.
57.	Őrség National Park Directorate	On page 56, section 4.1.3 Human health and quality of life, paragraph E) states that increased visitor traffic will not result in a large increase in traffic. This issue is more uncertain when the impacts of the pilot projects to be implemented under the Programme are assessed from several perspective (see e.g., cumulative pressure on infrastructure networks). However, the types of projects are currently unknown.	We agree with the comment that tourism developments have the potential to cause environmental pressures (e.g. through increased road traffic), and this is mentioned in several places in the Environmental Report. However, due to the scale of development eligible under the Programme, we consider that there is only a low risk in this respect.

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58.		<p>In order to support strategic decision-making for long-term development, it is proposed to conduct an environmental status analysis, to estimate "tourism impacts" and to identify mitigation options. It is recommended that such an analysis should be included in the Programme in the form of one of the options listed below:</p> <ul style="list-style-type: none"> - as a complex operational activity of the Slovenia-Hungary Cross-border Cooperation Programme, or - as an eligible programme under Action 2.1, or - in the evaluation process of applications under Action 2.1, the emphasis should be on applications for environmental status analysis and impact assessment tasks; and in the evaluation of applications under Action 2.2, the emphasis should be on tourism applications that provide a detailed analysis of the expected environmental impacts. 	<p>The proposal concerns the Programme and not the Environmental Report.</p> <p>However, in line with its contents, it is proposed that the environmental aspects should be emphasised in activities aimed at the overall development of tourism in the area (see Action 2.1, e.g. in the context of standard setting, awareness raising programmes). In the pilot actions to be implemented under Action 2.2, in-depth analysis and integration of environmental aspects should be an advantage in the selection process.</p>
59.	Government Office of Zala County, Department for Environmental Protection, Nature Conservation and Waste Management, Environmental Protection and Nature Conservation Unit	It agrees with the document from an environmental protection and nature conservation point of view. It has no comments or suggestions for amendments.	No response needed.

