

Elaboration of Strategic Environmental Assessment of the
Interreg Programme for the programming period of
2021–2027, concerning the programming area of
Hungary, Slovakia, Romania and Ukraine

Environmental Report

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Environmental report prepared for the Hungary-Slovakia-Romania-
Ukraine Interreg A NEXT Programme 2021-2027

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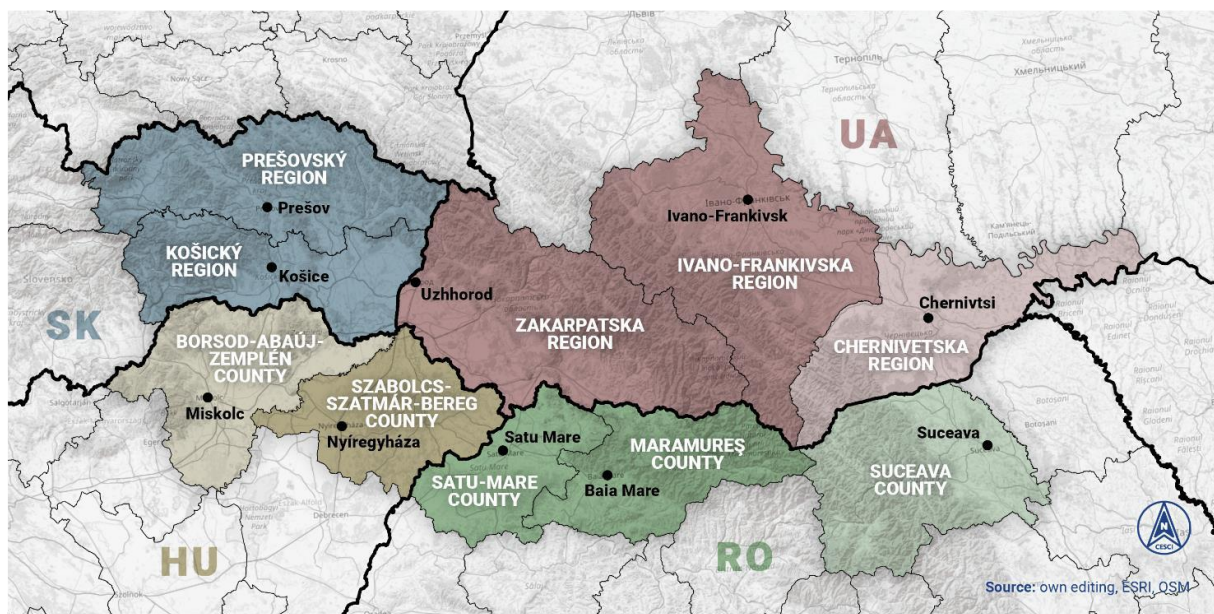
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1 Outline of the contents

1.1 Scoping approach

Cross Border Cooperation (CBC) is a key element of the EU policy towards its neighbours. It supports sustainable development along the EU's external borders, helps reducing differences in living standards and addressing common challenges across these borders. CBC promotes cooperation between EU countries and neighbourhood countries sharing a land border or sea crossing.

The Hungary- Slovakia- Romania- Ukraine Interreg A NEXT Programme is a cooperation program between three Member State countries and Ukraine in the middle of Europe, on the eastern border of the European Union. The cooperation area of the HUSKROUA Interreg A NEXT Programme covers a territory of 83 057 km², including 10 counties providing homes for over 8 million citizens.



CESCI INTERREG NEXT Hungary-Slovakia-Romania-Ukraine CBC Programme - Analysed territory

Figure 1. The analyzed territory of the HUSKROUA Interreg A NEXT Programme (Source: Territorial analysis prepared by CESCI, 2020.)

1.2 Development process of the programme document

A programme documentation template has been provided by the Interreg Regulation, that defines the content of Interreg Programmes. The first Chapter of the programme document provides the main development challenges and untapped potential in a form of a Territorial analysis. Chapter 2 will contain the policy and specific objectives and rationale behind, serving as intervention logic. The Territorial Analysis forming Chapter 1 has been prepared and handed over

to the expert team responsible for the preparation of Chapter 2 and the SEA of the programme document.

Chapter 2 is responsible for defining the priorities, policy objectives, specific objectives, potential beneficiaries, type of actions, target groups and indicators of the future Programme. This is the backbone of a programme concept. The development of Chapter 2 is currently in progress; the aim was to involve the SEA expert team at an early stage so their recommendations can be channelled into the planning process, leading to an improved document.

The HUSKROUA Interreg A NEXT Programme for 2021-2027 is under development. The Territorial Analysis (Chapter 1) of the programme document has concluded five major proposed Territorial Objectives – Priorities (TO6-P1 Environment; TO8-P1 Disasters; TO7-P1 Transport; TO8-P2 Health; TO3-P1 Heritage), which were narrowed down in Chapter 2 to three Priority objectives (A resilient and green border region; A healthy and attractive border region; A cooperating border region).

1.3 Stakeholders' list

The chapter describes, by participating countries, the list of National Environmental Authorities and conservation managers responsible for the scoping and later to be involved in the public consultation process as relevant stakeholders in the SEA process:

Hungary	Legislative basis: Annex III of Gov. Regulation No 2/2005 on the assessment of the effects of certain plans and programmes on the environment
	Ministry of Agriculture; Prime Minister's Office; Aggtelek National Park Directorate; Bükk National Park Directorate; Hortobágy National Park Directorate; Government Agencies of Borsod-Abaúj-Zemplén and Szabolcs-Szatmár-Bereg counties; Government Agency of Budapest Municipality; Ministry of Interior, National Directorate General for Disaster Management; Disaster Management Directorate of Borsod-Abaúj-Zemplén and Szabolcs-Szatmár-Bereg counties; Deputy State Secretariat for Architecture, Construction and Heritage
Slovakia	Legislative basis: Act no. 24/2006 Coll. on environmental impact assessment and on amendments and supplements to certain acts
	Ministry of Environment; Ministry of Investments, Regional Development and Informatization; Office of the Košice Self-Governing Region; Prešov Self-governing Region, Department of Regional Development
Romania	Legislative basis: Governmental Decision no.1076 of 8.07.2004 for setting up the environmental assessment procedure of certain plans and programmes (Of.J.no.707 of 5.08.2004)
	Ministry of Environment, Waters and Forests (MEWF); National Environmental Protection Agency (when delegated by the ministry); Local Environmental Protection Agencies

Ukraine	Legislative basis: LAW OF UKRAINE "About strategic ecological assessment" Number № 2354-VIII in force since 12.10.2018
	Ministry of Ecology and Natural Resources; Environmental Department of a regional state

All comments and recommendations of the relevant national authorities that modified the programme document and the environmental report were taken into consideration within this section of the Environmental report.

The national authorities did not take exception to the structure of the SEA. Several authorities provided detailed information in their field of expertise on the areas that need to be monitored in the context of the environmental assessment and then the implementation of the program.

The experts' answers given to the comment of the authorities are available at the Hungarian organization – Széchenyi Programme Office Nonprofit LLC – responsible for the development of the SEA.

1.4 List of sources (relevant legislative acts, data resources used during the draft of the programme document)

During the development of the program documents and the environmental assessment, a number of major EU and national level sources (legislations, development strategies, etc.) and databases were used, such as:

List of relevant legislative acts and documents	
Hungary	National Development and Territorial Development Concept of Hungary; National Transport Infrastructure Development Strategy of Hungary; National Tourism Development Strategy 2030 of Hungary; Jenő Kvassay Plan – National Water Strategy of Hungary; "Healthy Hungary 2021–2027" – Health Sector Strategy; National Framework Strategy on Sustainable Development of Hungary; <u>National Environmental Protection Program 2021-2027</u> ; <u>National Nature Conservation Master Plan</u> ; National Landscape Strategy of Hungary; Territorial Development Concept and Programme of Borsod-Abaúj-Zemplén County 2021-2027 (proposal); Territorial Development Concept and Programme of Szabolcs-Szatmár-Bereg County 2021-2027 (proposal)
Slovakia	Strategic plan for the development of transport in the Slovak Republic until 2030; Greener Slovakia - Strategy of the Environmental Policy of the Slovak Republic until 2030; Concept of the development of culture in the Košice self-governing region 2020-2025 (2030); National Strategy for Regional Development; National Strategy for Sustainable Development; National Strategy for Biodiversity Protection; National Regional and Territorial Strategy for Development of the Slovak Republic until 2030; Regional Integrated Territorial Strategy of the Košice Region; Strategy for the Development of Cycling and Cycle Transport in the Presov Region

Romania	<p>Romania's National Strategy for Sustainable Development 2030; North-West Region's Development Plan 2021-2027; National Strategy for development of the Eco-Tourism in Romania - context, vision and objectives - 2019-2029; The Romanian Energy Strategy 2020-2030, with perspectives for 2050; National Integrated Plan in domain of the Energy and Climate Changes, 2021-2030; Nation plan for Waste Management; Sustainable development Operational Program 2021-2027 (SDOP); General Transport Masterplan (GTMP) 2014-2030; Territorial Development Strategy of Romania (TDSR), Polycentric Romania 2035 – territorial cohesion and competitiveness, development and equal chances for people, National Strategy for Romania's Sustainable Development Horizons 2013-2020-2030; Large Infrastructure Operational Program 2014-2020; National Action Plan in the Field of Energy Efficiency IV (NAPEE); National Strategy and action plan for the preservation of Biodiversity 2014-2020; Cultural and National Heritage Strategy 2016-2022</p>
Ukraine	<p>State Programme for Development of Ukrainian Carpathian Region for 2020-2022; National transport strategy for the period until 2030; Strategy for the development of tourism and resorts for the period until 2026; National Waste Management Strategy in Ukraine until 2030; Energy strategy of Ukraine for the period up to 2035 "Security, energy efficiency, competitiveness, Strategy of low-carbon development of Ukraine until 2050; Concept for the implementation of state policy in the field of climate change for the period up to 2030; Development strategy of the Chernivtsi region for the period until 2027; Development strategy of the Ivano-Frankivsk region for the period until 2027; Regional Development Strategy of Zakarpattia region for the period 2021-2027; Waste management strategy in Zakarpattia region for a 15-year period; Draft Strategy for Environmental Safety and Adaptation to Climate Change until 2030; Draft National Strategy for Building a New Health Care System in Ukraine for the Period 2015-2025; Biodiversity protection Strategy until 2030 – under development</p>
Other	<p>Territorial analysis for the future INTERREG NEXT Hungary-Slovakia-Romania-Ukraine CBC programme</p> <p>HUSKROUA Interreg A NEXT Programme 2021-2027 – 1st Draft of the Programme</p> <p>The European Commission's orientation paper on INTERREG NEXT Programmes and its Annex III</p> <p>Joint paper on Interreg NEXT Strategic Programming 2021-2027</p> <p>Annex 2 to the Regulation of the European Parliament and of the Council on the ERDF and CF (proposal)</p> <p>Indicator Fiches of additional common output and result indicators for the ERDF for Interreg</p> <p>The European Green Deal; European Climate Law; EU Strategy on Adaptation to Climate Change; EU Water Framework Directive, EU Biodiversity Strategy for 2030; European Landscape Convention; EU Strategy for Energy System Integration; EU Hydrogen Strategy; European Union Strategy for the Danube Region</p>

List of data resources	
Hungary	Hungarian Central Statistical Office (ksh.hu); TEIR – Official database of the Hungarian Central Statistical Office (TeIR)
Slovakia	Statistical Office of the Slovak Republic (statistics.sk)
Romania	National Institute of Statistics of Romania (insse.ro)
Ukraine	State Statistics Service of Ukraine (ukrstat.org)
Other	-

2 Observation of potential alternatives

As the HUSKROUA Interreg A NEXT Programme is not a classic strategy but a financial framework for cross border cooperation, there are no potential alternatives to be examined. The Programme is prepared under the thematic structure laid out in the ERDF and Interreg regulations of the European Commission. The core alternative during the programming process is whether to select or not to select certain interventions categorised under policy and specific objectives. Therefore, the analysis of alternatives is narrowed down to the justification of these decisions:

PO1: The policy objective that aimed at the formulation of a smarter Europe by promoting innovative and smart economic transformation is not selected by the programme. This means that cooperation activities with direct economic benefit are excluded. Remote, setback underdeveloped border regions face severe socio-economic challenges (poverty, brain drain, ageing, outward migration) and the enhancement of economic activities are representing the most direct opportunities to solve these problems through improved employment, value adding capacity and thus, increased life standards. At the same time, institutional cooperation interventions under ISO1 b) provide indirect contribution through preparatory, supporting actions, including business development, entrepreneurship and digitisation, with less direct impact and benefit than joint product/service or market development.

PO2: The two SOs selected (including iv) promoting climate change adaptation, and disaster risk prevention and resilience, and vii) enhancing protection and preservation of nature, biodiversity, and green infrastructure and reducing pollution) are a proper mix addressing areas with the highest cross-border relevance, previous cooperation experience, and at the same time they are able to host niche projects of other, unselected SOs. The importance of the policy objective is also highlighted by the fact that the aggregate financial appropriation of the SOs selected is 45%.

PO3: The policy objective targeting the physical and virtual connectivity is not selected. It is true that the low level of transport connectivity is one of the main challenges in the programme area, that should be improved in order to pave the way to enhance social and economic cooperation. However, large scale investments required for transport development are out of the scope of a

CBC programme, thus the decision not to select the policy objective can be justified. At the same time, the structure of the Programme allows the inclusion of preparatory steps in other SOs - e.g. various forms of institutional cooperation under ISO1 b) - that pave the way to intergovernmental initiatives solving the border connectivity problems in the longer term.

PO4: The policy objective aimed at a more social Europe is the other main funding focus besides PO2. However, this is mainly due to the fact that tourism, one of the most important intervention areas was included under this PO in the ERDF regulation. Thus, the two SOs selected under PO4 represent quite diverse themes:

- Among social inclusion and health care related objectives of PO4, the ones targeted at employment, education and social inclusion are not selected due to lack of experiences and capabilities, while the objective focused on the integration of migrants is considered as irrelevant for the area. These decisions are justified by the need to concentrate the limited resources of the Programme, as well as the fact that certain education, employment and social inclusion aspects can be dealt with by other interventions. The only selected SO (*PO4 v) ensuring equal access to health care and fostering resilience of health systems, including primary care, and promoting the transition from institutional to family- and community-based care*), equal access to health care, is an area where cooperation experience is good, and the potential benefits of cross-border service integration and knowledge sharing can easily be recognized.
- Tourism (*PO4 vi) enhancing the role of culture and sustainable tourism in economic development, social inclusion and social innovation*) is one of the most relevant areas for cross-border regions with untapped natural potential. It also generates a high level of risk of overutilizing the natural environment, that must be considered and properly counter-balanced by the application of the sustainability criteria in funding decisions.

PO5: The policy objective supporting sustainable and integrated urban and rural development, as well as local initiatives is not selected. Coordinated measures in these themes would be highly beneficial on the long run, and it is questionable how other SOs - including ISO1 b) - can contribute to this challenge. At the same time, selected POs include the preparation of joint strategies and plans in key cooperation areas like climate change adaptation, protection and rehabilitation of biodiversity and habitats, as well as tourism.

ISO1: The single SO selected under the policy objective (*ISO1 b) 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*) aimed at good governance measures is the one that allows the widest possible range of stakeholder interactions, and thus is well positioned to host cooperation and capacity building in themes not covered by other SOs. A significant shortage is the non-selection of people-to-people actions, an area directly promoting civil and cultural interchange between societies, providing secondary benefits on institutional, administrative and economic levels. However, this is a deliberate programming decision: there is no potential coordinating body with

relevant capacities in all 4 programme area countries to coordinate people-to-people projects. Instead, small projects will be made eligible in thematic calls to allow for this kind of cooperation.

ISO2: The Interreg-specific objective dealing with safety and security is not selected, justified by experience showing difficulties in the cooperation between state level authorities, that can jeopardize the achievement of programme goals. In light of the concentration of resources and focusing on direct benefit thematic areas this decision is justified.

It can be generally concluded that the selected specific objectives provide a proper mix of crucial interventions, at the same time fulfilling the requirement to focus the limited financial sources of the programme. However, it is important to consider potential threats and adverse, unfavourable effects on the environment, in line with the protective recommendations highlighted in chapter 7 of the current SEA.

3 Main objectives of the Programme

The HUSKROUA Interreg A NEXT Programme plans to organize the development activities of the next 7-year period along three priorities, which are the following:

- P1 – A resilient and green border region
- P2 – A healthy and attractive border region
- P3 – A cooperating border region

The table below shows the relationship between the identified program priorities and the selected Policy objectives / Interreg specific objectives. The relationships between the priorities, the internal consistency of the programme documents are described in Chapter 4.2.

Programme priority	Selected policy objective or selected Interreg-specific objective	Selected specific objective
P1 – A resilient and green border region	Policy Objective 2 – A greener, low-carbon Europe	iv) promoting climate change adaptation, and disaster risk prevention, resilience, taking into account ecosystem-based approaches
		vii) enhancing protection and preservation of nature, biodiversity, and green infrastructure, including in urban areas, and reducing all forms of pollution
P2 – A healthy and attractive border region	Policy Objective 4 – A more social Europe	iv) ensuring equal access to health care and fostering resilience of health systems
		(v) enhancing the role of culture and sustainable tourism in economic development, social inclusion and social innovation
P3 – A cooperating border region	Interreg Specific Objective 1 – A	ii) enhance efficient public administration by promoting legal and administrative cooperation and cooperation between citizens, civil society actors and institutions, in

Programme priority	Selected policy objective or selected Interreg-specific objective	Selected specific objective
	better cooperation governance	particular with a view to resolving legal and other obstacles in border regions

Table: Defined programme priorities and their relationship to the selected Policy Objectives/Interreg Specific Objectives.

4 Cohesion and consistency of documents

4.1 Relationship with other relevant plans, programmes

The next chapter presents the relationship of the programme document with relevant EU directives and strategies and also with national and regional level legislations and strategies of the Partner countries involved in the HUSKROUA Interreg A NEXT Programme. The list of documents involved in the context of the cohesion analysis has been extended by the national authorities in some cases during the review process of the SEA's description of content.

Relevant European Union documents

Name of the relevant document, strategy	Cohesion
The European Green Deal	<p>The European Green Deal is the response of the Community to the current climate and environmental-related challenges. It is a new growth strategy that aims to transform the EU into a resource-efficient and competitive economy. It also aims to protect, conserve and enhance the EU's natural capital, and protect the health and well-being of citizens from environment-related risks and impacts. The HUSKROUA Interreg A NEXT Programme contributes to the realization of the European Green Deal through all of the selected Policy objectives and Specific objectives.</p>
European Climate Law	<p>Linked to the European Green Deal, the European Climate Law aims to create the framework needed to achieve climate neutrality in the EU by 2050. Priority 1 – PO2 iv) promoting climate change adaptation, and disaster risk prevention, resilience, taking into account ecosystem-based approaches – of the HUSKROUA Interreg A NEXT Programme is integral to the objectives set out in the proposal.</p>
EU Strategy on Adaptation to Climate Change	<p>The European Green Deal, the EU's growth strategy for a sustainable future, is predicated on the realisation that the green transformation is an opportunity and that failure to act has a huge cost. The EU has already taken action to boost its resilience over the past years under the 2013 Adaptation Strategy, all Member States now have a national adaptation strategy or plan.</p> <p>In line with the Green Deal, the new Adaptation Strategy aims to realise the 2050 vision of a climate-resilient Union by making adaptation smarter, more systemic, swifter, and by stepping up international action. The</p>

Name of the relevant document, strategy	Cohesion
	<p>HUSKROUA Interreg A NEXT Programme contributes to the realization of the climate adaptation goals through the specific objective PO2 iv) promoting climate change adaptation, and disaster risk prevention, resilience, taking into account ecosystem-based approaches.</p>
<p>EU Water Framework Directive</p>	<p>In line with the objectives of the Water Framework Directive (Article 1 of the DIRECTIVE 2000/60/EC), the HUSKROUA Interreg A NEXT Program (Priority 1 – “A resilient and green border region”) contributes to improving water quality, protecting aquatic ecosystems (PO2 vii)) and reducing water damage (PO2 iv)). Priority 2 – A cooperating border region” – of the programme can contribute to stronger cooperation between the relevant regional authorities and professional organizations of the countries concerned in addressing water related challenges, which is also an important element of the Directive.</p> <p>According to the framework, “common principles are needed in order to coordinate Member States' efforts ... to contribute to the control of transboundary water problems... (23)” and according to Article 3. (5) “where a river basin district extends beyond the territory of the Community, the Member State or Member States concerned shall endeavour to establish appropriate coordination with the relevant non-Member States, with the aim of achieving the objectives of this Directive throughout the river basin district”. The HUSKROUA Interreg A NEXT Program makes a major contribution to this area through its cooperation with Ukraine on water management issues.</p>
<p>EU Biodiversity Strategy for 2030 - Bringing nature back into our lives</p>	<p>The Strategy linked to the European Green Deal aims to put Europe's biodiversity on a path to recovery for the benefit of people, the climate and the planet by 2030. In the post-COVID-19 context, the strategy aims to increase the resilience of our societies to future threats, such as: the impacts of climate change; forest fires; food insecurity; disease outbreaks – including the protection of wildlife and fighting against illegal wildlife trade. Priority 1 – “A resilient and green border region” – of the HUSKROUA Interreg A NEXT Programme, in connection with the specific objectives PO2 iv) and PO2 vii), directly serve the achievement of the actions set out in the EU Biodiversity Strategy in the CBC region.</p>
<p>European Landscape Convention</p>	<p>The aims of the Convention are to promote landscape protection, management and planning, and to organise European co-operation on landscape issues. Article 9 of the Convention (Transfrontier landscapes) declares that the Parties shall encourage transfrontier co-operation on local and regional level and, wherever necessary, prepare and implement joint landscape programmes. Priority 2 – PO4 vi) enhancing the role of culture and sustainable tourism in economic development, social inclusion and social innovation – of the HUSKROUA Interreg</p>

Name of the relevant document, strategy	Cohesion
	<p>A NEXT Programme is fully in line with the objective set out in this article. The priorities of the Programme, in connection with strategic objectives PO2 iv); PO2 vii); PO4 vi) and ISO1 b), contribute to the coordinated development of European landscapes and their sustainable turistic use.</p>
<p>EU Strategy for Energy System Integration</p>	<p>Energy system integration is the coordinated planning and operation of the energy system across multiple energy carriers, infrastructures, and consumption sectors, for a more efficient, circular, and reliable energy system. The EU Strategy for Energy System Integration sets out a vision on how to accelerate the transition towards a more integrated energy system, including concrete policy and legislative measures at EU level.</p> <p>The HUSKROUA Interreg A NEXT Programme only indirectly – through the PO2 iv) “promoting climate change adaptation, and disaster risk prevention, resilience, taking into account ecosystem-based approaches” specific objective – contributes to the goals of the EU Strategy for Energy System Integration.</p>
<p>EU Hydrogen Strategy</p>	<p>According to the European Union, (green) hydrogen “is a key priority to achieve the European Green Deal and Europe’s clean energy transition”. In line with the European Green Deal, the aim of the EU Hydrogen Strategy is to decarbonise hydrogen production and expand its use in sectors where it can replace fossil fuels.</p> <p>The HUSKROUA Interreg A NEXT Programme only indirectly – through the PO2 iv) “promoting climate change adaptation, and disaster risk prevention, resilience, taking into account ecosystem-based approaches” specific objective – contributes to the goals of the EU Hydrogen Strategy.</p>
<p>European Union Strategy for the Danube Region</p>	<p>The EUSDR is a macro-regional strategy, the main objective of which is to coordinate existing provisions and initiatives across the Danube Region to address common challenges, as in many cases cross-border cooperation and a transnational solution are needed.</p> <p>The strategy addresses a wide range of issues and development policies, which have been coordinated along 4 pillars and 12 priority areas. The HUSKROUA Interreg A NEXT Programme is most strongly linked to the following DRS priorities: PA 2 - Sustainable Energy; PA 3 - Culture & Tourism; PA 4 - Water Quality; PA 5 - Environmental Risks; PA 6 - Biodiversity, Landscapes and Air & Soil Quality; PA 10 - Institutional Capacity & Cooperation.</p> <p>It is important to emphasize that there is no financial resource behind the strategy that can be applied for. The objectives of the strategy must be embedded in existing policy frameworks and operational programs with funding. EUSDR activities are mainly supported by the Danube Transnational Programme. In addition, most</p>

Name of the relevant document, strategy	Cohesion
	of the objectives are implemented in the form of projects with the support of the European Territorial Cooperation Programs (CBC Programs, Interreg, etc.) and the National Operational Programs.

Relevant Hungarian documents

Name of the relevant document, strategy	Cohesion
National Development and Territorial Development Concept of Hungary (until 2030)	<p>By implementing cross-border actions, the HUSKROUA Interreg A NEXT Programme contributes to the sustainable, coordinated development of the north-eastern part of the Carpathian Basin, which is one of the specific territorial goals of the Concept (Specific territorial goal: 'Strengthening the country's macro-regional role; Intervention field: establishing and strengthening economic and rural development cooperation in the Carpathian basin; strengthening Hungary's role in spatial organisation in the Carpathian basin; and extending territorial and inter-community relations in the Carpathian basin).</p>
National Transport Infrastructure Development Strategy of Hungary	<p>The selected Policy Objectives and related Specific Objectives of the INTERREG NEXT HUSKROUA Interreg A NEXT Programme do not prioritize the development of cross-border transport infrastructure.</p> <p>In connection with the development of cross-border networks of tourist attractions (PO4 (v)), small-scale actions for the development of cross-border transport may be implemented under the program.</p>
National Tourism Development Strategy 2030 of Hungary (until 2030)	<p>The programme focuses on the development of tourism as one of the drivers of cross-border economic development, social inclusion and social innovation (Programme Priority 2 – A healthy and attractive border region connected to PO4 (v).</p> <p>The tourism development actions implemented within the framework of the Programme can contribute to the increase of the tourism offer of the cross-border region in many areas (cultural tourism, gastronomy and wine tourism, event tourism, active and nature tourism) defined in the Strategy.</p> <p>The program territorially affects the 'Tokaj, Upper-Tisza and Nyírség region' which is one of the major tourism development areas identified in the Strategy.</p>

Name of the relevant document, strategy	Cohesion
Jenő Kvassay Plan – National Water Strategy of Hungary (2017-2030)	<p>One of the long-term goals of the Plan is ‘Preventive flood and inland water protection’. Actions implemented under the Program Priority 1 – A resilient and green border region can contribute to reduce disaster risk in the region (Policy Objective 2 – A greener, low-carbon Europe; SO iv) promoting climate change adaptation, and disaster risk prevention, resilience, taking into account ecosystem-based approaches).</p>
Government Decision No 1155/2016. (III. 31.) on Hungary's revised River Basin Management Plan 2015	<p>The measures needed to achieve the objectives set out in the Water Framework Directive are summarized in the, so-called, river basin management plans. The Government of Hungary published Hungary's first river basin management plan by the Government Decision No. 1042/2012. (II. 23.). In 2015, the plan was revised, which is the action program for the period 2016-2021.</p> <p>According to Chapter 1.2 (Transboundary Water Relations) of the Plan, international cooperation is vital for Hungary, as more than 90% of our watercourses come from across the border and much of our groundwater resources also come from there. The HUSKROUA Interreg A NEXT Programme, in relation to the specific objectives PO2 iv) and PO2 v), contributes in general to the achievement of the objectives set out in the plan, in particular to the performance of transboundary water management tasks.</p>
“Healthy Hungary 2021–2027” – Health Sector Strategy (2021-2027)	<p>The specific objective PO4 (iv) – “ensuring equal access to health care and fostering resilience of health systems” –of the program is linked to the activities set out in the Specific objective 1 and 5 of the Strategy. SO1 of the strategy aims at the development of Hungarian public health and primary care, while SO5 supports the development of digital health care.</p>
National Framework Strategy on Sustainable Development of Hungary (2012-2024)	<p>Mainstreaming sustainability in actions under the HUSKROUA Interreg A NEXT Programme ensures that the program contributes to the achievement of the objectives set out in the Framework Strategy. Due to the nature of the Framework Strategy, the link is relevant to all priorities of the HUSKROUA Interreg A NEXT Programme.</p>
National Environmental Protection Program 2021-2026	<p>Since 1997, the National Environmental Protection Programs have provided a comprehensive framework for Hungary's environmental policy goals and measures. The current program defines four strategic objectives, each of which is linked to the PO2 of the HUSKROUA Interreg A NEXT Programme:</p> <ul style="list-style-type: none"> ▪ PO2 iv) – “promoting climate change adaptation, and disaster risk prevention, resilience, taking into account ecosystem-based approaches” – contributes to the realization of the Strategic objective 1., 3. and 4. of the Program.

Name of the relevant document, strategy	Cohesion
	<ul style="list-style-type: none"> ▪ PO2 vii) – “enhancing protection and preservation of nature, biodiversity, and green infrastructure, including in urban areas, and reducing all forms of pollution” – strongly links to the Strategic objective 2 (Protection, restoration and sustainable use of natural values and resources) of the Program.
National Nature Protection Plan V. (proposal) (2021-2026)	<p>The Plan sets out the key nature conservation responsibilities of the country as part of the V. National Environmental Program of Hungary. The HUSKROUA Interreg A NEXT Programme contributes to a number of the objectives of the Plan through the PO2 vii) and ISO1 b) specific objectives, such as: Nature protection planning; Social relations, attitude formation, presentation; International cooperations, etc.</p>
National Landscape Strategy of Hungary (2017-2026)	<p>One of the important objectives of the strategy is to contribute to the creation of a livable urban landscape and wise land use (Specific objective II. of the Strategy). Actions implemented within the framework of the Program Priority 1 – A resilient and green border region can contribute to the development of urban green infrastructure, reduction of pollutions and to support more conscious land use.</p>
Territorial Development Concept and Programme of Borsod-Abaúj-Zemplén County 2021-2027 (proposal) (2021-2027)	<p>There is a significant development potential of the county by strengthening the economic and cultural relationship with the cross-border areas, which is served by the HUSKROUA Interreg A NEXT Programme.</p> <p>The county development concept defines 3 overall and 7 strategic goals, many of which are related to the HUSKROUA Interreg A NEXT Programme priorities:</p> <ul style="list-style-type: none"> ▪ In connection with PO2 iv) and vii), the transition to renewable energy use, as well as the development of water and wastewater infrastructure and the protection of water bases are priority areas in the county (II/2. Utility development, energy and water management programs). ▪ Linked to PO4 v), ensuring better access to health care is one of the strategic objectives of the county (I/2. Development of local social and health care services, facilitation of housing conditions). ▪ One of the priority areas of the county's economic development is the development of tourism services (III/3. Development of tourism services), which is directly related to PO4 vi) of the programme.
Territorial Development Concept and Programme of Szabolcs-Szatmár-Bereg County 2021-2027 (proposal) (2021-2027)	<p>There is a close territorial and thematic connection between the examined documents:</p> <p>The HUSKROUA Interreg A NEXT Programme, similar to the county level document, pays special attention to the green, climate friendly and sustainable development of the programme area. (Programme Priority 1 – A resilient</p>

Name of the relevant document, strategy	Cohesion
	<p>and green border region connected to the 'Green county – Green economy, climate-friendly energy management, adaptation to climate change' thematic specific objective)</p> <p>The programme considers the development of tourism as a priority area (Programme Priority 2 – A healthy and attractive border region), which also appears as an important goal in the county concept and programme ('Proactive county - Creating the conditions for economic and social self-organization at county level' thematic specific objective; all territorial specific objectives).</p> <p>The county level document identifies the deepening of the county's international integration as a priority area (Proactive county - Creating the conditions for economic and social self-organization at county level), one of the important elements of which is the strengthening of cross-border relations. The implementation of the HUSKROUA Interreg A NEXT Programme is fully linked to the achievement of this goal.</p>

Relevant Slovakian documents

Name of the relevant document, strategy	Cohesion
Strategic plan for the development of transport in the Slovak Republic until 2030	<p>"Ensuring better conditions for cycling and pedestrian transport at local and regional level" (SVO4 Horizontal Specific Objective); "Systematically decreasing the negative socio-economic and environmental impacts of Transportation" (Horizontal Specific Objective ŠHC3) and "Reducing the systematically negative socio-economic and environmental impacts of transport (including climate change) as a result of environmental monitoring, efficient planning/ infrastructure building, and decreasing the number of conventionally fueled transport, utilizing alternative fossil fuels" (Global Specific Objective SGC3) are in line with Priority 1 (PO2 vii) of the HUSKROUA Interreg A NEXT Programme.</p>
Greener Slovakia - Strategy of the Environmental Policy of the Slovak Republic until 2030	<p>Priority 1 of the Programme is consistent with several priority objectives of the Green Slovakia Strategy.</p> <p>The achievement of Objective 6 (Preventing and mitigating climate change), Objective 7 (Protection against flood, drought and water shortage), Objective 8 (Addressing drought and water scarcity) and Objective 14 (Better data for better decision-making) of the Strategy are directly supported by the implementation of the PO2 iv) "promoting climate change adaptation, and disaster risk prevention, resilience, taking into account ecosystem-based approaches" specific objective of the Programme.</p>

Name of the relevant document, strategy	Cohesion
	<p>Objective 9 (Clean air) is connected to P1 – A resilient and green border region and Policy Objective 2: A greener, low-carbon Europe (PO2 vii) of the Programme.</p> <p>Objectives 13 (Environmental education and Lifelong Learning) and Objective 14 (Better Data for Better Decision Making) of the strategy also relates to Priority 1 (PO2 iv) and Priority 2 – A healthy and attractive border region, connected to Policy Objective 4: A more social Europe (PO4 vi) of the Programme.</p>
<p>Concept of the development of culture in the Košice self-governing region 2020-2025 (2030)</p>	<p>Program 'Regional Cultural Identity' (3.1) and 'Cultural Tourism' (3.2) of the Concept through attracting domestic and foreign visitors and developing regional economy and tourism-related employment, are consistent with Priority 2 – A healthy and attractive border region, connected to Policy Objective 4: A more social Europe (PO4 vi) of the Programme. Program 'Optimizing management and operations of Cultural Organizations' (3.4) is consistent with Priority 3 – A cooperating border region, connected to Specific Objective 1: A better cooperation governance (ISO1 b) of the Programme.</p>
<p>National Strategy for Regional Development</p>	<p>Priority area 4.5 (protection and creation of the environment) of the Strategy is coherent with Priority 1 (PO2 iv and PO vii) and Priority area 4.4 of the Strategy (knowledge-oriented economy) is coherent with Priority 2 (PO4 v and PO vi) and Priority 3 (ISO1 b). The Strategic objectives 5.7 (Presov self-governing region) and 5.8 (Kosice self-governing region) are consistent with all Program Priorities.</p>
<p>National Strategy for Sustainable Development</p>	<p>Strategic objective number 5 of the Strategy (on supporting NGOs, interest groups and the public in participating in the development of society) and number 6 (on strengthening the legal knowledge, the value of the inhabitants, education etc.) are in line with Priority 3 (ISO1 b) of the Programme.</p> <p>Strategic objective number 7 (on developing the cultural, historical consciousness, etc.) is consistent with Priority 2 (PO4 vi). Strategic objective number 10 (on prioritizing the development of problematic, marginal regions) is in line with Priority 2 and 3 of the Programme (PO4 vi; ISO b). Strategic objective number 13 (on improving the health of the population, improving the quality of life) is consistent with Priority 2 - A healthy and attractive border region (PO4 v). Strategic objective number 14 (on reducing social disparities and unemployment) and Strategic objective number 22 (on improving the transport and technical infrastructure, developing of tourism) are in line with Priority 2 (PO4 vi). Strategic objective number 26 (on reducing of environmental pollution) is consistent with Priority 1 (PO2 vii). Strategic objective number 27 (on mitigating and adapting to climate change</p>

Name of the relevant document, strategy	Cohesion
	impacts) is connected to Priority 1 (PO2 iv). Strategic objective number 28 (on improving quality of life in the regions) is consistent with all Priorities of the HUSKROUA Interreg A NEXT Programme.
National Strategy for Biodiversity Protection	Priority 1 of the Programme (PO2 iv and PO2 vii) is consistent with several priority objectives of the Strategy, mostly Objective A.1 (on halting the deterioration of all species and habitats, especially if they are recognized by EU legislation and to achieve their significant and measurable improvements); Objective A.2 (informing the public on the importance of biodiversity and steps for its protection and sustainable use) and Objective B.3 (on ensuring the preservation and strengthening of ecosystems and their services, namely through the establishment of green infrastructure and the renewal of at least 15% of the degraded ecosystems and sustainable low-carbon economy at the regional and macro-regional level).
National Regional and Territorial Strategy for Development of the Slovak Republic until 2030	The Strategy's objective is to support the sustainable, dynamic, inclusive development of communities and a modern, innovation-oriented economy in the regions, cities and municipalities of Slovakia for the benefit of improving the living conditions of their inhabitants, the quality of their life, the creation conditions for the use of their specific potentials, the sustainable and efficient use of human, economic and natural resources, their development and protection. It is consistent with almost all Program Priorities (P1, P1, P3 and P4).
Regional Integrated Territorial Strategy of the Košice Region	The Quality of life in Kosice Region is considered among the biggest challenges connected to Territorial development, including environmental and healthcare-related challenges. Specific territorial Objective No. 2.1.2. (on modernizing healthcare infrastructure to integrate primary healthcare) is consistent with Priority 2 – A healthy and attractive border region (PO4 v) and Priority 3 – A cooperating border region (ISO1 b)
Strategy for the Development of Cycling and Cycle Transport in the Presov Region	Objective no. 1 of the Strategy (Implementing measures to improve cycling infrastructure and services in terms of the needs of its users in line with current global trends); Objective no. 2 (implementing measures that will create the conditions for building modern and competitive regional cycling destinations) and Objective no. 3 (on coordinating the activities of interested target groups in the Presov Region so as to contribute to the effective implementation of Objectives 1 and 2) is in line with Priority 2 (PO4 vi) and Priority 1 – Resilient and green border region.

Relevant Romanian documents

Name of the relevant document, strategy	Cohesion
Romania's National Strategy for Sustainable Development 2030	Actions under the HUSKROUA Interreg A NEXT Programme ensure the achievement of the objectives set out in the Framework Strategy. Due to the nature of the Framework Strategy, the link is relevant to all priorities of the HUSKROUA Interreg A NEXT Programme.
North-West Region's Development Plan 2021-2027	The plan aims to achieve objectives in connection with Romania's National Strategy for Sustainable Development 2030, which can be linked to actions under the HUSKROUA Interreg A NEXT Programme as follows: Specific Objective (SO) no. 4 (Natural environment used responsibly) of the Plan, PO2 of the HUSKROUA Interreg A NEXT Programme; SO no. 3 (Sustainable, authentic and attractive lifeframe) of the Plan, PO4 of the HUSKROUA Interreg A NEXT Programme.
National Strategy for the development of the Eco-Tourism in Romania - context, vision and objectives - 2019-2029	<p>The main objective of the eco-tourism strategy is to create conditions for the development of eco-tourism at the level of protected natural areas and in the areas in their vicinity, by developing a network of recognized eco-tourism destinations and by creating competitive eco-tourism products at national and international level. Strategic objectives for specific activities are: Creation of the necessary instruments for protection of the traditional architecture; Development of the local offer; Active participation in the conservation of the biodiversity; Application of the environmental protection actions at the level of the destinations with eco-touristic potential.</p> <p>Policy Objectives no. PO2 and PO4 of the HUSKROUA Interreg A NEXT Programme are in compliance with the above-mentioned strategic objectives.</p>
The Romanian Energy Strategy 2020-2030, with perspectives for 2050	The strategy accords great importance to the reduction of air pollution and the negative effects of greenhouse gases (GHG). The following Operational Objectives of the Strategy are in close correlation with Policy Objective no. 2 of the HUSKROUA Interreg A NEXT Programme: (OP9) Replacement of electricity production capacities on the horizon of 2030 which will go out of operation with new, efficient and low emissions; (OP15) Reduction of pollutant gas emissions in the energy sector; (OP16) Sustainable development of the national energy sector, protecting air, water, soil and biodiversity quality; (OP17) Equitable participation in the collective effort of the EU member states to achieve energy efficiency objectives and targets in the field of greenhouse gas reduction.

Name of the relevant document, strategy	Cohesion
National Integrated Plan in the domain of the Energy and Climate Changes, 2021-2030	In the meaning of the Strategy, as well as in case of "Romania's Strategy for Energy 2018-2030, with perspective to 2050", the first objective, named "Decarbonation – emission and absorption of the greenhouse gases", proposes to use energy efficient and green energy technologies. There is a connection between the objective of the Strategy and with Policy Objective no. 2 of the HUSKROUA Interreg A NEXT Programme.
Nation plan for Waste Management	<p>The Nation plan for Waste Management is in strong connection with the Policy Objective no. 2 of the HUSKROUA Interreg A NEXT Programme, specific objective "vii) enhancing protection and preservation of nature, biodiversity, and green infrastructure, including in urban areas, and reducing all forms of pollution".</p> <p>The Nation plan for Waste Management aims to reduce the negative environmental impact of waste by improving the waste management system on every waste category, reducing the consumption of natural resources, increasing the degree of waste recovery and optimizing the use of packages.</p>
Sustainable development Operational Program 2021-2027 (SDOP)	The Operational Program aims mainly to improve the living standards of the population and the environmental standards, as well as fulfilling the obligations arising from European directives. Specific objectives of the Operational Program (entitled "Promoting energy efficiency and reducing greenhouse gas emissions", "Promoting sustainable water management", "Improving the protection of nature and biodiversity, green infrastructure, especially in urban areas, and reducing pollution", "Promoting adaptation to climate change, risk prevention and disaster resilience") are in compliance with PO2 of the planned HUSKROUA Interreg A NEXT Programme.
General Transport Masterplan (GTMP) 2014-2030	<p>The master plan aims to achieve a set of strategic objectives, which should contribute to economic efficiency, economic development, sustainability, security, lowering negative environmental impact, and also the use of financing funds.</p> <p>The specific environmental objective, within the environmental objective of the Masterplan, is focused on reducing air pollution and greenhouse gas emissions, and also on reducing the negative impact on the biodiversity (Environmental objective no. 1-2 and 1-4), in concordance with PO2 of the program.</p> <p>Regarding the transport network, the Masterplan includes the development of the transport network between Romania-Ukraine (directly, in the area of the program) and Romania-Hungary (indirectly from the point of view</p>

Name of the relevant document, strategy	Cohesion
	of the program), contributing to PO4 of the HUSKROUA Interreg A NEXT Programme, specific objective "v) enhancing the role of culture and sustainable tourism in economic development".
Territorial Development Strategy of Romania (TDSR), Polycentric Romania 2035 – territorial cohesion and competitiveness, development and equal chances for people	The TDSR organizes the actions in two planification perspectives: 1. investments which configure the national territory; 2. targeting, that aims to protect the existing natural and built spaces. The Specific Objective (SO) no.4 of the strategy is focused on the protection of the natural and built heritage, highlighting the territorial identification elements, which is in concordance with PO2 and partially PO4 of the HUSKROUA Interreg A NEXT Programme. SO no.5 of the strategy highlights the principle of cooperation between public institutions, transborder and transnational cooperation, according the policy objective ISO 1 of the program.
National Strategy for Romania's Sustainable Development Horizons 2013-2020-2030	<p>The Strategy involves 4 key objectives: environment protection, social cohesion and equity, economic prosperity and fulfilling of the EU commitments.</p> <p>Point no. 1.1. ("Climate change and green energy") of the chapter "Crucial challenges" of the strategy, and point no. 1.4. ("Conservation and management of the natural resources") are in convergence with PO2 of the HUSKROUA Interreg A NEXT Programme.</p> <p>Point no. 1.3. ("Promoting sustainable consumption and production practices"), point no. 1.5. ("Promoting quality medical services on an equal footing and improving protection against health threats") and point no. 1.6. ("Social inclusion, demography and migration") are in convergence with PO4 of the HUSKROUA Interreg A NEXT Programme.</p>
Large Infrastructure Operational Program 2014-2020	<p>The Plan is in line with the provisions of the HUSKROUA Interreg A NEXT Programme.</p> <p>Priority Axis no. 3 "Development of environmental infrastructure in conditions of efficient management of resources", through specific objective SO 3.1. (Reducing the number of non-compliant landfills and increasing the degree of waste recycling in Romania) and SO 3.2. (Increasing the level of collection and treatment of urban wastewater, as well as the degree of ensuring the drinking water supply of the population), and also Priority Axis no. 4. "Environmental protection through biodiversity conservation measures, air quality monitoring and decontamination of historically polluted sites", through specific objective SO 4.1. (Increasing the degree of protection and conservation of biodiversity and restoring degraded ecosystems) and SO 4.3. (Reduction of historically polluted areas) comply with PO2 of the HUSKROUA Interreg A NEXT Programme.</p>

Name of the relevant document, strategy	Cohesion
	<p>Priority Axis no. 5 (Promoting adaptation to climate change, prevention and risk management) through specific objective SO 5.1. (Reducing the effects and damages on the population caused by natural phenomena associated with the main risks accentuated by climate change, mainly by floods and coastal erosion) and SO 5.2. (Increasing the level of preparedness for a rapid and efficient disaster response of response crews) aims to achieve PO2 of the HUSKROUA Interreg A NEXT Programme (climate change adaptation, and disaster risk prevention, resilience, taking into account ecosystem-based approaches).</p> <p>Priority Axis no. 6 (Promoting clean energy and energy efficiency in order to support a low carbon economy) through SO 6.1. (Increasing energy production from less exploited renewable resources (biomass, biogas, geothermal)), SO 6.2., SO 6.3. and SO 6.4. (regarding energy efficiency and greenhouse gas emission reduction of industry and domestic usage) and also Priority Axis no. 7 (Increasing energy efficiency at the level of the central heating system in the selected cities, including Bucharest) through SO 7.1. and SO 7.2. are contributing to the proposed specific objectives of PO2 of the HUSKROUA Interreg A NEXT Programme.</p> <p>Priority Axis no. 9 (Promoting social inclusion, combating poverty and all forms of discrimination) is in synergy with PO4 (social inclusion and social innovation) of the HUSKROUA Interreg A NEXT Programme.</p>
<p>National Action Plan in the Field of Energy Efficiency IV (NAPEE)</p>	<p>The Fourth National Action Plan on Energy Efficiency 2017-2020 is structured on two components: "Energy savings in the energy supply system-transformation, transport and distribution" and "Energy savings at the final consumer (art.7 DEE2017/2012/EU)".</p> <p>The national energy efficiency target is in line with Directive 2012/27/EU of the European Parliament and of the Council of 25 October 2012 on energy efficiency, and in order of the achievement of the targets in the plan a set of measures are established in this sense.</p> <p>Mainly, the objective of the measures is to meet the long-term goals of the strategy on climate change and the transition to a competitive low-carbon economy by 2050, in connection with PO2 of the HUSKROUA Interreg A NEXT Programme, specific objective no. iv) "promoting climate change adaptation, and disaster risk prevention, resilience, taking into account ecosystem-based approaches".</p>
<p>National Strategy and action plan for the preservation of Biodiversity 2014-2020</p>	<p>In order to achieve the desiderates related to the conservation of the biodiversity at national level more strategic objectives have been established, which contribute to PO2 (vii. enhancing protection and preservation of nature,</p>

Name of the relevant document, strategy	Cohesion
	<p>biodiversity, and green infrastructure, including in urban areas, and reducing all forms of pollution) of the HUSKROUA Interreg A NEXT Programme.</p> <p>Other Strategic Objectives can be mentioned in this context: SO B (Ensuring the coherence and efficient management of the national network of protected natural areas); SO C (Ensuring a favorable state of conservation for protected wild species); SO D (Sustainable use of biological diversity components); SO J (Public communication, education and awareness).</p>
<p>Cultural and National Heritage Strategy 2016-2022</p>	<p>PO4 of the planned program is in line with Priority Axis no. 1 of the Cultural and Heritage Strategy, general objective no. 1 (Utilization of cultural resources - elements of local and regional identity - for sustainable territorial development and a high quality of life), Priority Axis no. 2, General objective no. 1 (Entrepreneurship development in the Cultural and Creative Sectors) and Priority Axis no. 4 (Increasing the presence of Romanian works, creators and cultural operators at international level).</p>

Relevant Ukrainian documents

Name of the relevant document, strategy	Cohesion
<p>State Programme for the Development of the Ukrainian Carpathian Region for 2020-2022</p>	<p>The State Programme covers 4 administrative regions of Ukraine, 3 of which (Zakarpattia, Ivano-Frankivsk and Chernivtsi) are also target territories of the HUSKROUA Interreg A NEXT Programme 2021-2027. It supports implementation of cross-border and international projects in the Carpathian region. It is aimed at the development of tourism and environmental safety, the prevention of emergencies and dangerous events in mountain settlements and the elimination of their consequences, the restoration of biological and landscape diversity. Actions implemented within the framework of the Program Priorities 1 – A resilient and green border region and 2 - A healthy and attractive border region will support preventing the risk of flood-related disasters, strengthen biodiversity conservation and strengthen the role of culture and sustainable tourism in the economic development of the cross-border areas and the 3 regions of Ukraine.</p>
<p>National transport strategy for the period until 2030</p>	<p>The Strategy envisages improving the quality of transport services, their environmental friendliness and compliance with international standards, the integration of the Ukrainian transport system into the European network, etc. However, the selected Policy Objectives and related Specific Objectives of the HUSKROUA Interreg</p>

Name of the relevant document, strategy	Cohesion
	<p>A NEXT Programme 2021-2027 do not prioritize the development of cross-border transport infrastructure. In connection with the development of cross-border networks of tourist attractions (PO4 (v)), small-scale actions for the development of cross-border transport may be implemented under the program. Also, the exchange of best practices for the development of eco-transport, the construction of wildlife crossings, etc., can take place under Priority 3 - A cooperating border region (ISO1 b).</p>
<p>Strategy for the development of tourism and resorts for the period until 2026</p>	<p>The Programme supports Priority 2 - A healthy and attractive border region. Activities in the field of tourism development will allow implementing international standards in the field of tourist services, expanding services in rural, ecological and active tourism of the border regions, and developing relevant infrastructure there, in accordance with the Strategy.</p>
<p>National Waste Management Strategy in Ukraine until 2030</p>	<p>The Programme does not provide any special priority aimed at cross-border cooperation in the field of waste governance. However, soft measures, such as the establishment of a selective waste collection system in settlements or the implementation of appropriate educational programs in schools, can be implemented under Priority 1 - A resilient and green border region. Waste management activities can only be part of a wider transboundary activity under PO2 vii) enhancing protection and preservation of nature, biodiversity, and green infrastructure, including in urban areas, and reducing all forms of pollution.</p>
<p>Energy strategy of Ukraine for the period up to 2035 "Security, energy efficiency, competitiveness"</p>	<p>The Programme does not provide any special priority aimed at improving the energy efficiency of communities and the development of RES in the cross-border region. However, measures on promoting distributed RES generation and creating pilot models in communities can be part of a broader cross-border activity under Priority 1 - A resilient and green border region. Exchange of best practices in this area can also take place within Priority 3 - A cooperating border region.</p>
<p>Strategy of low-carbon development of Ukraine until 2050</p>	<p>The Strategy envisages the promotion of RES development and energy efficiency measures in industry and housing, the introduction of sustainable practices for efficient waste management and increased attention to forests and their role in carbon sequestration. The HUSKROUA Interreg A NEXT Programme 2021-2027 does not identify specific priorities in cross-border activities in the field of sustainable energy and waste management, but certain measures are possible under Priority 1 - A resilient and green border region. Projects aimed at the conservation of forest ecosystem biodiversity, the promotion of dead wood and Old-Growth Forests meet both the objectives of the Strategy and Program Priority 1 - A resilient and green border region.</p>

Name of the relevant document, strategy	Cohesion
<p>Concept for the implementation of state policy in the field of climate change for the period up to 2030</p>	<p>Priority 1 - A resilient and green border region, PO2 iv) "Promoting climate change adaptation, and disaster risk prevention, resilience, taking into account ecosystem-based approaches" will help to develop and implement effective measures on climate change adaptation and increase resilience to climate-related risks and natural disasters for health, human life, and economic sectors, and the natural ecosystems of transboundary regions. The Concept sets itself the same tasks.</p>
<p>Development strategy of the Chernivtsi region for the period until 2027</p>	<p>Cross-border activities within Priorities 1 - A resilient and green border region and 2 - A healthy and attractive border region will help to achieve the results of the operational goals of the Strategy: conservation of Protected Areas, development of tourism and recreation, development of the healthcare and social protection system.</p>
<p>Development strategy of the Ivano-Frankivsk region for the period until 2027</p>	<p>The Development Strategy of the Ivano-Frankivsk region until 2027 is focused on 3 Strategic Priorities:</p> <p>Priority 1. Competitive economy on the basis of smart-specialization. Within this Priority, one of its Operational Objectives is the Development of tourism and recreation. This Objective is fully in line with Priority 2 of the INTERREG Programme.</p> <p>Priority 2. Development of the region's infrastructure. The HUSKROUA Interreg A NEXT Programme does not support large-scale infrastructure investments.</p> <p>Priority 3. Establishing comfortable and safe living conditions in the Ivano-Frankivsk region. Within this priority, there is the Operational Objective of Ensuring equal access to and improving the quality of medical services, as well as the Operational Objective of Improving the level of environmental safety. The first of these Objectives is in line with Priority 2 of the INTERREG program, in particular PO4 v) ensuring equal access to healthcare and fostering resilience of health systems. Activities under the second Operational Objective, in particular under the task Conservation and expansion of natural areas, are supported by Priority 1 of the INTERREG programme PO2 vii) enhancing protection and preservation of nature, biodiversity, and green infrastructure, including urban areas, and reducing all forms of pollution.</p>
<p>Regional Development Strategy of Zakarpattia region for the period 2021-2027</p>	<p>Implementation of cross-border activities under Priorities 1 and 2 of the HUSKROUA Interreg A NEXT Programme 2021-2027 will support achieving operational objectives of the Strategy. These are ensuring equal access and improving the quality of medical services, the development of tourism and healthcare sectors, the conservation and restoration of biological and landscape diversity, natural complexes, water, land and forest resources, the expansion of the regional ecological network, the conservation and restoration of wetlands at all altitude-zones</p>

Name of the relevant document, strategy	Cohesion
	of the region, the formation of ecologically-oriented multifunctional and close to nature forestry, and the protection of forests from the impact of climate change.
Waste management strategy in Zakarpattia region for a 15-year period	The program does not provide for a special priority aimed at cross-border cooperation in the field of waste governance. However, soft measures, such as the establishment of selective waste collection systems in settlements or the implementation of appropriate educational programs in schools, can be implemented under Priority 1 - A resilient and green border region. Waste management activities can only be a part of a wider transboundary activity under PO2 vii) enhancing protection and preservation of nature, biodiversity, and green infrastructure, including in urban areas, and reducing all forms of pollution.
Draft Strategy for Environmental Safety and Adaptation to Climate Change until 2030	The Strategy has not yet been approved by the Cabinet of Ministers of Ukraine, but the INTERREG Programme is in line with the draft concept; the cross-border activities under Priority 1 will contribute to the achievement of the Strategy's objectives.
Draft National Strategy for Building a New Health Care System in Ukraine for the Period 2015-2025	<p>The Strategy includes the whole reform and management of the healthcare system, including its financing. It identifies 5 directions for development in relation to medical services, which are as follows: Strengthen primary level healthcare; Reform of the hospital network; Public Health; Emergency Service and Dental care.</p> <p>Cross-border activities under Priority 2 of the HUSKROUA Interreg A NEXT Programme PO4 v) ensuring equal access to healthcare and fostering resilience of health systems will strengthen the national healthcare sector reform in Ukraine, in particular, improve community access to good quality healthcare services; it will support achieving the goals of Ukrainian healthcare system reform in the second, third and fourth Development directions described above.</p>
Biodiversity protection Strategy until 2030 – under development	The approval of this Strategy is on the way by the Cabinet of Ministers of Ukraine and hopefully be completed before the start of the HUSKROUA Interreg A NEXT Programme 2021-2027 implementation. Implementation of cross-border projects under Priority 1 - A resilient and green border region, PO2 vii) "Enhancing protection and preservation of nature, biodiversity, and green infrastructure, including in urban areas, and reducing all forms of pollution" will allow the establishment of biodiversity status monitoring in the target areas of the Program from the Ukrainian side. It will support starting the implementation of the ecosystem services concept; forming a comprehensive approach to species conservation; fulfilling international obligations in the field of biodiversity, as provided by the Strategy.

4.2 Internal consistency of the programme document

In this chapter, we examine the internal consistency of the programme document, paying particular attention to the following:

- possible contradictions between Chapter 1 and Chapter 2 of the programme documents, and
- possible contradictions between the actions of the planned priorities.

The Territorial Analysis (Chapter 1) of the programme document has concluded five major proposed Territorial Objectives – Priorities (TO6-P1 Environment; TO8-P1 Disasters; TO7-P1 Transport; TO8-P2 Health; TO3-P1 Heritage), which were narrowed down in Chapter 2 to three Priority objectives (A resilient and green border region; A healthy and attractive border region; A cooperating border region). However, these 3 priorities, apart from the field of transport, cover all the other Territorial objectives proposed in the Territorial Analysis. The narrowing was the result of a number of negotiations:

- On the one hand, the partners aimed to concentrate the financial resources of the program. Projects related to transport infrastructure development are high-budget projects, so the amount allocated to the priority would have taken away significant resources from other areas.
- On the other hand, although according to the stakeholder consultation, transport is an important area to be developed in the border region, previous project experience shows that projects related to the development of transport infrastructure have not been effective.
- As a compromise, within Priority 3 – A cooperating border region, in connection with the ISO1 b) specific objective, preparatory works (planning, strategy development) related to transport infrastructure development will be supported.

The priorities planned within the framework of the HUSKROUA Interreg A NEXT Programme respond to relevant problems and challenges of the border region, and the actions planned under the program priorities complement each other.

Priority 1: A resilient and green border region PO2 iv) promoting climate change adaptation, and disaster risk prevention, resilience, taking into account ecosystem-based approaches and PO2 vii) enhancing protection and preservation of nature, biodiversity, and green infrastructure, including in urban areas, and reducing all forms of pollution: The activities carried out under the two selected SOs are a proper mix addressing areas with the highest cross-border relevance and the partner countries have significant previous cooperation experience in this field. The planned activities related to the selected SOs reinforce each other's effects.

Priority 2: A healthy and attractive border region PO4 v) ensuring equal access to healthcare and fostering resilience of health systems and PO4 vi) enhancing the role of culture and sustainable tourism in economic development, social inclusion and social innovation: The two SOs selected under PO4 represent quite diverse themes. Health-related infrastructure and service development and activities related to sustainable tourism are two important development areas in the cross-border area. Furthermore, activities related to sustainable tourism development are in line with the activities related to the PO2 vii) specific objective.

Priority 3: A cooperating border region ISO1 b) 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: The selected SO under the policy objective aimed at good governance measures allows the widest possible range of stakeholder interactions. Activities under this priority will contribute to strengthening cooperation and capacity building on issues not covered by other SOs.

5 Socio-economic and environmental characteristics of the CBC landscape

Based on the Territorial analysis, the chapter briefly describes the current socio-economic and environmental situation of the HUSKROUA CBC area and its expected evolution without the implementation of the Programme, in particular the cross-border systems, including the advantages and disadvantages of the cross-border location.

Within the first subchapter, the socio-economic system of the region is described on the basis of Chapter 2.1 of the Territorial analysis (“Key characteristics of the programme area”), examining the following main areas:

- Cooperation area
- Demography
- Economic structure and performance
- Social challenges
- Data on the impact of the COVID-19 crisis

The second subchapter is a brief description of the environmental status of the CBC region based on Chapter 2.2 of the Territorial analysis “PO2 Greener / TO6-P1 Environment”), focusing on the following aspects:

- Natural condition and regions
- Water resources, river basins
- Biodiversity, protected areas
- Environmental pressures
- Sustainability, joint preparation for climate change

5.1 The socio-economic characteristics of the areas which are likely to be affected by the programme objectives

This chapter is based on section 2.1. of the Territorial analysis “Key characteristics of the programme area” and highlights the socio-economic characteristics of the programme area that are most likely to be affected by the priorities and specific objectives.

5.1.1 Cooperation area

The cooperation area of the Programme consists of regions of Hungary, Slovakia, Romania (EU Member States) and Ukraine (as Partner Country). The total cooperation area consists of ten NUTS III areas (categorised as counties in HU and RO and regions in SK and the UA) and covers a territory of 83 057 square kms with a population of 8,08 million - as large as a mid-sized European country. The cross-border territory can be considered as a large continuous rural area with only a few urban cores and urban regions. Slightly higher rate of rural-urban duality can be observed in the Košický Region (SK), Borsod-Abaúj-Zemplén County (HU) and the three Ukrainian regions (Chernivetska, Ivano-Frankivska and Zakarpatska).

The ten cooperating NUTS III areas are comparable in size (with a population in the range of 0,38-1,37 million). However, administratively the cooperation area is divided between four countries with different roles and responsibilities of their respective NUTS III regions. This and the fact that the Programme joins EU members states and a non-member partner country provides a cooperation area with statutory borders presenting fundamental physical and administrative barriers between stakeholders and initiatives on each side, limiting the potential of many cooperation themes, and calling for a careful selection of priorities.

5.1.2 Demography

The population density of the programme area is relatively low, without major territorial differences: the highest values are 118.46 and 111.33 inhabitants per square kms (Košický and Chernivetska Regions), the lowest are 83.08 and 87.99 (Maramureş and Satu- Mare counties). Rural areas have typically lower population density than intermediate (rural-urban) segments. The programme area is hindered by longstanding outward migration tendencies: capitals, regional economic hubs and third countries tend to attract young and active people, especially in the case of HU and RO counties. Population ageing can be tracked throughout the area, especially affecting the HU and RO parts (with an ageing index¹ of 110 and 90 respectively).

¹ The ratio of elderly people above 65 and young people under 15.

5.1.3 Economic structure and performance

The programme area is highly diverse in terms of economic performance. While country-specific parts of the area typically have the lowest GDP per capita in their respective countries (Prešovský Region in SK, Szabolcs-Szatmár-Bereg County in HU, Suceava County in RO and Chernivetska and Zakarpatska Regions in the UA), there are huge territorial differences, in line with the general economic development status of the countries themselves. Most productive parts are in SK (Košický and Prešovský Regions) and HU (Borsod-Abaúj-Zemplén County), while the least developed areas are the regions located in the UA (Chernivetska, Zakarpatska and Ivano-Frankivska). This is partly due to the historic disparity between the more prosperous western areas and the least productive eastern parts, but the UA regions experienced a severe recent shrinkage as well, as an effect of the Russo-Ukrainian War since 2014, showing a GDP decline in the range of 26-31%. Most recent tendencies are more promising: the UA regions are bouncing back from the deep economic crisis, while other areas also improve their economic performance.

The enterprise density of the programme area is highly unequal, with the western part often showing 6-7 times higher densities than the easternmost, mostly Ukrainian areas. Industrial parks are used to boost local economic production mostly in HU counties and to a lower extent in the SK regions of the area.

The areas generally lag behind the national averages and cannot perform up to their full economic potential due to their peripheral locations, low level of cross-border economic relations and underperforming international economic integration (in terms of foreign investment, trade relations, value chains and supplier networks, business development, etc.).

5.1.4 Social challenges

Unemployment and poverty are profound problems across the majority of the programme area, strongly interrelated with the low relative economic performance, low level of cross-border/international integration, disadvantageous demographic tendencies and rural settlement structure analysed in the subchapters above. Unemployment exceeds 8% in most areas. Poverty can be observed throughout the programme area in various forms, including lack of savings, debts, precarious jobs (if any) and low amounts of benefits. Even in the case of counties with a better labour situation (Suceava, Maramureş and Satu-Mare in RO, Borsod-Abaúj-Zemplén in HU), in-work poverty² shows structural social problems, with rates usually exceeding the EU28 average. Alarmingly, SK regions with the best in-work poverty ratio show a negative tendency in this respect over recent years. Unemployment could be tackled on a cross-border level, balancing

² The phenomenon when employed people suffer from a certain level of poverty.

inequalities between local labour market demand and supply with cross-border employment and related services, without the permanent loss of active workforce.

Roma communities exist in high relative proportions throughout the programme area (also considering that their ratio is generally underestimated by official surveys), and represent a social segment especially vulnerable to poverty, exclusion from the labour market, and financial and material deprivation. Their most populous and peripheral communities live in small remote villages and/or border areas facing structural socio-economic challenges including bad infrastructure, weak accessibility, lack of workplaces, housing problems, low educational attainment, etc.

Social vulnerability and exposure to health issues are interrelated problems. People experiencing poverty are generally disadvantaged as compared to other social groups, also in terms of prevalent diseases, disabilities, badly perceived health status and low levels of wellbeing. Access to quality healthcare services is generally worse than average in the programme area, and especially problematic in the RO and the UA parts.

Recent factors including climate change (posing one of the biggest threats for humanity, seriously affecting human health, the natural environment, and security) and the COVID-19 pandemic (highlighting the importance of social inclusion of vulnerable groups) prove the special importance of improving access to healthcare and employment services, housing and anti-poverty initiatives. Cross-border service integration, as well as improved permeability of borders and mobility of people can provide potential solutions to these challenges.

5.1.5 Impact of the COVID-19 crisis

The COVID-19 pandemic, consequent lockdowns and other containment measures had major impact on not only the health sector but many aspects of cross-border cooperation as well. The health crisis was soon followed by a job crisis, resulting in a severe increase of unemployment ratios. Vulnerable social groups are especially affected as pre-existing gaps in social and employment protection emerged: lower skilled workforce and people occupied via non-standard forms of employment were more likely to lose their jobs, while students and workers with limited ICT skills or equipment were excluded from teleworking or distance education. Poverty projections suggest that the long-term social impacts of the crisis are likely to be quite significant.

Environmental impacts are rather positive on the short term, with a reduced carbon footprint due to limited transportation and mobility activities and declining production. Such changes are not long-term improvements though, and polluting activities will surely bounce back to their pre-COVID intensity as soon as the pandemic is over.

Due to travel restrictions, cross-border mobility has significantly decreased, and tourism suffers the largest decline in the post-World War 2 history of the industry. It is currently totally unpredictable how and when will the sector bounce back from the nearly zero volumes reached during national lockdowns and the international travel ban, and it is also very uncertain how

borderside locations outside major tourism destinations will perform as compared to the general trends. Recent studies suggest that outdoor activities, like outdoor attractions, parks/gardens, wildlife/natural environment attractions, will probably meet the interests of post-COVID tourists more, providing remote, borderside destinations a potential edge in the forthcoming period. Also, short- and medium-term inland vacations, occasionally combined with short cross-border visits (city breaks, etc.) will be more favoured instead of international journeys.

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

This chapter is to be completed based on the “Statistical and data-based analysis” within section 2.2. of the Territorial analysis “PO2 Greener / TO6-P1 Environment” and highlights the environmental characteristics of the programme area that are most likely to be affected by the priorities and specific objectives.

5.2.1 Natural condition and regions

The protection and management of common natural values in the border region is relevant in several aspects. Landscapes are cross-border units, in the CBC region the Carpathian Mountains or the Pannonian Plain and the smaller landscapes are shared by several states, but their natural features, values, and current and future challenges are similar. Coordinated management, protection and development of landscapes requires joint efforts in border areas. Without joint action, negative environmental impacts (loss of biodiversity, floods, air pollution, climate change etc.) will intensify in the region.

The HUSKROUA CBC area covers three of the seven biogeographical regions designated in Europe: Continental, Alpine and Pannonian. These biogeographical regions are a good illustration of the main natural features of the programme area.

The Carpathians, belonging to the Alpine region, are characterized by mountainous areas, while the Pannonian and Continental regions are characterized by lowlands, and only the parts close to the Carpathians are hills.

The main climatic conditions are mostly determined by the topography. The average annual precipitation in the Pannonian and almost the entire Continental region is below 700 mm. In the Carpathians the precipitation increases with the altitude: in the lower parts it is around 700-800 mm, while in the higher parts it is between 800 and 1000 mm. The average temperature conditions in the region are similar, with the main difference that the areas inside the Carpathians are warmer than the eastern areas outside the Carpathians.

5.2.2 Water resources, river basins

One of the most significant geographical features of the HUSKROUA CBC area as a whole is hydrography, as the Carpathians – crossing the HUSKROUA CBC area – form the watershed between the Baltic Sea (Vistula) and the Black Sea (Danube, Dniester).

The importance of regional water management is underlined by the fact that each country in the region is part of the Tisa / Tisza catchment area, so deficiency in wastewater and waste management result a cross-border environmental challenge and coordinated flood protection can be a priority in the region.

5.2.3 Biodiversity, protected areas

Biodiversity is a term used to describe the variety of life on Earth. It can be used more specifically to refer to all species in one region or ecosystem. It plays a key role in the functioning of ecosystems and the provision of ecosystem services (e.g. fisheries, biomass, pollination, nutrient cycling, water purification, recreation) which are essential for human life and wellbeing. It is a common experience that the lower the biodiversity in an ecosystem, the more vulnerable the system is, the more inflexible it responds to change.

Within Europe, the region has a key role to play in terms of biodiversity. The Carpathians, their World Heritage-protected forests, are of a paramount importance for the conservation of biodiversity in Europe. Of the 11 biogeographical regions in Europe, the Pannonian biogeographical region is one of the richest in biodiversity.

Nature protection areas are important for biodiversity conservation. There are different levels of nature conservation areas such as international, European and national in the programme area. International as well as nationally protected areas are located in all four countries. The Birds and Habitats Directives – and the Natura 2000 sites they designate in the EU Member States – aim to protect biodiversity and are the key pieces of legislation underpinning the EU Biodiversity Strategy to 2020. Protected areas, often in territorial overlap with each other, play a significant role in the preservation and survival of the biodiversity and other natural values of the program area.

5.2.4 Environmental pressures

One of the main environmental issues of the program area is the mitigation and elimination of negative environmental impacts arising from the different environmental infrastructure of the counties participating in the program. Environmental conflicts and problems often have a cross-border impact. Deficiencies in water and waste management, wastewater treatment and air pollution problems are the most important environmental issues in the program area.

The cross-border aspect of waste management is provided by the illegal communal waste dumping into the floodplain of the Upper Tisza (in Ukraine), carried by the river across borders to the Lower Tisza (in Hungary) when the river floods.

Although a number of remediation programs have been launched in recent years, the long-term solution would be a complex prevention program (professional municipal waste management; elimination of existing illegal landfills; reduction of the use of plastics – e.g. by developing the drinking water network). Wastewater treatment is another important environmental issue for countries along the Upper Tisza, which is also unresolved in many Ukrainian settlements.

The air quality has significantly improved over the past decades in Europe. Nevertheless, the current air quality still affects people's health and the ecosystem. Air pollution - especially the periodically high levels of particulate matter - is a major challenge in the border area, as well as an important health risk to all its residents, directly leading to various illnesses, as well as to premature death.

There are additional challenges for some air pollutants – nitrogen oxides (NO_x), ground-level ozone, particulate matter (PM) – in the area. For example, in Europe, the pollution caused by particulate matter is one of the highest in the HUSKROUA CBC area. Low air quality is closely related to harmful heating methods, but some bad agricultural practices – e.g. burning agricultural organic waste; poorly performed plowing methods – can also play a negative role in this case.

5.2.5 Sustainability, joint preparation for climate change

The issue of environmental sustainability is of regional significance for the program area. Significant sustainability efforts are needed in each country. The EU Member States have begun to meet various EU sustainability requirements and Ukraine has also begun its European integration in the field of sustainability.

With regard to greenhouse gas emissions, the countries of the programme area have not taken significant steps in recent years in the field of joint, independent energy management and the use of renewable energy.

Based on the available research, the annual average temperature of the Carpathian Basin is expected to increase by 1-2 °C by 2050 and by 2-3 °C by 2100 as a result of climate change. Climate change will result in an increase in the number of extreme weather events, which will increase the role of common disaster risk prevention. Adaptation to climate change is therefore an important joint issue in the cross-border area.

5.3 Relevant environmental conflicts and problems

Based on the situation analysis, this chapter describes the relevant environmental conflicts and problems of the HUSKROUA CBC area, specifically those which relate to any areas of particular environmental importance, such as areas designated pursuant to Directives 79/409/EEC and 92/43/EEC.

Environmental conflicts and problems that are particularly threatening to protected areas contribute to the loss of certain species and habitats and result in ecosystem degradation and weakening ecosystem resilience. The main environmental conflicts and problems are:

- Habitat change – including loss, fragmentation and degradation – of natural and semi-natural habitats due to land-use change is a main pressure. The fragmentation of the rural landscape due to urban sprawl and linear infrastructure developments, the homogenization and loss of habitats by the development of agriculture and land abandonment, and intensively managed forests are the main causes of natural habitat degradation.
- Over-exploitation of natural resources, in particular through forestry in the HUSKROUA CBC area, remains a large problem. Uncontrolled tourism is also a problem in some nature reserves.
- The accelerated spread of invasive alien species is not only an important driver of biodiversity loss, but also causes significant economic damage.
- Some pollution pressures have decreased, such as the nutrient enrichment of European waters. However, the level of nitrogen still substantially exceeds ecosystem eutrophication limits in most of Europe and the eutrophication risk is predicted to remain unchanged in the coming decade. Air pollution has a significant impact not only on human health, but also on the health of ecosystems. The most harmful air pollutants in terms of damage to ecosystems are ozone, ammonia and nitrogen oxides.
- The increasing impacts of climate change (see above) are already affecting the distribution and interactions of species and projected to become an increasingly significant threat in the coming decades. Climate change is exacerbating many other environmental threats.

5.4 Environmental protection objectives relevant to the Programme

At international, Community or partner country level, there are a number of strategies – and related objectives – that are relevant to the environment and the region and that have been taken into account during the preparation of the program. In this chapter, these – mainly community level – strategies are briefly described.

The European Green Deal, published in 2019, endorsed the objective of achieving a climate-neutral EU, an economy with net-zero greenhouse gas emissions, by 2050. The implementation of the European Green Deal requires the renewal and updating of the most important policies and measures. All EU actions and policies must contribute to the objectives of the European Green Deal.

In the context of the European Green Deal, a number of strategies have been developed and renewed. The European Green Deal, in 8 subchapters – and in the related strategies – discusses the challenges and outlined solutions in each area, which are:

- Increasing the EU's climate ambition for 2030 and 2050 (2.1.1.) – *European Climate Law and EU Strategy on Adaptation to Climate Change*
- Supplying clean, affordable and secure energy (2.1.2.) – *EU Strategy for Energy System Integration*
- Mobilizing industry for a clean and circular economy (2.1.3.) – *Circular Economy Action Plan*
- Building and renovating in an energy and resource efficient way (2.1.4.) – *Renovation Wave*
- Accelerating the shift to sustainable and smart mobility (2.1.5.) – *Smart and Sustainable Mobility Strategy*
- From 'Farm to Fork': designing a fair, healthy and environmentally friendly food system (2.1.6.) – *Farm to Fork Strategy*
- Preserving and restoring ecosystems and biodiversity (2.1.7.) – *EU Biodiversity Strategy for 2030*
- A zero-pollution ambition for a toxic-free environment (2.1.8.) – *Zero Pollution Action Plan*

In this chapter, in connection with the purpose of the document, we describe the “Forging a climate-resilient Europe - the new EU Strategy on Adaptation to Climate Change” and the “EU Biodiversity Strategy for 2030 – Bringing nature back into our lives” in more detail.

Tackling climate change is an urgent challenge. The atmosphere is warming, and this is affecting our everyday life already now. Climate change is having an increasingly severe impact on our planet's ecosystems and biodiversity, in addition to our health and food systems.

The IPCC (Intergovernmental Panel on Climate Change) estimates that in order to address the challenges posed by climate change and limit temperature rises to 1.5 °C, global net zero CO₂ emissions by 2050 and the neutrality of all other greenhouse gases by the end of the century must be achieved.

Linked to the above goal, the European Climate Law proposal provides the foundation for increased ambition and policy coherence on adaptation, and the new Adaptation Strategy will contribute to the Union's 2050 vision of a climate-resilient Union by making adaptation smarter, more systematic, faster and international.

Under Priority 1 “A resilient and green border region”, the HUSKROUA Interreg A NEXT Programme, in connection with the PO2 iv) “promoting climate change adaptation, and disaster risk prevention, resilience, taking into account ecosystem-based approaches” sets out a number of activities that will contribute to achieving the objectives of the strategy. The most important of these are:

- 2.1. Smarter adaptation: improving knowledge and managing uncertainty
- 2.2. More systemic adaptation: Support policy development at all levels and sectors

Knowledge and data sharing, climate adaptation strategies must be effective at all levels. Within the framework of the HUSKROUA Interreg A NEXT Programme (PO2 iv); ISO1 b)), the creation of common strategies related to climate adaptation and disaster prevention and knowledge and data sharing among relevant stakeholders can be an important area of cooperation.

Biodiversity is one of the crucial topics of modern European environmental strategies. This complex topic is influenced by many green issues, as it is also reflected in the EU Biodiversity Strategy for 2030. In the Strategy, several actions have been formulated to reverse biodiversity loss.

Most of the activities in the EU Biodiversity Strategy are also crucial for the whole HUSKROUA CBC area. Not only the management of the various environmental issues, but also the maintenance and preservation of the main ecological corridors and elements are a common task of the whole cross-border area. Most environmental issues are closely interlinked and require integrated solutions. Climate change is accelerating the destruction of nature through droughts, floods and fires, while the loss and unsustainable use of nature is a key driver of climate change.

Under Priority 1 “A resilient and green border region”, the HUSKROUA Interreg A NEXT Programme, in connection with the PO2 vii) “enhancing protection and preservation of nature, biodiversity, and green infrastructure, including in urban areas, and reducing all forms of pollution” sets out a number of activities that will contribute to achieving the objectives of the strategy. The most important of these are:

- 2.1. A coherent network of protected areas
- 2.2. An EU Nature Restoration Plan: restoring ecosystems across land and sea – 2.2.2. Bringing nature back to agricultural land; 2.2.4. Increasing the quantity of forests and improving their health and resilience; 2.2.7. Restoring freshwater ecosystems; 2.2.8. Greening urban and peri-urban areas; 2.2.9. Reducing pollution; 2.2.10. Addressing invasive alien species

6 Potential environmental effects of programme implementation

In the main chapter of the environmental assessment, the potential environmental impacts on environmental elements – such as soil; air; water and ground waters; biodiversity, flora, and fauna; Natura 2000 territories and equivalent protected areas in case of Ukraine; climate; built environment, settlement surroundings, and cultural heritage; human health and lifestyle; environment consciousness; emerging environmental conflicts and potential problems, the escalation of existing problems; interrelationship and cumulative effect of threats to the above systems – are assessed. All planned interventions of the programme are considered, and the assessment of potential – negative, neutral, contrary, positive – environmental impacts are highlighted.

6.1 Potential effects of the programme on soil

Priority 1: A resilient and green border region

PO2 iv) promoting climate change adaptation, and disaster risk prevention, resilience, taking into account ecosystem-based approaches

Type of actions in PO2 iv) targeting prevention, monitoring, public awareness-raising activities and building of common strategies on natural and human-induced disasters in the region will have indirect positive effects on soil health. The increasing number of flooding, drought events and landslides in the region seriously increase the danger of soil loss, unwanted sediment deposition, the alteration of topsoil characteristics, loss of organic matter and vegetation (protected flora) which negatively affect both cultivated and non-cultivated soils across borders.

Priority 1: A resilient and green border region

PO2 vii) enhancing protection and preservation of nature, biodiversity, and green infrastructure, including in urban areas, and reducing all forms of pollution

Types of actions listed in PO2 vii) will have the most positive, tangible effects especially that these actions will contribute to the enhancement of complex soil protection measures and sustainable soil management practices in the region. In return, these actions will contribute to the increased adaptive capacity of the four countries to mitigate the impacts of climate change on soil. It is worth to highlight that any action that supports joint educational and awareness-raising activities/programs targeting the systemic protection, pollution reduction and maintenance of ecosystem services (soil included) is very welcome. These interventions will beneficially contribute to changing the attitude and knowledge of the inhabitants of the region (especially the youth) to protect and care for soil. Therefore, human-induced soil pollution and degradation can be largely prevented or decreased across borders in the long run.

Priority 2: A healthy and attractive border region

PO4 v) ensuring equal access to healthcare and fostering resilience of health systems

Types of actions listed in PO4 v) ensuring equal access to healthcare and fostering resilience of health systems will not be relevant for soil. However, some considerations need to be taken into account when renovating the buildings of health institutions as detailed in the below PO4 vi) section.

Priority 2: A healthy and attractive border region

PO4 vi) enhancing the role of culture and sustainable tourism in economic development, social inclusion and social innovation

In case of PO4, which can have positive effects on soil, it is important to highlight that the proposed infrastructure development actions need to be implemented with special care for natural assets such as soil. Mainly, v) includes actions that would support heavy infrastructure expansion and the improvement of the accessibility of cultural, natural sites. These actions usually involve the building of new roads, buildings, public utilities, extensive pavings which can be harmful for soil health, biodiversity and functions. Construction activities largely contribute to soil sealing, degradation and pollution with heavy metals. Moreover, increased touristic activity and the presence of large groups at natural sites can cause loss of ground cover, organic matter, and endemic vegetation. It also results in the change of species composition above and under ground and it reduces the air and water permeability of soils through trampling. As a result, slow soil deterioration occurs which jeopardizes the value of natural sites and heritage across borders – basically putting pressure (potentially destroying) on the very natural resource

and asset on which the touristic activity depends. Furthermore, heightened cross-border cultural events and festivals involving large groups of people will enhance the chance of extensive soil pollution with various types of waste (from smaller littering to illegal waste deposition activities).

Priority 3: A cooperating border region

ISO1 b) 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

ISO1 b) 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 region is not really relevant in terms of soil.

6.2 Potential effects of the programme on air

Priority 1: A resilient and green border region

PO2 iv) promoting climate change adaptation, and disaster risk prevention, resilience, taking into account ecosystem-based approaches

Type of actions in PO2 iv) will have beneficial effects in terms of decreasing the occurrence of natural hazards that negatively affect local and regional air quality (such as forest fires) if the planned prevention, knowledge sharing and development of common strategies for cross-border disaster management will be implemented. The prevention and enhanced preparedness for forest fires is an especially apt proposition that needs joint action. These fires can produce heavy and rapid degradation of air quality as they are becoming the source of pollutants such as carbon monoxide or nitrogen dioxide. Moreover, the decrease in air quality is followed by visibility problems, danger to human health and ecotoxic effect on flora and fauna. Long-term heatwaves, which are becoming very common in the region, can be the root of forest fires as well. Therefore, joint actions on complex prevention, monitoring, and management of natural and human-made disasters are highly important between the countries. Joint interventions that specifically address reforestation or the prevention of illegal logging are also very important in terms of local air quality. Trees positively affect air quality through the removal of air pollutants (cleansing the air) and the prevention of extreme warming of the local microclimate (which is especially important for urban areas).

Priority 1: A resilient and green border region

PO2 vii) enhancing protection and preservation of nature, biodiversity, and green infrastructure, including in urban areas, and reducing all forms of pollution

Types of actions listed in PO2 vii) will also have direct beneficial impact as they mostly aim to reduce the sources of pollutants, mainly transport-originated pollutants, from air, thus positively effecting regional climates. Moreover, actions aiming for the revitalization and reconstruction of natural ecosystems, building of green infrastructure and habitat involving reforestation and vegetation cover will have similar impacts as mentioned in iv) as they help to cleanse the air, resulting in the cooling of the regional and local climate and they also act as carbon sinks.

Priority 2: A healthy and attractive border region

PO4 v) ensuring equal access to healthcare and fostering resilience of health systems

Types of actions listed in PO4 v) could potentially have positive effects, mainly actions that promote the screening and prevention of diseases through education and awareness-raising of the population. Both natural (forest fires) and human-made disasters (industrial pollution) and other anthropogenic activities (emissions from transportation) result in poor air quality like an increase in particulate matter for prolonged periods of time which puts human health at risk, mainly causing a rise in respiratory problems. Any joint program that connects regional stakeholders (healthcare workers, citizens, environmental agencies) in order to promote actions for the prevention and management of diseases originated from air pollution will be very useful.

Priority 2: A healthy and attractive border region

PO4 vi) enhancing the role of culture and sustainable tourism in economic development, social inclusion and social innovation

In case of PO4 vi) types of actions, heightened touristic activity, festivals and cultural events will inevitably bring increased transportation, the presence of vehicles at cultural and natural heritage sites. This leads to smog, poor air quality including increased particulate matter content, nitrogen oxide, volatile organic compounds and air toxics (benzene, diesel particulate matter). Therefore, greater tourism in the region may lead to greater health risks for humans at cultural sites and ecotoxicity for the flora and fauna on natural sites. Moreover, the accompanying noise pollution causes annoyance and stress for humans and distress for the wildlife, especially at sensitive sites.

Priority 3: A cooperating border region

ISO1 b) 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

ISO1 b) 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 region is not relevant in terms of air quality.

6.3 Potential effects of the programme on water and ground waters

Priority 1: A resilient and green border region

PO2 iv) promoting climate change adaptation, and disaster risk prevention, resilience, taking into account ecosystem-based approaches

Type of actions in PO2 iv) are expected to have positive, direct effects on transboundary watercourses. Joint actions that aim to reduce the risk of human-made and natural disasters through prevention, education and common management strategies are highly anticipated in relation to cross-border waterbodies. Especially floods and droughts should be in the focus of the actions as the region is very prone and will be prone (due to extreme weather events) to flooding events. Floodwater can carry multitude of contaminants for long distances and can accumulate across landscape. It results in a significant threat to any living organisms it has contacted, not to mention the possible contamination of water systems, like drinking water. Drought is another weather event getting more and more frequent in the region. Drought causes decrease in water flow and volume which leads to increased salinity due

to reduced dilution. The change in pH fundamentally alters aquatic ecosystems. The decrease in water leads to water shortages for local agricultural production and threatens human consumption (the quality and volume of available drinking water).

Priority 1: A resilient and green border region

PO2 vii) enhancing protection and preservation of nature, biodiversity, and green infrastructure, including in urban areas, and reducing all forms of pollution

Types of actions listed in PO2 vii) that aim to protect and sustainably manage watercourses across borders will similarly have direct beneficial impacts, especially through the joint development of monitoring and warning systems which helps to detect the sources and occurrences of water pollution.

Priority 2: A healthy and attractive border region

PO4 v) ensuring equal access to healthcare and fostering resilience of health systems

The same effects and conclusion can be mentioned here like in the case of air. Any joint program that connects regional stakeholders (healthcare workers, citizens, environmental agencies) in order to promote actions for the prevention and management of diseases originated from water pollution will be very useful.

Priority 2: A healthy and attractive border region

PO4 vi) enhancing the role of culture and sustainable tourism in economic development, social inclusion and social innovation

In case of PO4 vi) types of actions, they could be indirectly beneficial, but they may have some acute negative effects if not managed properly. In order to prevent the negative impacts, it would be very important to harmonize the main elements, priorities of this proposed program and find linkages between the action proposed for the development of sustainable tourism and nature protection and climate change mitigation – particularly for waterbodies (but generally for other environmental elements as well). Although water is the most critical resource, it is often overused by tourism for providing resources for accommodation, food, personal use, etc. If it is done near natural heritage sites, it can result in significant damage to water supplies, cause water shortages and deprivation of quality. Any renovation of existing and construction of new buildings and infrastructure for touristic purposes often lead to sewage pollution (especially at border crossing river valleys). As a result, wastewater pollutes rivers, lakes, groundwater, and other water bodies nearby cultural and natural heritage sites (protected areas) damaging flora and fauna and the health of local inhabitants as well. Also, any construction activity, festival or large gatherings in nature inevitably involve the pollution of waterbodies through littering, discharge and storage of construction waste, and illegal depositions. These are not only harmful for any living organism but can be huge dispoiler of natural environments, rivers, lakes, etc., threatening touristic development. These risks need to be addressed within the calls for proposals before any plans for touristic or construction development begins close to natural heritage sites and watercourses.

Solutions to mitigate and prevent waste pollution have already been addressed in the soil section.

Priority 3: A cooperating border region

ISO1 b) 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

ISO1 b) 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 region is not really relevant in terms of waterbodies.

6.4 Potential effects of the programme on biodiversity, flora, and fauna

Priority 1: A resilient and green border region

PO2 iv) promoting climate change adaptation, and disaster risk prevention, resilience, taking into account ecosystem-based approaches

Type of actions in PO2 iv), just as in the case of soil, air and water, will have mainly indirect positive effects on biodiversity. Joint actions and interventions targeting better preparedness and the creation of joint strategies and action plans for regional natural disaster management and human-induced pollution will be important to stop or decrease the risk of habitat destruction, mass species mortality and the spread of disease and invasive species.

Priority 1: A resilient and green border region

PO2 vii) enhancing protection and preservation of nature, biodiversity, and green infrastructure, including in urban areas, and reducing all forms of pollution

Types of actions listed in PO2 vii) will greatly contribute to the protection of biodiversity especially through actions planned on the revitalization, reconstruction of natural habitat or the control of invasive species.

Priority 2: A healthy and attractive border region

PO4 v) ensuring equal access to healthcare and fostering resilience of health systems

Types of actions listed in PO4 v) ensuring equal access to healthcare and fostering resilience of health systems will not be really relevant for biodiversity.

Priority 2: A healthy and attractive border region

PO4 vi) enhancing the role of culture and sustainable tourism in economic development, social inclusion and social innovation

PO4 vi) types of actions could have indirect positive effects; it must be highlighted that they involve direct harmful impacts as well if not prevented or managed properly.

Increased touristic and construction activity at cultural and protected natural sites can interfere with essential ecological functions, cause habitat loss, species imbalance, excessive use of natural resources, therefore reducing the productivity of ecosystems on which regional and local food supply and health depends. Moreover, it weakens the ability and adaptive capacity of ecosystems to react to natural disasters, extreme weather events and the effects of climate change. Another threat can be the

introduction of exotic, invasive species and diseases which tourists bring in that are not native to local environments.

Priority 3: A cooperating border region

ISO1 b) 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

ISO1 b) 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 region is irrelevant in terms of biodiversity.

6.5 Potential effects of the programme on Natura 2000 territories and other conservation areas

Priority 1: A resilient and green border region

PO2 iv) promoting climate change adaptation, and disaster risk prevention, resilience, taking into account ecosystem-based approaches

Type of actions in PO2 iv) will likely have positive effects on Natura 2000 sites as they aim to contribute to the protection of natural assets through preparing for the occurrence of natural and human-induced disasters. Usually, these disasters result in loss of habitat and mass mortality of protected flora and fauna, therefore, any joint action targeting prevention is very welcome.

Priority 1: A resilient and green border region

PO2 vii) enhancing protection and preservation of nature, biodiversity, and green infrastructure, including in urban areas, and reducing all forms of pollution

Types of actions listed in PO2 vii) will also have direct beneficial impacts, especially if habitat reconstructions, protection, species conservation actions are implemented properly. Similarly to iv), specific actions or examples addressing Natura 2000 and cross-border protected areas would be ideal to add.

Priority 2: A healthy and attractive border region

PO4 v) ensuring equal access to healthcare and fostering resilience of health systems

Types of actions listed in PO4 v) ensuring equal access to healthcare and fostering resilience of health systems will not be really relevant for Natura 2000 sites.

Priority 2: A healthy and attractive border region

PO4 vi) enhancing the role of culture and sustainable tourism in economic development, social inclusion and social innovation

PO4 vi) types of actions could have indirect positive effects; it must be highlighted that they involve direct harmful impacts as well if not prevented or managed properly. Heightened touristic activity and planned construction developments carry the risk to threaten natural assets and protected areas through the destruction and disturbance of natural habitats (negative effects equal to those already

mentioned in the biodiversity section). The “no deterioration” concept for Natura 2000 site management must always be taken into account and followed in case of renovation or new infrastructural projects for touristic purposes near or at Natura 2000 sites.

However, protected areas - just as Natura 2000 sites - can enhance the attractiveness of relevant regions in the four countries as pristine mountains, landscapes rank among the most important motives when tourists choose destinations. Therefore, these cross-border protected sites can be extremely important for branding local and regional touristic attractions or products. This means that the protection and proper management of Natura 2000 sites can contribute to the enhanced local economic development of tourism.

Before any construction and infrastructural activity at these sites, the development of appropriate assessments need to be carried out. Considerable changes in the protected habitat and new constructions need to be considered as significant changes/deteriorations when habitat or species are impacted directly (e.g. grave reduction and disturbance of sites, change to one or multiple factors contributing to the quality of the site). The case is very similar when cultural, sports events and festivals are planned to be organized at Natura 2000 sites. Often special event permits may be required and appropriate legal requirements need to be considered with regards to the “no deterioration concept” as these events may contribute to changes in terrain, environment, the appearance of temporary buildings and music which cause disturbance for the wildlife.

Priority 3: A cooperating border region

ISO1 b) 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

ISO1 b) 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 region is irrelevant in terms of Natura 2000.

6.6 Potential effects of the programme on climate

Priority 1: A resilient and green border region

PO2 iv) promoting climate change adaptation, and disaster risk prevention, resilience, taking into account ecosystem-based approaches

Type of actions in PO2 iv) will mostly have positive effects on climate. Joint interventions that support the prevention and mitigation of natural or human-induced disasters through reforestation, limitation of illegal logging and preempting pollution of natural assets are especially beneficial.

Priority 1: A resilient and green border region

PO2 vii) enhancing protection and preservation of nature, biodiversity, and green infrastructure, including in urban areas, and reducing all forms of pollution

Types of actions listed in PO2 vii) will also have direct beneficial impacts following the same logic presented in PO2 iv). Terrestrial and aquatic ecosystems absorb significant part of man-made emissions as they act as carbon sinks. Therefore, joint actions to protect biodiversity, reconstruct habitats, enhance vegetation cover will contribute to healthy and well-functioning ecosystem services in the region that will be able to better adapt to and mitigate the effects of climate change by reducing vulnerability, increasing resilience and controlling local and regional climate. Moreover, these actions are more cost-efficient ways to combat climate change across borders than any other technological interventions.

Priority 2: A healthy and attractive border region

PO4 v) ensuring equal access to healthcare and fostering resilience of health systems

Types of actions listed in PO4 v) will have no direct effect on the climate. However, the same considerations need to be taken into account when renovating the building and infrastructure of health institutions as detailed regarding constructions in the below PO4 vi) section.

Priority 2: A healthy and attractive border region

PO4 vi) enhancing the role of culture and sustainable tourism in economic development, social inclusion and social innovation

PO4 vi) types of actions should be implemented with special care for the climate as these actions have the possibility to initiate rather negative effects. Increased touristic activity coupled with construction developments in the region could result in large GHG emissions and ozone depleting substances caused by transportation, aviation, or the consumption of goods and services. It is a shortcoming of these actions that they do not address activities specific to mitigate the effects of sustainable tourism in relation to climate. It would be ideal if the proposed program and actions would take into account that regional touristic and cultural activities are not only contributing to climate change, but they are also threatened by it. Floods, forest fires, landslides, less snowfall, the appearance of diseases have serious effect on domestic and regional tourism industries. Building on this, it is recommended to specifically address this issue in PO4 actions.

Priority 3: A cooperating border region

ISO1 b) 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

ISO1 b) 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 region is irrelevant in terms of climate.

6.7 Potential effects of the programme on built environment, settlement surroundings, and cultural heritage

Priority 1: A resilient and green border region

PO2 iv) promoting climate change adaptation, and disaster risk prevention, resilience, taking into account ecosystem-based approaches

Type of actions in PO2 iv) will mostly have positive effects on the built environment and cultural heritage as they try to prevent and mitigate natural and human-induced disasters and reduce the impact of climate change. Since disasters have acute negative impacts on the built environment through the destruction, undesired change and deterioration of buildings - especially on cultural heritage (e.g. floods, fires, landslides etc.), not to mention the loss of living-space and economic hardship that follows –, the planned actions are desired. Climate change also puts severe pressure on buildings and related infrastructure through increased likelihood of subsidence – mainly on clay soils-, ground movement in winter affecting ground pipes and cables which contribute to the physical and economic degradation of built environment. Therefore, joint actions that aim to prevent and mitigate the effects of climate change and disasters on buildings and settlement surroundings will be very beneficial. They will result in decreased risk of floods, heatwaves and other extreme weather events which will have positive impact on the durability and livability of civil and cultural buildings, settlements.

Priority 1: A resilient and green border region

PO2 vii) enhancing protection and preservation of nature, biodiversity, and green infrastructure, including in urban areas, and reducing all forms of pollution

Types of actions listed in PO2 vii) will also have beneficial impacts as any joint action that aims to preserve nature and biodiversity outside or inside settlements will contribute to the livability and adaptive capacity of a built environment against climatic events, therefore, the resilience and wellbeing of residents. Moreover, the development of green infrastructure and preservation of natural elements close to buildings raise the economic and aesthetic value of the built environment and cultural heritage.

Priority 2: A healthy and attractive border region

PO4 v) ensuring equal access to healthcare and fostering resilience of health systems

Types of actions listed in PO4 v) will also have positive effects on the built environment as joint action to develop infrastructure, refurbish and renew buildings of health institutions will contribute to better economic and social assessment and use of a given built environment or settlement by residents and other stakeholders.

Priority 2: A healthy and attractive border region

PO4 vi) enhancing the role of culture and sustainable tourism in economic development, social inclusion and social innovation

PO4 vi) types of actions that focus on the renovation and restoration of cultural heritage sites will have some positive effects on the built environment as they raise the economic and social value of cultural venues, buildings and therefore the surrounding buildings and infrastructural elements. However, it is important to note that the construction of new buildings, facilities and utilities for touristic purposes tends to change the land use of the built area, results in the overburdening of the surrounding infrastructure, upsets the harmony and aesthetic value of the built environment or the cultural heritage destination. Tourism may bring changes to the vernacular technology, and traditional constructions simply may vanish, giving space to modern buildings. Furthermore, there is the risk of illegal touristic constructions, pollution, over-intensive, undesired urbanization at cultural heritage settlements and the threat of degrading quality due to overuse.

Priority 3: A cooperating border region

ISO1 b) 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

ISO1 b) 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 region is irrelevant in terms of built environment.

6.8 Potential effects of the programme on human health and lifestyle

Priority 1: A resilient and green border region

PO2 iv) promoting climate change adaptation, and disaster risk prevention, resilience, taking into account ecosystem-based approaches

Climate change is one of the biggest threats for humanity, seriously affecting human health, the natural environment and security. PO2 iv) – receiving 25% of the total financial appropriation of the Programme – will provide important contributions to adaptation and risk prevention, but these will only affect human health indirectly and in the longer term. Short term effects on the human lifestyle will be realised by Action type 1.2 (joint education, awareness raising and knowledge sharing activities), introducing adaptation practices to the general public.

Priority 1: A resilient and green border region

PO2 vii) enhancing protection and preservation of nature, biodiversity, and green infrastructure, including in urban areas, and reducing all forms of pollution

Urban air pollution is another major health risk that will definitely be addressed by PO2 vii) interventions, either in the form of direct investments, or through indirect capacity or policy development measures. At the same time, the vast majority of the population of the programme area is living in small rural settlements, less prone to the adverse effects of urban air pollution.

Priority 2: A healthy and attractive border region

PO4 v) ensuring equal access to healthcare and fostering resilience of health systems

Out of all selected SOs, PO4 v) is the one with the most direct positive effects on human health and human lifestyle via a complex collection of interventions. Improvements in the physical facilities of healthcare institutions, as well as health screening programs will provide immediate benefits on the health status of borderside communities. Other elements are responsible for indirect and long-term effects, including the general improvement of ICT applications, awareness raising for healthy lifestyle and preventive screening programs, as well as joint epidemiology and rescue service development.

Priority 2: A healthy and attractive border region

PO4 vi) enhancing the role of culture and sustainable tourism in economic development, social inclusion and social innovation

Tourism has extremely important potential in the improvement of the economic and social status of the cross-border area. Through direct benefits in increased local income and number of workplaces it can

contribute to fighting poverty and allowing the most vulnerable social groups to increase their health-related expenditures. Cross-border and international tourism also has a slight negative potential on the health of local communities through exposure to diseases transmissible from human to human. Action type 4.2 includes the development of healthcare regulations and processes, targeting this specific risk.

Priority 3: A cooperating border region

ISO1 b) 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

Institutional cooperation under ISO1 b) is planned in various thematic areas that do not include health or social care services. The themes selected have only narrow and/or very indirect effect on human health.

6.9 Potential effects of the programme on environment consciousness

Priority 1: A resilient and green border region

PO2 iv) promoting climate change adaptation, and disaster risk prevention, resilience, taking into account ecosystem-based approaches

Environmental consciousness will directly be improved by the joint education, awareness raising and knowledge sharing activities planned under Action type 1.2. Small scale cooperation projects are planned in an integrated manner, including awareness raising elements. As a very constructive element, the programme includes a specific focus on forming the attitude of future generations.

Priority 1: A resilient and green border region

PO2 vii) enhancing protection and preservation of nature, biodiversity, and green infrastructure, including in urban areas, and reducing all forms of pollution

PO2 vii) includes various intervention areas with direct and positive impact on the general environmental awareness of local communities. Among common interest infrastructure development projects, it will develop educational nature trails providing relevant information to individual tourists as well as student groups. It will generate joint education, awareness raising and knowledge sharing activities including campaigns, events and knowledge-sharing activities. This SO also includes special attention on forming the attitude of children. Small scale cooperation projects are once again planned in an integrated manner, including awareness raising elements.

Priority 2: A healthy and attractive border region

PO4 v) ensuring equal access to healthcare and fostering resilience of health systems

Healthcare-related interventions planned under PO4 v) have only slight and indirect impacts on environmental consciousness.

Priority 2: A healthy and attractive border region

PO4 vi) enhancing the role of culture and sustainable tourism in economic development, social inclusion and social innovation

While social innovation and inclusion interventions have no direct impact on environmental consciousness, the promotion of sustainable means of tourism may have positive effects on both service providers and tourists. The programme specifically includes trainings for stakeholders of the tourism sector on topics associated with environmental sustainability, as well as studies and action plans exploring sustainable forms of tourism valorisation of the natural environment. A highly positive element of the SO is the preference put on improving the accessibility of tourism attractions by bike, as a sustainable form of mobility.

Priority 3: A cooperating border region

ISO1 b) 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

Institutional cooperation under ISO1 b) is planned in various thematic areas, including one focused on energy efficiency and renewable energy. Interventions under this theme have the potential to increase the environmental awareness of local communities.

6.10 Potential effects of the programme on emerging environmental conflicts and potential problems, and on the escalation of existing problems

Priority 1: A resilient and green border region

PO2 iv) promoting climate change adaptation, and disaster risk prevention, resilience, taking into account ecosystem-based approaches

All four countries in the program area are highly exposed to natural hazards, with most registered natural disaster cases caused by hydrological events (floods, ice drift jamming on rivers - 40%) or extreme temperature (cold/heat wave, drought – 38%). The Programme cannot provide significant contributions to mitigation and adaptation to climate change, due to its limited financial resources, but it can provide policies supporting more effective and coordinated efforts of the stakeholders.

Human factors also play an increasing role in the development of disaster events (e.g. lack of detention reservoirs, illegal logging, wildfires, communal pollution of the rivers, etc.). In relation to these effects, the Programme can improve the awareness and attitudes of local stakeholders.

Priority 1: A resilient and green border region

PO2 vii) enhancing protection and preservation of nature, biodiversity, and green infrastructure, including in urban areas, and reducing all forms of pollution

The Programme will contribute to reduce the high pressure on natural habitats caused by uncontrolled tourism and fishing, intensified forestry and eutrophication, the spreading of invasive species of flora. At the same time, numerous other problems are beyond the scope of the selected objectives:

- Waste pollution has been regular in the rivers of the Upper Tisza region since the 2000s.
- Apart from waste, surface waters are subject to wastewater discharges and nutrient inputs from agricultural, industrial and diffuse sources including heavy metal pollution.
- This and inadequate thermal water management endanger water habitats and the water quality of aquifers, groundwater and drinking water as well.

- There are a lot of industrial and mining sites in the border area with harmful cross-border pollution requiring environmental revitalization.

Priority 2: A healthy and attractive border region

PO4 v) ensuring equal access to healthcare and fostering resilience of health systems

The program will take steps towards providing equal access to quality healthcare, though its limited financial resources will allow only moderate impacts. Therefore, it is important to concentrate service development efforts on areas and local communities with the weakest accessibility to quality healthcare services.

The current COVID-19 pandemic is strongly linked to the negative impacts of human-induced climate change. Therefore, it is important that joint activities between the countries not only address basic dietary, diagnostic, hygienic and precautionary issues for health prevention, but aim at the core cause of the problem (human-induced land use change, deforestation, loss of biodiversity, all increasing the chances of new diseases).

Priority 2: A healthy and attractive border region

PO4 vi) enhancing the role of culture and sustainable tourism in economic development, social inclusion and social innovation

Increased tourism activity and the protection and maintenance of natural assets are generally contradictory priorities. The high level of risk of overutilizing the natural environment has to be considered and properly counter-balanced by the application of the sustainability criteria in funding decisions, otherwise tourism development measures will result in overconsumption and the deterioration of natural resources in the long term.

Infrastructural developments for touristic activities, events and festivals potentially endanger biodiversity, especially in the case of attractions or programs located near natural heritage or protected sites. Increased visitor traffic leads to higher transport-related air pollution, water and soil contamination, increased amount of communal waste generated and increased energy consumption.

At the same time, the Programme does not specifically address the threat of decay of valuable built heritage sites in the absence of proper maintenance and renovation.

Priority 3: A cooperating border region

ISO1 b) 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

Cooperation, conversation and strengthening of cultural and professional links generally contribute to solving emerging conflicts and problems. If sustainability is included in the criteria against funded cooperation projects, these impacts can be especially positive.

6.11 Potential effects of the programme on the interrelationship and cumulative effect of threats to the above factors

Summary table of the potential effects on environmental and socio-economic factors of the CBC region

	Effects on soil	Effects on air	Effects on water and ground waters	Effects on biodiversity, flora, and fauna	Effects on Natura 2000 territories and equivalent protected areas in case of Ukraine	Effects on climate	Effects on built environment, settlement surroundings, and cultural heritage	Effects on human health and lifestyle	Effects on environment consciousness	Effects on emerging/escalating environmental conflicts and problems
PO2 iv)	strong positive effect(s)	weak positive effect(s)	weak positive effect(s)	strong positive effect(s)	strong positive effect(s)	weak positive effect(s)	strong positive effect(s)	weak positive effect(s)	weak positive effect(s)	weak positive effect(s)
PO2 vii)	strong positive effect(s)	strong positive effect(s)	strong positive effect(s)	strong positive effect(s)	strong positive effect(s)	strong positive effect(s)	strong positive effect(s)	weak positive effect(s)	strong positive effect(s)	weak negative effect(s)
PO4 v)	neutral effect(s)	weak positive effect(s)	weak positive effect(s)	neutral effect(s)	neutral effect(s)	weak positive effect(s)	weak positive effect(s)	strong positive effect(s)	neutral effect(s)	neutral effect(s)
PO4 vi)	weak negative effect(s)	weak negative effect(s)	weak negative effect(s)	weak negative effect(s)	weak negative effect(s)	weak negative effect(s)	weak negative effect(s)	weak positive effect(s)	weak positive effect(s)	strong negative effect(s)
ISO1 b)	neutral effect(s)	neutral effect(s)	neutral effect(s)	neutral effect(s)	neutral effect(s)	neutral effect(s)	neutral effect(s)	neutral effect(s)	weak positive effect(s)	strong positive effect(s)

Legend:

strong negative effect(s)	weak negative effect(s)	neutral effect(s)	weak positive effect(s)	strong positive effect(s)
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The Programme does not contain detailed measures, but loosely identifies intervention areas and sets boundary conditions. In the previous subsections (6.1-6.11) we analysed in detail the potential impacts of each selected SO on different environmental elements and categories. The summary of the evaluation is presented in the table above. If the elements and categories of environmental impacts potentially affected by the 5 selected areas of intervention are analysed by simple mathematical methods (substituting positive and negative impacts with +1 and +2 and -1 and -2, respectively, taking the mixed impacts as zero, and averaging across different categories), we can read informative aggregate results from the diversified correlation system of the multi-element environmental impact assessment:

- 3 SOs have an impact on all 10 assessed environmental elements: Nature protection interventions of PO2 vii) and climate change measures of PO2 iv) have generally positive effects, while sustainable tourism interventions of PO4 vi) have mixed/negative impacts. Health care interventions of PO4 v) have neutral or mixed effects on half of the assessed categories, but positive impacts on the other half. Cooperation measures under ISO b) affect the lowest number of environmental areas (only 2).
- The vast majority of assessed environmental elements are affected by 4 out of 5 SOs, and only 3 of them (soil, biodiversity and protected areas) are affected by less elements (3 each).
- Considering the average impact on environmental elements, the mostly negative effect is realised by sustainable tourism measures of PO4 vi): apart from the effects on human health and environment consciousness, it has potentially negative impact on all environmental elements.
- The most positive overall impact is expected in case of nature protection and climate change interventions (both under PO2). Cooperation measures of ISO1 b) also have positive overall impact, but they are irrelevant for most environmental elements.
- The environmental elements gaining the most positive effects from the planned interventions are human health and environment consciousness.

If the effects of the intervention areas are averaged, the following ranking is obtained:

- PO2 vii) Nature protection: 1,6
- ISO1 b) Cooperation: 1,5
- PO2 iv) Climate change: 1,4
- PO4 v) Health care: 1,2
- PO4 vi) Sustainable tourism: -0,7

From the above data, it can be seen that it is the area of sustainable tourism where a potential intervention can most probably violate or jeopardize an environmental aspect. All other SO areas have generally positive impacts.

A specific aspect of environmental assessment is the analysis of effects on emerging environmental conflicts and existing or potential problems, presented in chapter 6.10 and summarised in the last column of the table above. Selected SOs show mixed contributions to environmental conflicts:

- Cooperation activities (ISO1 b) generally contribute to solving emerging conflicts and problems.
- Climate change interventions (PO2 iv) provide a rather complex contribution in their thematic area, including limited infrastructure development projects, policy development, as well as awareness and attitude forming, both in case of natural and human induced disasters.
- Healthcare measures (PO4 v) target a major challenge of the programme area (access to quality healthcare services) but cannot deliver complex solutions adequately securing the coverage of most vulnerable social groups or protection against future health crisis situations.
- Nature protection interventions (PO2 vii) will improve the situation of many natural habitats, but will not affect several key areas, like the pollution of rivers and groundwater or the revitalization of industrial and mining sites.
- Increased tourism activity (PO4 vi) and the protection of the environment are generally contradictory priorities, and the high level of risk of overutilizing the natural environment must be properly counter-balanced by the application of sustainability criteria in funding decisions.

7 Protective measures

The following chapter lists every measure envisaged to prevent, reduce and offset - as fully as possible - any significant adverse, unfavourable effects on the environment by the implementation of the Programme. It also identifies critical programme elements which can have a potential negative environmental effect despite the measures taken to decrease them. The notes are grouped under key environmental areas, following the headings of chapter 6 of the current SEA.

Soil

Although, the actions indicated in PO2 iv) are sufficient, it is suggested to include joint actions, strategies that put specific focus on the restoration and recovery of soils after natural and human-induced disasters (such as monitoring of soil contamination, levelling of land, rebuilding practices, etc.)

The idea itself - to promote cross-border, cultural cooperation through sustainable tourism in PO4 vi) - is one to be supported. However, it is important to keep in mind that increased tourism activity in the region and the protection and maintenance of natural assets are generally contradictory priorities. In order to actually prevent the degradation of the soil and decline in soil health in relation to sustainable tourism, it would be important to add joint actions, strategies that focus on the development of practices which aim to control and/or decrease the appearance and long-term presence of large number of people at protected and vulnerable natural sites (e.g. setting unified numeric limits to control people at natural sites along with dedicated personnel who monitors any abuse or limiting the permissible length of stay in a given, protected/threatened area, directing tourists to more resilient areas through zoning). Moreover, targeted communication campaigns/educational actions across the borders would be within Action type 4.2, to inform tourists about the prevention of waste generation, as well as sustainable waste collection and disposal. In addition, education programmes teaching low-impact ways to visit a protected site, such as techniques for observing wildlife without disturbing it would be advisable just as interpretation programmes across borders educating respect for a site's resources and protection.

Air

In case of PO4 v), it is suggested that not only epidemiological, hygienic or sports related preventive actions are taken into account, but also joint education actions, focusing on preventable human activities that lead to indoor pollution and decreased local air quality, such as household and organic waste burning, inappropriate agricultural activities and industrial waste incineration, all of which can cause acute respiratory problems.

Taking measures (e.g. joint sanctions) across the countries to ensure that air quality standards are kept - so critical air pollutants are below the air pollution limit – would be essential. Specifically, the control of aeroallergen plants (regular weed control, preventive measures), in public and private areas should be a priority. It is also recommended not to plant highly allergenic tree species, such as birch, alder, ash, plane and willow.

Furthermore, it is suggested to include joint programs in PO4 vi), or even standards, limitations across borders for limiting the use of vehicles run on fossil fuels for encouraging the use of electric cars, buses and better public transport at cultural and natural sites. In return, it is also suggested to develop joint incentives for low-carbon transportation options at regional touristic sites such as the use of electric cars, buses, improved public transport options.

Water and ground waters

While the proposed actions are sufficient in PO2 vii), it is suggested to include more ambitious joint actions to harmonize national regulations and standards in the four countries in relation to watercourse management and the discharge of waste and wastewater. For example, introduction and proper monitoring of strong limits for wastewater discharges, or adoption of mainly biological treatment to municipal wastewater, limitations for nutrient inputs from agricultural,

industrial and diffuse sources. This harmonization is particularly important in case of UA as it is not part of the EU.

It is also suggested to change the proposed joint monitoring and forecasting actions and make them as inclusive as possible. Apart from regional institutions involved in monitoring activities, it would be necessary to mobilize local networks and communities across borders (inhabitants, civil society) to monitor groundwater, drinking water and nearby watercourse quality, thus include them in these actions – especially in areas with a high level of water pollution risk. However, the proposed local civil participation in monitoring can only serve as an additional monitoring activity in addition to conducting accredited sampling and testing.

Special attention must be paid to cross-border activities, interventions and measures used for the indirect or direct extraction of drinking water and for the protection, preservation and improvement of the condition of long-term water bodies and surface and groundwater. The cross-border drinking water production facilities connected to surface watercourses are paramount waterworks in terms of ensuring bigger amount of drinking water for the population across borders, therefore stricting regulations to protect and improve the conditions of these waterworks would be important. Also, cross border awareness-raising and information exchange programs among inhabitants on how to use water in the household sustainably or introducing geographically unified wateruse standards would be very welcome between countries.

In order to improve the comfort and quality of life of the population, to protect the quality of groundwater, joint actions to improve communal infrastructure systems and the promotion of connections to communal systems would be important. More specifically, measures to eliminate or ban domestic/household wastewater collectors, inappropriate clarifying and percolation installations that contaminate soil and groundwater would be justified in order to protect the quality of groundwater.

It would be ideal if specific, joint sustainable tourism-related actions would be addressed comprehensively throughout the actions of PO4 vi) to protect waterbodies and other natural assets, and not only in the title of the SO. Trade-offs between any nature protection and sustainable tourism development-related actions should also be added in PO4 vi).

For instance, cross-border sanctions need to be set to prevent discharge of sewage waste, the planning of new tourism projects must include measures/sanctions to limit negative impacts on water quality (prevention of discharges of pollutants into surface and groundwater from point or diffuse sources from urban, industrial and agricultural activities) Also, the development of a waste/wastewater management system should be a pre-requisite for allowing any touristic constructions, and a relevant authority needs to be established to inspect wastewater disposal activities.

Biodiversity, flora, and fauna

It is suggested to add joint actions under Action type 1.1 of PO2 vii) that target better capacity building of stakeholders for the ecological restoration and reclamation (e.g. enhanced natural succession, technical and assisted restoration) of hazardous and non-hazardous post-industrial and mining sites across borders. These sites are quite widespread in the region and carry a potential threat to biodiversity.

It is suggested in relation to Action type 2.2 of PO2 vii) to add joint knowledge sharing and educational activities that inform inhabitants not only about the drivers of biodiversity loss or destruction of natural assets, but on how inhabitants can capture locally the benefits of biodiversity, ecosystem services. This would highly improve the involvement and engagement of people and organisations interested in biodiversity protection. In case of Action type 2.3 it is suggested to take into account that many endemic species or ecosystems are limited to a specific area, therefore, only national or local administrative units and agencies can act to protect them. Thus, cross-border cooperation and joint actions should include specific interventions which support capacity building, research and administration for biodiversity-related actions at local institutions.

In case of Action type 4.2 of PO4 vi), it would be ideal if joint actions would mention that all tourism-related infrastructural developments, events and festivals will take into account biodiversity-related aspects, especially for programs organized near natural heritage or protected sites. It is also highly recommended to set stricter standards to issue permits for program organization, touristic events and better inspection (through local/national authorities) to filter out permit abuse. Permits for long-term infrastructural developments should not be issued if they do not comply with biodiversity or natural protection standards. Also, just as it was suggested in case of the soil and water joint sustainable waste disposal and waste prevention activities should be added to pre-empt any pollution of the local ecosystems.

Natura 2000 territories and similar protected areas

Actions listed in PO2 iv) seldom mention joint activities that include the mitigation and prevention of natural and human-made risks specifically at protected Natura 2000 sites. Therefore, it is suggested to add specificities for Natura 2000 sites for relevant joint interventions which focus on the prevention/management of disaster risks on Natura 2000 sites (and similar protected areas in the case of UA) and their recovery after disaster events.

Moreover, it is suggested to include joint actions in PO2 vii) for developing guidelines for the preparation of conservation measures, objectives and management plans, especially for vulnerable natural areas in UA, and also for the other three countries in cases when these plans are missing. In relation to this, the harmonization of separate national conservation strategies along with monitoring and evaluation for Natura 2000 sites should be encouraged. In order to better involve and engage local stakeholders, joint programs should be added to map and

determine the potential benefits and opportunities for socio-economic development in relation with nature protection and conservation.

In case of Action type 2.3 of PO2 vii), it is suggested to highlight the importance of finding joint solutions to harmonize funds across borders for conservation efforts for Natura 2000 and the maintenance of other protected sites. This would be ideal as financial instruments are usually lacking from national budgets especially in case of UA and RO. It is essential to embed the conservation of Natura 2000 sites in other sectoral plans and relevant policies (such as forestry, fishing, tourism, hunting, etc.) in all four countries. It is also recommended to include joint actions to map the possibility of legal harmonization between countries and make legally binding, cross-border, compulsory measures to maintain and protect conservation plans and targets.

It is suggested to pay special attention to map and find joint cooperation activities and linkages between Natura 2000 sites, and sustainable tourism and recreation activities in PO4 vi). For instance, common management plans, guidance measures should be encouraged on the management of eco-tourism activities at Natura 2000 sites and the compatibility of tourism or cultural activities with the conservation targets. Moreover, close participation of local stakeholder groups needs to be added to ensure the sustainable use of protected sites and to jointly determine the desired conditions and required actions for achieving them.

Due to lack of knowledge among stakeholders of the tourism industry, it would be worth to include joint actions that support local touristic service providers to increase the knowledge on the implications of Natura 2000 directives, national conservation plans and the requirements of the "no deterioration" concept for touristic development.

Climate

It is suggested to be more consistent and specific in the actions of PO2 vii) in terms of green infrastructure development in urban areas, since the title of the priority mentions urban areas, but there are no specific actions on how to support the preservation of their biodiversity and ecosystems. Increasing the resilience of urban areas by the development of green infrastructure and nature-based solutions would be vital to combat climate change through improving urban microclimate and to ensure the long-term wellbeing of inhabitants. Increasing the number of trees, parks and green surfaces help to control local climate in accordance with respective national legislations, support the cooling effect protecting against heatwaves, clean the air from pollutants and provide a home for pollinators and other species.

It is suggested to add specific joint educational and awareness raising programs to Action type 3.4 of PO4 v) on the effects of climate change (both local and global) on the inhabitants' health in the region. The current epidemic is strongly linked to the negative impacts of human-induced climate change. Therefore, it is important that joint activities between the countries not only address basic dietary, diagnostic, hygienic and precautionary issues for health prevention, but aim at the core cause of the problem (human-induced land use change, deforestation, loss of biodiversity, all increasing the chances of new diseases). This would result in the better

understanding and enhanced knowledge of the population on the complicated interlinkages between improved health and collectively engaging in the mitigation of climate change.

It would be very important to address illegal landfills in the countries since, through their methane emissions, these landfills greatly contribute to climate change, not to mention the deteriorating effect on biodiversity, soil, and water. Therefore, cross-border joint activities aiming to develop specific national interventions, sanctions to eliminate/ban illegal landfills would be important. For instance, the introduction of a circular approach for economic activities in countries where it does not exist yet or the mainstreaming of this method is highly recommended. Specific authority needs to be established in the countries to monitor and inspect illegal dumping, stricter legislation needs to be laid down for companies to monitor their material flow and recycling centers are suggested to be created for gathering municipal, household waste to not end up in the illegal sites.

It is also recommended to include in Action type 4.2 of PO4 vi) the support of joint partnerships and interventions to develop strategic plans for local destinations and attractions that involve local residents and stakeholders. Also, joint development of measurable indicators for sustainable tourism outlining acceptable limits of change, emissions, number of vehicles and visitors would also be beneficial, coupled with specific limitations on transportation as mentioned under the notes related to air quality.

Moreover, common education of travellers on how to comply with the requirements set by the regional tourism industry would also be essential (e.g. guidelines, digital/online tools, communication campaigns, etc.) to raise awareness and acceptance of the new measures and pre-empt the deterioration of natural and cultural sites and uncontrolled emissions.

Built environment, settlement surroundings, and cultural heritage

Considerations in relation to the built environment are generally absent from the program, therefore it is suggested to add joint interventions to PO2 iv) actions which focus on identifying buildings and their surroundings in the region especially vulnerable to extreme weather events and disasters. Plus, joint actions would also be needed to increase the capacity of relevant institutions and residents to renovate or design buildings that can cope with the effects of climate change and are resilient against disasters.

It is suggested to add joint interventions in PO2 vii) that aim the renovation and design of buildings in settlements that incorporate nature-based solutions, energy efficient and renewable energy technologies and make use of green infrastructure. The more of these solutions are used in the built environment, the higher the chance to decrease the energy need of buildings. This contributes to reduced mortality due to air pollution and overheating and leads to the better wellbeing of the population and accessibility of public spaces.

Taking into account the topographic features of a given area, joint efforts to use renewable energy sources in order to improve the state of the environment, environmental safety and the quality

of the built environment. For instance, setting specific minimum standards for existing and new buildings (residential and office) for the installation and usage of renewable energy applications (solar, wind, geothermal etc.) in the countries would be important as well as joint actions on awareness-raising of the population to support the reduction of energy consumption of the built environment (e.g., heat recovery, insulation of buildings, position and orientation of the building)

It is recommended to include joint actions in PO4 vi) to support the design and renewal of buildings, routes, public transport and cultural heritage in the region following the complexity of sustainable, energy efficient and aesthetic considerations when expanding touristic activity. In case of new touristic or infrastructural development, the building permits should only be issued if they comply with national regulations for the preservation of built environment and cultural heritage. If insufficient, new or stricter legislation should be put in place across borders that build on high environmental, built environment and cultural heritage preservation.

Human health and lifestyle

Service integration could be more directly addressed in PO4 v), allowing institutions from neighbouring countries to develop combined services targeting a cross-border audience, based on their complementary strengths and capacities. Service development should be focused on areas and local communities with the weakest accessibility to quality healthcare services. Specific focus could be put on elderly healthcare, targeting the ageing issue of local communities on the one hand and also providing service development for the silver economy with long term economic and employment benefits.

Tourism has extremely important potential in the improvement of the economic and social status of the cross-border area. The unique consequences and opportunities of the post-COVID era could be more directly addressed by specific calls for proposals to be announced under PO4 vi): funded projects could provide targeted support for services most severely hit by the lockdowns and the travel ban, while niche areas (outdoor and natural attractions) with an improved relative position in the tourism competition could receive special attention. The training of vulnerable social groups to gain skills that can be used in the operation of tourism services (attractions, accommodations, cultural events, etc.) would also be beneficial in the long term.

Considering the low accessibility of quality healthcare services, especially in areas inhabited by the most vulnerable social groups, it is recommended to include cross-border healthcare cooperation and joint service development into the range of themes selected for institutional cooperation under ISO1 b).

Several infrastructure development initiatives not directly focused on human health have indirect effects on the health of the local population, that has to be considered in future calls for proposals: Tourism investments may have adverse effects on the environment that should be eliminated, minimised or compensated (see our recommendations above under specific environmental elements). If focused more on cycling and pedestrian facilities, tourism can positively affect the general health of people living in and visiting the programme area.

Investments aiming the improvement of communal infrastructure and services are effective measures to develop certain environmental elements, thus the life quality and health of people as well.

Environmental awareness

It is advised that – similarly to small scale investments - common interest infrastructure development projects targeting natural and human-made environmental risks in PO2 iv) also include awareness raising elements and actions supporting the planning. Preparation, coordination and implementation of joint initiatives.

Impacts on environmental consciousness can be boosted under PO4 v) through health promotion programmes suggesting eco-friendly fitness and leisure activities for local communities.

While PO4 vi) includes measures directly improving the environmental awareness of tourism service providers, tourists engaged in sustainable tourism services can also be the subject of awareness raising activities. The SO could include specific preference to projects (either product development or investment) including such attitude forming elements directed at tourists and the local communities.

Institutional cooperation in the theme of cross-border transport development under ISO1 b) should be focused on sustainable means of mobility, including public transport and cycling.

The programmes approach to communication described in chapter 5 should put more emphasis on raising the environmental awareness of key target audiences (especially children and youth for long-term results).

8 Assessment of the monitoring system

Though at the time of developing the draft version of the current SEA, the audited version of the Programme did not include provisions on the planned monitoring activities, except for the mere identification of output and result indicators for each of the selected specific objectives. In the meantime, the system of indicators has been supplemented and clarified, allowing a more comprehensive auditing of the monitoring system of the programme, A specific document titled “Framework Methodology of Indicators and Performance Framework” was also prepared for the PC, providing background information about the intervention logic of the programme and explaining how the target values for output and result indicators were elaborated.

Output and result indicators are selected from the common output and result indicators for the ERDF and the Cohesion Fund, listed in the annex of the ERDF Regulation. Baseline and target values, as well as data sources are provided for each indicator. These indicators account for the number of direct outputs (built green infrastructure, pilot actions, jointly developed solutions, organisations cooperating across borders, etc.) either during programme implementation (listed as output indicators) or after the completion of funded projects (listed as result indicators, to measure the multiplication, upscaling or roll-out results).

The chosen result indicators selected help monitor also the indirect effects on the environmental status or socioeconomic characteristics of the programme area.

Chapter 4 of the programme briefly specifies the monitoring and evaluation system to be operated as part of the programme management. It appoints the MC as main body in charge of monitoring and evaluation, assisted by the JS and programme info points. The programme also defines the monitoring activities to be carried out on a regular basis.

Though the list of activities is coherent and allow for a proper measurement of progress and performance, the monitoring and evaluation system should be supplemented along the following principles: Monitoring measures should be developed in line with Article 10 of the SEA Directive³, fulfilling the following key criteria:

- Significant environmental effects of the implementation must be detected, realizing any unforeseen adverse effects in time to undertake appropriate remedial action.
- Existing monitoring systems may also be used if appropriate, to avoid duplication.

The monitoring system should meet the following standards:

- Specific: Effects that can be credibly attributed to the interventions should be measured, cleansed from the contribution of other factors.
- Proportional: Operational costs should be moderate and proportional with the practical value.
- Legitimate: It must comply with relevant legislation.
- Coherent: It must be compatible with programme/project monitoring systems applied during implementation.
- Easy to understand: It should be unambiguous both for system operators and beneficiaries, with clearly defined indicators.
- Exact in terms of spatial structure: It should be able to record the location and spatial context of data collected.

As a result of the programming procedure and after receiving the Commission observations on the cooperation programme submitted on 01/04/2022 the output and result indicators have been selected from the common output and result indicators for the ERDF and the Cohesion Fund. Baseline and target values, as well as data sources are provided for each indicator.

The intervention logic is clearly linked to output and result indicators differentiated along SOs and actions, with at least one output and one result indicator assigned to each action. No

³ DIRECTIVE 2001/42/EC

milestones have been set for 2024 but that is acceptable as it is unrealistic to expect closed projects by then.

Monitoring indicators are complying with specific suggestions of the Commission observations:

- The use of RCO84 and RCO116 output indicators are avoided, and replaced by ERDF common indicators as relevant to the SOs concerned, to ensure measurability of the outputs and results of investments.
- RCO81 or RCO115 output indicators will be used for SOs building on cross-border events (2.4, 2.7, 4.5 and 4.6).

Training related actions under SO 4.6 will be measured via training related output and result indicators (RCO85 and RCR81). The monitoring system should primarily build on project-level data. However, there might be important cumulative effects insignificant on the level of single projects, especially in terms of combined environmental effects of interventions funded by the Programme, requiring the establishment of program-level indicators as well. In addition to the selected output indicators, monitoring indicators measuring environmental effects and sustainability should also be defined. It would be beneficial to define at least one environment-specific indicator (preferably result indicator) for each priority objective. At the same time, an overly sophisticated indicator system should be avoided.

Further specific suggestions:

- We suggest to include further programme level result indicators to measure indirect effects on the environmental status (and optionally socioeconomic characteristics) of the programme area, based on data collected from outside the reporting activities of funded projects (e.g. statistical data, tailored surveys, etc.)
- We suggest to involve further programme implementation bodies (Managing Authority, National Authorities), as well as territorial environmental authorities and ministries relevant for environmental issues from all participating countries of the Programme, into the planned monitoring and evaluation activities.

9 Non-technical summary

The most important document of the Strategic Environmental Assessment is this Environmental Report, which aims to review the potential negative and positive environmental impacts of the implementation of the HUSKROUA Interreg A NEXT Programme.

The document has been prepared taking into account the relevant legislation and the comments of the authorities involved in the scoping process.

Chapter 1 provides a brief summary on the development process of the programme document and the Environmental Report itself: it contains a description of the scoping, the planning process, the list of the relevant stakeholders involved in the SEA process and the relevant legislation and documents.

Chapter 2 describes the possible alternatives of programme implementation, presents the justification of the selected Policy objectives and Specific objectives within the programme document.

Based on the current version of Chapter 2 of the programme documents, chapter 3 – Main objectives of the Programme – briefly describes the relationship between the identified program priorities and the selected policy objectives / INTERREG specific objectives.

Chapter 4 discusses the cohesion and consistency of documents. It presents the cohesion of the programme document with relevant EU directives and strategies and also the coherence of the programme document with national and regional level legislations and strategies of the Partner countries involved in the HUSKROUA Interreg A NEXT Programme. As for consistency it describes the internal coherence of the programme documents.

Based on the Territorial analysis (Chapter 1 of the programme document), chapter 5 briefly describes the current socio-economic and environmental situation of the HUSKROUA CBC area and its expected evolution without the implementation of the Programme.

In chapter 6, the potential environmental impacts on environmental elements – such as soil; air; water and ground waters; biodiversity, flora, and fauna; Natura 2000 territories and equivalent protected areas in the case of Ukraine; climate; built environment, settlement surroundings, and cultural heritage; human health and lifestyle; environment consciousness; emerging environmental conflicts and potential problems, the escalation of existing problems; interrelationship and cumulative effect of threats to the above systems – are assessed, considering potential environmental impacts of the planned interventions:

- Considering the average impact of the planned interventions on environmental elements, the most negative effect could be realised by tourism measures: apart from the positive effects on human health and environment consciousness, it can have a potential negative impact on the assessed environmental elements.

- The most positive overall impact is expected in case of nature protection and climate change interventions. Cooperation measures also have positive overall impacts.
- Human health and environment consciousness are the two environmental elements to gain the most positive effects from the planned interventions

Chapter 7 lists all measures envisaged to prevent, reduce and offset any significant adverse, unfavourable effects on the environment by the implementation of the Programme. It also identifies critical programme elements which can have a potential negative environmental effect despite the measures taken to decrease them. The notes are grouped under key environmental impactors, following the headings of chapter 6 of the current SEA.

The proposed monitoring system has undergone some serious development during the programming procedure and also after receiving the Commission observations on the cooperation programme submitted on 01/04/2022. According to Chapter 8, the output and result indicators have been selected from the common output and result indicators for the ERDF and the Cohesion Fund. Baseline and target values, as well as data sources are provided for each indicator. The intervention logic is clearly linked to output and result indicators differentiated along SOs and actions, with at least one output and one result indicator assigned to each action. No milestones have been set for 2024 but that is acceptable as it is unrealistic to expect closed projects by then.

Monitoring indicators are complying with specific suggestions of the Commission observations:

- Some of the output indicators are avoided, and replaced by ERDF common indicators as relevant to the SOs concerned, to ensure measurability of the outputs and results of investments.
- RCO81 or RCO115 output indicators will be used for SOs building on cross-border events (2.4, 2.7, 4.5 and 4.6).
- Training related actions under SO 4.6 will be measured via training related output and result indicators (RCO85 and RCR81).

The operation of the monitoring and evaluation system is described satisfactory.