Preparation of Strategic Environmental Assessment Report for the Interreg VI-A IPA Croatia-Bosnia and Herzegovina-Montenegro

STRATEGIC ENVIRONMENTAL ASSESSMENT REPORT

Volume I.

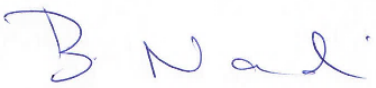
Rev.2

EKOINVEST

March 2022

Managing Authority:	Ministry of Regional Development and European Union Funds		
SEA Practitioner:	Eko Invest d.o.o., Draškovićeva 50, 10 000 Zagreb		
Document:	Strategic Environmental Assessment Report for the Interreg VI-A IPA Croatia – Bosnia and Herzegovina – Montenegro, rev. 2		
Team Leader:	Nenad Mikulić, PhD		
Authors: ***EKO INVEST d.o.o.***	Nenad Mikulić, PhD chem.tech., B.Sc.civ.eng.		Chapters: 1., 2., 3., 10., 13.
	Marina Stenek, B.Sc.biol.eng., univ.spec.tech.		Chapters: 4., 4.1., 4.1.3., 4.1.4., 7., 8., 9.
	Vesna Marčec Popović, B.Sc.chem. and biol.		Chapters: 4.1.4., 4.2., 5., 6., 7., 8., 9.
	Martina Cvitković mag.geog.		Chapters: 4.1.1., 4.1.2., 4.1.3., 4.1.7., 9.
	Danijela Đaković, mag.silv.		Chapters: 4.1., 5., 6., 7., 8., 9., 10.
	Margareta Androić, mag.ing.prosp.arch.		Chapters: 4.1., 4.1.6., 5., 6., 7., 8., 9., 10., 11., 12., 13., 14.

Director



Bojana Nardi

EKO INVEST
inženjering, ekonomske, organizacijske i tehnološke usluge
d. o. o.
ZAGREB, Draškovićeva 50

SADRŽAJ

List of Figures

List of Tables

LIST OF ABBREVIATIONS

Abbreviation	Explanation
AAP	Ambient air pollution
AMI	Areas of Mutual Interest
AQM	Air quality management
BCE	Before the Common era
CBC	Cross Border Cooperation
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CMS	Convention on the Conservation of Migratory Species of Wild Animals
COPD	Chronic obstructive pulmonary disease
DB	District of Brčko
DNSH	Do no significant harm
EC	European Commission
EEA	European Environment Agency
EFFIS	European Forest Fire Information System
EIA	Environmental Impact Assessment
END	Environmental Noise Directive
EU	European Union
EUSAIR	European Strategy for the Adriatic and Ionian Region
EUSDR	European Strategy for the Danube Region
FBIH	Federation of Bosnia and Herzegovina
GEF	Global Environment Facility
GHG	Greenhouse gas
GIS	Geographical information system
HAKOM	Croatia's regulatory agency for network activities
IBA	Important Bird Areas

Abbreviation	Explanation
IENC	Inland Electronic Navigational Chart
ICT	Information and communication technology
IPA	Instrument for Pre-Accession
IPA	Important Plant Areas
IPPC	Integrated Pollution and Prevention Control
IUCN	the International Union for Conservation of Nature
MESD	Ministry of Economy and Sustainable Development
MRDEUF	Ministry of Regional Development and EU Funds
MS	Member State
MPA	Marine Protected Areas
NGO	Non-Governmental Organization
PA	Programme Area
PO	Policy Objective
RES	Renewable energy source
RCC	Regional Cooperation Council
R&D	Research and development
SEA	Strategic Environment Assessment
SEEFCCA	Southeast European Forum on Climate Change Adaptation
SO	Specific Objective
SDGs	Sustainable Development Goals
TF	Task Force
TL	Team Leader
ToR	Terms of Reference
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme

Abbreviation	Explanation
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFCCC	United Nations Framework Convention on Climate Change
WFD	EU Water Framework Directive 2000
WHO	World health organisation
WWF	World Wide Fund for Nature / World Wildlife Fund
WW	Wastewater
WWTP	Wastewater treatment plant

1. INTRODUCTION

Strategic Environmental Assessment (SEA) is a procedure carried out with the purpose to assess the likely significant effects on the environment which may arise out of implementation of a strategy, plan and programme (SPP). The objective of the procedure is to optimize the development proposed by an SPP, i.e. resolve the issues of cumulative effects, large-scale impacts, intersectoral and indirect impacts, which otherwise cannot be foreseen within the EIA procedures.

The objective of the SEA Directive (Art. 1) is to provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development. Through SEA, the decision-maker is informed about the degree of uncertainty of likely impacts, consistency of objectives (both SPPs and environmental protection), sensitivity of the current environment and the range of available alternatives of the SPP under consideration.

The SEA procedure for the Interreg VI-A IPA Croatia – Bosnia and Herzegovina - Montenegro (hereinafter referred to as the Programme) was initiated by the adoption of the Decision on the commencement of the SEA procedure (CLASS: 910-06/21-01/1; File No. 538-10-3-1-1/433-21-6) of 11 November 2021. In the screening procedure, the Decision was brought by the Croatian Ministry of Economy and Sustainable Development (hereinafter: MINGOR) that it was possible to exclude significant negative effect on the conservation targets and integrity of ecological network and that the Programme did not require Main Assessment as a part of the Appropriate Assessment (CLASS: UP/I 612-07/21-37/258, Reg. No.: 517-10-2-3-21-3 of 21 October 2021).

Scoping was conducted in the period from 11 November to 11 December 2021, with public consultations held on 29 November 2021 via Teams online platform. As a part of the scoping step, a scoping report was prepared and delivered to all the relevant participants in the SEA procedure. The results are documented in this SEA Report.

The Programme Proponent is Ministry of Regional Development and European Union Funds, while the SEA practitioner in this procedure is Eko Invest d.o.o. company from Zagreb, Croatia, that holds authorization by the Croatian Ministry of Economy and Sustainable Development for performance of environmental and nature protection tasks (**16.4** Consent for the performance of professional environmental tasks).

1.1 LIST OF STAKEHOLDERS

The project is managed by several bodies formed for the purposes of review of the overall implementation of the project, management and control, providing assistance to stakeholders, auditing etc. and by National Authorities of the participating countries which are responsible for setting up and ensuring efficient functioning of the national control systems. National Authorities are also responsible for conducting the scoping step, and will later be involved in review of the SEA Report and carrying out public consultations. The list of persons participating in scoping is provided below:

Republic of Croatia	**Republic of Bosnia and Herzegovina**	**Republic of Montenegro**
National Authority: Ministry of Regional Development and EU Funds	National Authority: Directorate for European Integration of Bosnia and Herzegovina	National Authority: Government of Montenegro – Prime Minister's Office
Ministry of Economy and Sustainable Development	Ministry of Foreign Trade and Economic Relations of BiH	Ministry of Ecology, Spatial Planning and Urbanism of Montenegro
Ministry of Agriculture		
Ministry of Health		
Ministry of Labour, Pension System, Family and Social Policy		
Ministry of Tourism and Sport		
Ministry of Science and Education		
Ministry of Culture and Media		

According to Croatian regulations, the said authorities were invited to submit their opinions on the scope and level of detail to be elaborated in the SEA Report based on the draft Programme and the prepared Scoping report supplemented with a Questionnaire. National Authorities delivered their opinions on the Scoping report which regarded technical corrections.

All comments and opinions on the scoping report and the programme document were analysed and subsequently integrated in the Decision on the SEA Report contents enclosed in the SEA Report. The Decision on the SEA Report is the basis for the elaboration of this SEA Report. The full answers to the comments received are available at the Ministry of Regional Development and EU Funds.

2. OUTLINE OF INTERREG VI-A IPA CROATIA – BOSNIA AND HERZEGOVINA - MONTENEGRO

The Programme is an instrument to support cross-border cooperation between the participating countries in the upcoming programming period 2021 - 2027 that will offer public authorities space to develop their own cooperative practices and exchange knowledge and skills, but it is also open to other beneficiaries in strengthening their capacities and knowledge in developing new solutions. The Programme is especially envisaged to assist in reducing regional imbalances and differences in the level of development between the regions.

The proposed programme covers the territory of border areas between Croatia and Bosnia and Herzegovina, Croatia and Montenegro and between Montenegro and Bosnia and Herzegovina. Within programme area there is a tri-border area (Dubrovnik-Neretva County, Trebinje Municipality and Herceg Novi Municipality). The proposed programme area is identical to the one of the previous programming period 2014-2020. In other words, programme area covers 12 counties on the Croatian side, Brčko District of Bosnia and Herzegovina and 109 municipalities/cities on the side of Bosnia and Herzegovina and 11 municipalities on the side of Montenegrin border. This amounts to total of 87.453,95 km² of programme area with 5587.836 inhabitants.

The programme area could be divided into northern part and southern part where northern part is characterized with continental climate while the southern part enjoys a more Adriatic climate with hot, dry summers and autumns and mild and wet winters.

The programme area is large and heterogeneous and has significant potential and numerous advantages, but is also facing different common challenges resulting from climate change. The programme area is one of the most vulnerable areas in Europe, and the effects of climate change are already being felt through temperature extremes, droughts, floods etc. Such effects need to be prevented through mitigation and resilience building. Biodiversity preservation and management of cross-border areas should be improved, especially in areas which are affected by risks such as floods, wildfires and airborne pollution and climate change related risks in general.

The programme is in line with the key strategic document dealing with the region, even though it was designed so that it supports projects with the biggest cross-border impact in the long run and create solutions which can later be implemented on a larger scale. The desired goals for EU Member States for the future include green and digital transformation of the economy and public sector, while in non-EU countries, infrastructure projects and productive investments with a strong focus on the twin green and digital transition for the region, boosting circular economy and biodiversity and jointly implementing the upcoming Green Agenda for the Western Balkans will be supported. The focus of this assistance will be on improving economic governance, financial sector stability, transparency and fight against corruption and a better functioning of the labour market and social protection.

The Programme was formed in a way to be complementary to other funding opportunities, i.e. give way to additional types of projects that are better suited for cross border cooperation and hence give additional value in the sense of multi-country perspective.

The Programme ensures to be in line with the goals of key European documents, namely the **Green Deal** that drives the EU to a more sustainable and environment friendly region. The programme supports investments in new models and pilots for energy efficiency in buildings, while renovating on a small scale. The preservation of biodiversity is in the heart of the Green Deal and taking into account the EU Biodiversity Strategy for 2030, the biodiversity crisis and the climate crisis are intrinsically linked. Climate change accelerates the destruction of the natural world through droughts, flooding and wildfires, while the loss and unsustainable use of nature are in turn key drivers of climate change. Nature is therefore a vital ally in the fight against climate change that is rated among five main direct drivers of biodiversity loss. By investing into projects that are promoting climate change adaptation, the programme is directly contributing to biodiversity of the area. The programme intends to support research and innovation capacities and the uptake of advanced technologies, as also defined in the Green Deal. Although these will be targeted across different areas, R&D projects that support green transition will be additionally embraced. Finally, the programme is in line with the European Climate Pact, by promoting cross border connections and knowledge sharing, that will educate the public about climate change and develop, implement and finally scale up solutions for climate change adaptation.

The programme was developed in such a way that it promotes sustainable development to the fullest extent possible, taking into account some key policy areas mentioned in the *Towards a Sustainable Europe by 2030* document and the *South - East Europe 2030 Strategy* drafted by Regional Cooperation Council (RCC). at cross national level, the programme is in line with the European Strategy for the Danube Region' (EUSDR) in that it promotes culture and tourism, management of environmental risks, supports the competitiveness of enterprises and improving institutional capacities. The European Strategy for the Adriatic and Ionian Region' (EUSAIR) is integrated through addressing importance of transnational terrestrial habitats and biodiversity and diversification of tourism offer.

Taking into account national strategies, all three countries have strategies that are valid until 2027/2030 and are in line with the general concepts promoted in EU documents and in this Programme. Croatian National Development Strategy 2030 points out strengthening crisis resilience and green and digital transition as two key priority policy areas, which is perfectly matched with the priorities of this Programme. In the Development Strategy of the Federation of Bosnia and Herzegovina 2021 - 2027 resource efficient and sustainable development is one of the major goals with focus on improving energy efficiency and increasing resilience to crises. Brčko District strategy 2021 - 2027 recognizes, among other priorities, the development of tourism, modernisation of health care and public health systems, strengthening the resilience of natural and other disasters and efficient usage of energy as priorities for development - all tackled through this Programme as well. Lastly, National Strategy for Sustainable Development until 2030 of Montenegro that is closely in line with SDGs, puts emphasis on the *preservation of natural capital* and *introduction of green economy* areas that will also be funded through this Programme.

It is important to stress out that all three countries have recognized the importance of long term energy planning, and have developed long term strategies - Energy Development Strategy of the Republic of Croatia until 2030 with a view to 2050, General Energy Strategy of Bosnia and Herzegovina until 2035, Energy Development Strategy of the Republic Srpska until 2035, Energy Development Strategy of Montenegro 2014 - 2030, all of which stress out the importance of energy efficiency and new technologies for energy transition.

Figure 1. Programme territory

With regards to the chosen policy objectives most suited for the programme area and having analysed the area in its key development areas, the programme has come up with a strategic programme objective/mission **to foster smart, green and inclusive development of Croatia-Bosnia and Herzegovina-Montenegro cross-border region.**

With this in mind, the programme envisaged **4 key priorities** for the upcoming period, that can also be seen as a sort of continuation of the previous programme with certain new elements and characteristics desired in the new financial framework. The programme will therefore focus on a limited set of objectives and policy areas, i.e. concentrate on those thematic key areas where joint actions have the potential for the biggest impact:

- Priority Axis 1- Smart investments in research, innovation and competitive entrepreneurship
- Priority Axis 2- Green investments in environmental protection and efficient risk management
- Priority Axis 3- Accessible and resilient health services
- Priority Axis 4- Sustainable and inclusive tourism and culture

The selected priority axes were translated into the following policy objectives or specific objectives:

Policy Objective 1 (SMARTER EUROPE): A more competitive and smarter Europe by promoting innovative and smart economic transformation and regional ICT connectivity

- SO 1.1 Developing and enhancing research and innovation capacities and the uptake of advanced technologies
- SO 1.3 Enhancing sustainable growth and competitiveness of SMEs and job creation in SMEs, including by productive investments

Policy Objective 2 (GREENER EUROPE): A greener, low carbon transitioning towards a net zero carbon economy and resilient Europe by promoting clean and fair energy transition, green and blue investment, the circular economy, climate change mitigation and adaptation, risk prevention and management, and sustainable urban mobility

- SO 2.1 Promoting energy efficiency and reducing greenhouse gas emissions
- SO 2.4 Promoting climate change adaptation and disaster risk prevention, resilience, taking into account eco-system-based approaches
- SO 2.6 Promoting the transition to a circular and resource efficient economy

Policy Objective 4 (MORE SOCIAL EUROPE): A more social and inclusive Europe implementing the European Pillar of Social Rights

- SO 4.5 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
- SO 4.6 Enhancing the role of culture and sustainable tourism in economic development, social inclusion and social innovation

The overall strategic framework with appertaining actions and outputs and results with indicators are shown in the **Table 1**. The financial allocations appertaining to each programme priority represent a preliminary proposal only and are subject to change. They are used as potential indication of intensity of investment, i.e. intensity of likely impacts of a priority axis.

Table 1. Proposed list of output and results indicators per each programme priority/specific objective

Programme Priority and financial allocation (%)	Specific objective - as per Regulation	Types of Actions	Output and results indicators
P1 - Smart investments in research, innovation and competitive entrepreneurship **Financial allocation - 22%**	**SO 1.1 - Developing and enhancing research and innovation capacities and the uptake of advanced technologies**	1. Supporting cross-border innovation and technology based on smart specialization approach and improving cooperation between research institutions, SMEs, public sector, and business support organisations 2. Strengthening and modernising business support services (including small scale infrastructure preferring nature-based solutions) that could help with: trainings, marketing, developing and or implementing new services/products, using ICT and new technologies, implementing innovative solutions in business organisation and processes (blockchain, big data, cloud computing, Internet of Things, advanced manufacturing, robotics, artificial intelligence, cybersecurity, etc.) 3. Accelerating innovation and technology transfer (e.g. blue and green economy, circular economy, agriculture, food production, fisheries and aquaculture, climate change, renewable resources, smart manufacturing, biodiversity, skills development for smart specialization), 4. Supporting pilot lines, early product validation, certification, advanced manufacturing capabilities including via science – business collaboration 5. Pilot actions aimed at transferring good practices on green economy trends and standards 6. Enhancing support services for SMEs and entrepreneurs to improve their access to research and technological innovations 7. Enhancing transfer and upscaling of proven green solutions to reduce the environmental footprint of production processes and open up green business opportunities 8. Improving capacities and integration of innovative solutions using ICT for public sector needs 9. Supporting the establishment of Living Labs, test-beds and ecosystems to promote the development and actual use of innovative solutions	RCO 87 - Organisations cooperating across borders RCR 84 - Organisations cooperating across borders after project completion RCO 84 - Pilot actions developed jointly and implemented in projects RCO 116 - Jointly developed solutions RCR 104 - Solutions taken up or up-scaled by organisations

		10. Supporting cooperation of public authorities in development, implementation and monitoring of smart specialisation strategies and other policy tools for development of innovative economy 11. Establishing connections and long-term cooperation between research institution especially in joint capacity building for innovation and technology transfer to businesses	
	SO 1.3 - Enhancing sustainable growth and competitiveness of SMEs and job creation in SMEs, including by productive investments	1. Supporting local SMEs to face challenges related to their size, limited resources (such as skills and finance) or industry and market conditions 2. Improving the capacity of micro and small entrepreneurs such as family farms regarding marketing, branding, e-business, competitiveness including education and training in entrepreneurship skills 3. Developing and supporting existing business clusters and/or networks of SMEs in applying ICT, innovation and new technologies to develop and promote common products for local cross-border and international market 4. Implementing joint pilot actions to introduce product and/or process innovations 5. Supporting actions related to development of innovative products and services (e.g. patents, industrial design, trademark and innovation etc.) 6. Promoting and introducing (international) certifications and standards of existing and new products and services 7. Cross-border development, adaptation and exchange of best practices in digitisation and application of new technologies, processes, products or services to be directly used by the enterprises	RCO 01 - Enterprises supported (of which: micro, small, medium, large)* RCO 02 - Enterprises supported by grants* RCR 03 – Small and medium-size enterprises (SMEs) introducing product or process innovation RCO 84 - Pilot actions developed jointly and implemented in projects RCO 116 - Jointly developed solutions RCR 104 - Solutions taken up or up-scaled by organisations
P2 - Green investments in environmental protection and	**SO 2.1 - Promoting energy efficiency and reducing greenhouse gas emissions**	1. Developing and implementing joint pilot and demonstration actions on innovative technologies, measures and solutions in the field of energy management (collection of integrated data and the interoperability of data through digital technologies) and reducing greenhouse gas emissions (e.g. monitoring of air quality and other parameters in public buildings on a larger scale) and use of RES (e.g. demo centres/plants)	RCO 84 - Pilot actions developed jointly and implemented in projects RCO 116 - Jointly developed solutions

efficient risk management **Financial allocation - 40%**		2. Investments in measures and actions that increase energy efficiency and improve the integration of sustainable energy sources in different sectors including small scale infrastructure preferring nature-based solutions. 3. Promoting pilot actions in the public buildings sector which are in line with the Renovation Wave and the EU Green Deal. Cross-sectoral nexus approach should be emphasized by integrating buildings energy and seismic retrofit 4. Joint incentives and pilot projects to encourage and ensure a strategic approach to energy efficiency (e.g. developing SECAP) 5. Strengthening the cross-border cooperation and transfer of knowledge in the region through exchange of experience, information (awareness raising) and capacity building through online and in-situ trainings to improve skills in the field of energy efficiency 6. Implementing pilot actions to test innovative and climate-neutral solutions through e.g. taking up and exploiting R&D results for the energy efficient renovation and heating and cooling of buildings (including cultural heritage buildings) 7. Improving energy demand management and fostering behavioural changes of consumers for reducing energy consumption and a resource-efficient and sustainable use of energy 8. Promoting the production and use of advanced biofuels (produced from non-food crops, such as cellulosic biofuels and waste biomass) as well as other renewable energy sources (solar, geothermal energy, wind, etc.).	RCR 104 - Solutions taken up or up-scaled by organisations
	SO 2.4 - Promoting climate change adaptation and disaster risk prevention, resilience, taking into account eco-system based approaches	1. Development and introduction of joint climate change adaptation, disaster prevention and first response plans, as well as solutions and systems for monitoring, prevention and management of potential risks (e.g. floods, wildfires, landslides, droughts, sea pollution, earthquakes, invasive alien species, etc.) 2. Encouraging intersectoral/interstate cooperation in risk prevention and rapid response management through development and implementation of joint protocols, procedures, approaches and measures, small scale infrastructure preferring nature-based solutions, response vehicles, equipment, shelters, etc. 3. Strengthening of institutional and expert capacities and raising	RCO 83 - Strategies and action plans jointly developed RCR 79 - Joint strategies and action plans taken up by organisations RCO 84 - Pilot actions developed jointly and implemented in projects RCO 116 - Jointly developed solutions RCR 104 - Solutions taken up or up-scaled by

		awareness to address environmental issues, climate change and disaster risks reduction (e.g. workshops, methodologies, protocols, educational materials, joint training for civil protection units) 4. Establishment of joint emergency centres, including small-scale infrastructure preferring nature-based solutions 5. Development of cross-border risk assessment and disaster risk strategies for cross-border hazards such as forest fires, landslides, floods and relative sea-level change, invasive alien species directly threatening biodiversity and ecosystems 6. Exchanging knowledge and good practices on eco-system based climate change adaptation measures and implementing pilot actions for protection and restoration towards resilient eco-systems, e.g. rivers, wetlands and sea, forests, cross-border connectivity of habitats, agro-forestry, biodiversity, landscapes, climate proofing, modelling and forecasting 7. Testing integrated climate-adaptation solutions in pilot actions, which combine technological, ecological, social, cultural, governance and financial aspects taking into account good practices available at local, regional, national or European level 8. Increasing climate resilience of critical infrastructures and cultural/natural heritage sites through improved risk preparedness and risk management plans 9. Integrating climate change aspects into water management strategies on local, regional and interregional level (considering e.g. water quality, flooding, rainwater management and water retention, water scarcity, drinking water supply including smart water pricing, ground water, forecasting) 10. Sharing knowledge and developing solutions for climate proofing the agricultural and forestry sectors to increase their resilience towards e.g. droughts, outbreaks of pests, invasion of alien species 11. Developing solutions for strengthening eco-system services for human health and wellbeing to support social resilience and counteracting socio-economic impacts of climate change	organisations

	SO 2.6 - Promoting the transition to a circular and resource efficient economy	1. Developing and implementing approaches and solutions for limiting landfilling of all types of waste and retaining their value (as future resources) in the economic cycle 2. Increasing awareness of policy makers and stakeholders about environmental and economic opportunities of a circular economy and improving their capacity for the practical implementation of circular economy approaches in different sectors (such as electronics, construction and buildings, textiles, plastics, packaging, food, agriculture, forestry and wood industry) 3. Developing and implementing joint pilot and demonstration actions that closely involve citizens (e.g. good practices in separate waste collection and waste re-use, pilot testing of repair, reuse and refurbish approaches etc.) in order to foster behavioural changes, higher acceptance of more sustainable products and resource-efficient consumption and production patterns 4. Improving waste management policies and competences of the public sector, including the prevention, processing and recycling of communal (e.g. recovery of organic waste, including nutrients from municipal wastewater) and industrial waste 5. Developing and testing solutions that support the recovery and reuse of raw materials 6. Fostering and testing digital solutions for the circular economy including applications and services (such as product passports, resource mapping, tracing systems and consumer information).	RCO 84 - Pilot actions developed jointly and implemented in projects RCO116 - Jointly developed solutions RCR 104 - Solutions taken up or up-scaled by organisations RCO 85 - Participations in joint training schemes RCR 81 - Completions of joint training schemes
P3 - Accessible and resilient health services	**SO 4.5 - Ensuring equal access to health care and fostering resilience of health systems, including primary care, and promoting**	1. Development and implementation of ICT solutions and (pilot) actions to support digitalization in health care 2. Improving health care and access to long-term care for vulnerable groups, with focus on elderly, children and disabled persons 3. Improving the accessibility and effectiveness of cross-border public health care services by investing in telemedicine, diagnostics, mobile clinics and mobile assets, including small scale infrastructure preferring nature-based	RCO 84 - Pilot actions developed jointly and implemented in projects RCO 116 - Jointly developed solutions RCR 104 - Solutions taken up or up-scaled by organisations

Financial allocation - 15%	**the transition from institutional to family-and community based care**	solutions 4. Transfer of knowledge through exchange of experience, awareness raising, lifelong learning, education and training programmes, and capacity building through online and in-situ trainings to improve skills in the field of health care and enhance the delivery of primary care and family-based and community-based care services 5. Developing and implementing joint activities/solutions to promote healthy lifestyles and active and healthy aging, disease prevention.	RCO 85 - Participations in joint training schemes RCR 81 - Completions of joint training schemes RCO 87 - Organisations cooperating across borders RCR 84 - Organisations cooperating across borders after project completion
P4 - Sustainable and inclusive tourism and culture **Financial allocation - 15%**	**SO 4.6 - Enhancing the role of culture and sustainable tourism in economic development, social inclusion and social innovation**	1. Developing and implementing joint (pilot) actions to support diversification and sustainability of the tourism by investing in lesser-known destinations and diverse forms of tourism (cultural, rural, agro, active, health tourism, etc.) including small-scale infrastructure preferring nature-based solutions 2. Developing and implementing innovative solutions and creating smart destinations (e.g. through digitalisation and creative industries), and new services and products for specific targeted market segments such as seniors, young people or people with disabilities including small scale infrastructure preferring nature-based solutions 3. Development and implementation of measures to protect, develop and promote sustainable cultural heritage and cultural services, public tourism assets and tourism services including investments in physical regeneration and security of public spaces (including small scale infrastructure preferring nature-based solutions), in the scope of their inclusion in the touristic and/or cultural circuit 4. Support of social innovation in tourism and culture - development of existing or new tourism and culture businesses models 5. Protection, development and promotion of natural heritage and eco-tourism including Natura 2000 sites 6. Integration of existing tourist products into cross-border thematic routes,	RCO 77 - Number of cultural and tourism sites supported RCR 77 - Visitors of cultural and tourism sites supported RCO 87 - Organisations cooperating across borders RCO - 120 Projects supporting cooperation across borders to develop urban-rural linkages RCR 84 - Organisations cooperating across borders after project completion

		products or destinations and their further advancement 7. Capacity building for innovation in tourism and cultural heritage, focusing on recovery and resilience, and sustainable development of new or upgrading of existing cross-border tourism products, product diversification to adapt to new trends and needs 8. Adoption of green concepts and standards in cross-border tourist products and services and sustainable use of culture and tourist potentials of the border regions.	

The performance framework for the Programme covers indicators selected for each specific objective, data quality assurance criteria and methods for calculation of target and milestone achievement. There are two types of indicators defined for each specific objective: output indicators which measure deliverables of interventions, and result indicators which measure the effects of the planned interventions.

The programme strategy is based on territorial and socio-economic analysis, with the related SWOT analysis and the identified challenges have been translated into specific objectives. Each specific objective details an indicative list of actions which have to comply with the intent of the objective, but is not exhaustive. However, as the analysis of the Programme structure revealed the specific objectives to be too generalized, indicative actions were selected as the most appropriate element of the Programme to be used for the analysis of impacts. Impact assessment at action level also corresponds with the requirements of the Taxonomy Regulation, which requires assessment of compliance of the Programme actions with the DNSH principle.

3. RELATIONSHIP OF THE PROGRAMME WITH OTHER RELEVANT STRATEGIES PLANS AND PROGRAMMES

This chapter gives an overview of the legislation, policies, strategies, plans and programmes which have been considered for the purpose of preparation of the SEA Report, and for the assessment of internal compliance of the Programme with them.

The Strategic Environmental Assessment procedure is regulated by the Environmental Protection Act, Nature Protection Act, Regulation on Strategic Environmental Assessment, Regulation on information and participation of the public and public concerned in environmental matters of Croatia. In Bosnia and Herzegovina, environmental protection acts of both entities and DB represent the basis for establishment of the system from planning, management, information and financing, including the SEA, while in Montenegro, the SEA is regulated by the Environmental Protection Act, Act on Environmental Impact Assessment and Acton Strategic Environmental Assessment.

The relevant strategies, plans and programmes proposed in the scoping step have been analysed in order to establish compliance of the Programme with them and in order to determine SEA objectives. The analysis is presented in the **Table 2**.

Table 2. Relationship of the Programme with other relevant strategies, plans and programmes

Document	Policy objectives	Contribution and compliance of the Programme
United Nations 2030 Agenda for Sustainable Development	The universal agenda encompasses 17 sustainable development goals and 169 targets in order to realize human rights and achieve gender equality through the balance of the three dimensions of sustainable development. The agenda is committed to eradication of poverty and hunger, protection of the planet, prosperity, peace in participation of all the countries and all the people. Sustainable Development Goals 1. End poverty in all its forms everywhere 2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture 3. Ensure healthy lives and promote well-being for all at all ages 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all 5. Achieve gender equality and empower all women and girls 6. Ensure availability and sustainable management of water and sanitation for all 7 Ensure access to affordable, reliable, sustainable and modern energy for all 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation 10. Reduce inequality within and among countries 11. Make cities and human settlements inclusive, safe, resilient and sustainable 12. Ensure sustainable consumption and production patterns 13. Take urgent action to combat climate change and its impacts 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development	The level of investment in research and technological development in programme area is still low, private sector research &and development is very limited, and university-industry collaboration is insufficient resulting in low technology transfer. There is a lack of research in the private sector, exchange of experiences and practices in the private sector and cross-sectoral cooperation. Therefore, the main challenges of the programme area are increasing innovation and research capacity, strengthening knowledge transfer, adding value to existing economic activities and creating new jobs. Cross-border activities represent the potential to improve the framework conditions, and address the following specific needs: - Improve linkages between research institutions and businesses across the border area; - Improve linkages between research institutions across the programme area; - Improve access to research and innovation and enhancing technology transfer for SMEs: - Support innovation and application of new technologies that contribute to profitability and competitiveness; - Support cooperation and cross-border partnerships between small and medium-sized enterprises in the development of innovative cross-sectoral products and supply chains (e.g. agriculture and IT or tourism). Participating countries lag behind in competitiveness compared to other EU Member States. The level of skills and experience needed for adding values to products and marketing them, especially internationally, is relatively low. The area lacks a skilled labour force, so it is necessary to invest in human capacity

	15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels 17. Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development	building for the implementation of new technologies and smart business solutions. The specific objective is of great importance since the following needs in the program area have been recognized: - To improve the economic growth and competitiveness of small and medium-sized enterprises by promoting business cooperation and increasing cross-border trade and cooperation; - To raise the level of competitiveness (especially international) of small and medium-sized enterprises in the context of increasing globalization; - The need for employment growth, the creation of new value, innovation and services at the local and regional level, - The need for the establishment of new value-added supply networks across the borders and joint appearances in new markets; - The need to diversify the economy and create innovative solutions to local challenges.
European Green Deal	It is a set of policy initiatives by the European Commission with the overarching aim of making the EU climate neutral by 2050. The plan is to review each existing law on climate merits, and to introduce new legislation on the circular economy, building renovation, biodiversity, farming and innovation. The main objective of the EU Green Deal is for the EU to become the first climate neutral continent by 2050, resulting in a cleaner environment, more affordable energy, smarter transport, new jobs and an overall better quality of life. It aims at combating unevenly dispersed effects of the energy transition, reducing greenhouse gas emissions and the impact of climate change and other environmental challenges.	The programme contributes to the goal of *building and renovating in an energy and resource efficient way (2.1.4.)* by investing in new models and pilots for energy efficiency in buildings, while renovating on a small scale. By supporting a circular economy concept, it directly supports the *Farm to Fork Strategy (2.1.6.)*. The preservation of biodiversity is in the heart of the Green Deal (*2.1.7.*) and taking into account the EU Biodiversity Strategy for 2030, the biodiversity crisis and the climate crisis are intrinsically linked. Climate change accelerates the destruction of the natural world through droughts, flooding and wildfires, while the loss and unsustainable use of nature are in turn key drivers of climate change. Nature is therefore a vital ally in the fight against climate change that is rated among five main direct drivers of biodiversity loss. By investing into projects that are promoting climate change adaptation, the programme is directly contributing to biodiversity of the area. The programme intends to support research and innovation capacities and the uptake of

		advanced technologies, as also defined in the Green Deal - *mobilising research and fostering innovation (2.2.3.)*. Although these will be targeted across different areas, R&D projects that support green transition will be additionally embraced. Finally, the programme is in line with the European Climate Pact, by promoting cross border connections and knowledge sharing, that will educate the public about climate change and develop, implement and finally scale up solutions for climate change adaptation.
EU Climate and Energy Package	It is a set of laws passed to ensure EU meets its climate and energy targets. Key targets for 2030 include: ○ At least 40% cuts in greenhouse gas emissions ○ At least 32% share for renewable energy ○ At least 32.5% improvement in energy efficiency This framework helps guide towards low-carbon economy to ensure affordable energy for all consumers, increase security of supply, reduce dependence on energy import, create new jobs opportunities, and bring environmental and health benefit through reduced emissions.	The cross-border area has a significant potential for the use of renewable energy sources. Exploiting this potential requires large investments in infrastructure, while substantial cross-border effects would require improvement and harmonization of regulatory conditions at national levels, both of which goes beyond the framework of cross-border cooperation programs. The impact of cross-border cooperation, however, is expected on the development of favourable models and exchange of experiences and practices that contribute to the reduction of CO_2 emissions. Also, the program aims towards the effects in reducing energy consumption, the introduction of innovative technologies in the field of renewable energy sources and in particular supporting models and practices that raise the energy efficiency of buildings and households. The actions will be focused on public infrastructure, creation of knowledge-base and human resources required for energy transition, as well as on national, regional and local agencies that promote energy efficiency and support and encourage end users to use energy from renewable sources and rationalise the energy consumption. Considering increasing energy demands and increasingly limited resources, the development of energy saving and energy efficiency enhancement methods will be a priority in the future development of the area. Expected results of the actions are improved conditions for public and private sector investments and innovations in energy efficiency and integration of sustainable energy sources in different sectors across the programme area, which is in line with the EU Climate and Energy Package.
EU Strategy on Adaptation to Climate Change	The Strategy sets out how the EU can adapt to the unavoidable impacts of climate change and become climate resilient by 2050. The strategy has four principal objectives: to make adaptation smarter, swifter and more systemic, and to step up international action on adaptation to climate change.	Much like other parts of Europe, the programme area has been very much exposed to the negative effects of climate changes. Floods and wildfires are increasingly frequent due to more extreme weather conditions. Such events demand direct joint action once they take place, but the area already has

		different local and national models of cooperation in monitoring and prevention in place. Additionally, even if not related to the climate change, the area is at risk of earthquakes that have in 2020 demonstrated that consequences are felt across the borders. Finally, the responsibility for the preservation of the Adriatic Sea as a common resource and a sensitive eco-system, as well as the need to foresee the climate change adaptation measures in the coastal area are at the forefront of cross-border challenges that the countries and regions in the programme area share. It is important to harmonize and standardize the preparation of local community responses and their actions at the cross-border level for effective emergency preparedness and response. To achieve this, cross-border cooperation is essential, in particular in strengthening appropriate communication tools that need to be simple, action-oriented, and tailored to the general public.
EU Biodiversity Strategy for 2030	The strategy provides a long-term plan for the protection of nature and reversing degradation of ecosystems. European biodiversity will be put on the path to recovery by 2030 for the benefit of people, climate and the planet. The Strategy aims to build resilience to future threat posed by climate changes and proposes commitments and actions regarding expansion of NATURA 2000 areas, binding nature restoration targets, funding for biodiversity. Restoration targets include capturing and storing carbon, prevention and reducing the impact of natural disasters, ensuring soil health, improving knowledge through monitoring of ecosystems and their services.	The Programme observes high biodiversity values as a potential that can generate additional benefits for the economy, especially tourism that can be promoted as sustainable and aimed at nature preservation. The continental part of the programme territory has great natural potential that has to be preserved and presented through soft tourism related projects in the. However, the programme territory is characterised by natural values which have to be preserved through green, low-carbon and resilient measures, especially seen as the Programme area is threatened by climate change. Boosting the efficient use of resources, protection and restoration of natural systems and cutting down pollution will contribute to the objectives of the Biodiversity Strategy.
European Strategy for the Danube Region (EUSDR)	The Danube region covers 9 EU Member States and 5 non-EU countries. All of them are joining forces to address common challenges related to environmental threats, navigability of rivers, lack of road and rail connections, energy poverty, unbalances socio-economic development, uncoordinated education and research and lack of security. The EUSDR addresses a wide range of issues, divided among 4 pillars: “Connect the Region”, “Protecting the Environment”, “Building prosperity”, and “Strengthening the Region”	The EUSDR pillars are reflected within the programme’s priorities primarily in the promotion of culture and tourism, management of environmental risks, support of competitiveness of enterprises and improving institutional capacity and cooperation.

European Strategy for the Adriatic and Ionian Region (EUSAIR)	the objective of the EUSAIR is to promote sustainable economic and social prosperity in the region through "Blue Growth", "Connecting the Region", "Environmental Quality" and "Sustainable Tourism"	The EUSAIR pillars are reflected within the programme's priorities primarily Blue Growth (blue technologies, maritime and marine governance and services), Environmental Quality (the marine environment, transnational terrestrial habitats and biodiversity) and Sustainable Tourism (diversified tourism offer, sustainable and responsible tourism management).
National Development Strategy of the Republic of Croatia	The Strategy aims to support the twin digital and green transition of the Croatian society and economy. The National Strategy outlines 4 strategic priority clusters: Sustainable economy and society, Strengthening resilience to crises, Green and digital transition, and Balanced regional development. Furthermore, the main goal of Croatian Smart Specialisation Strategy is to increase the competitiveness and transformation of the Croatian economy, concentrating knowledge resources and linking them to a limited number of priorities. Croatia has chosen five thematic priority areas as its main focus for S3: Health and quality of life, Energy and sustainable environment, Transport and mobility, Safety and finally, Food and the bioeconomy. In addition, it has chosen two horizontal themes (key development technologies; information and communications technologies) which can contribute to increased added value to Croatian manufacturing and foster new economic activities, productivity and employment growth.	National Development Strategy is hierarchically the supreme strategic planning act which is used in forming and implementation of development policies, which are then in turn elaborated by local and regional development plans. In such a context, Interreg programme has to comply with the development directions and objectives of the National Strategy. All specific objectives of the Interreg programme are in line with the National Strategy, and allow for: - improvement of research and innovation capacities, with focus on ICT and new technologies and processes, - support of bio, green and circular economy in manufacture and production, but also in cultural and creative industries - development of use and integration of RES in different sectors, - development and implementation of resilience projects for climate-change induced risks, along with capacity building and awareness raising in addressing environmental issues - improving health care and care for vulnerable groups - supporting sustainable tourism and culture -supporting transition to a circular economy

Development Strategy of the Federation of Bosnia and Herzegovina 2021-2027	The Strategy is an integrated, multi-sectoral strategic document which defines public policies and guides socio-economic development of the FBIH towards reaching 4 strategic goals: - Accelerated economic growth - Prosperous and inclusive social development - Resource efficient and sustainable development - Transparent, efficient and accountable public sector. The Strategy also provides a multi-sectoral and multi-functional response to the pandemic on a long-term basis.	All specific objectives of the Interreg programme are in line with the National Strategy, and allow for: - improvement of economic growth and raising competitiveness, - building resilience - development of use and integration of RES in different sectors, - upgrading health services and infrastructure - transformation of the tourist offer - digitalisation as a response to COVID-19 pandemic
National Strategy for Sustainable Development until 2030 of Montenegro	Montenegro is among the group of UN candidate countries which have officially adopted a key development document – National Strategy for Sustainable Development until 2030, which is harmonized with the UN Agenda 2030. Environmental, economic and social aspects of the development of Montenegro in recent decades have indicated that needs of future generations might be endangered through qualitative and quantitative degradation of natural resources and limited availability of other resources (human resources as development assumption and economic capital). On the basis of the gained experience and lessons learnt, and in relation to the duties towards future generations and from the experiences of key international actors which trace the path towards sustainability through global dialogue, in the period by 2030 it is necessary to establish the four-dimension development concept based on access according to which the production of assets and delivering of services that are crucial for the improvement of material, mental and spiritual wellbeing of every generation requires four fundamental, necessary resources: human, social, natural and economic. 1.Human resources include strengthening human resources and social inclusion with the objective to improve negative demographic trends and health, ensure quality education for everyone. 2.Social resources support values, norms and sustainable behaviour patterns in order to stimulate sustainable development, equality, development of sustainable system of values, rule of justice, increase of employment, establish culture as core value, and ensure efficient system of integrated protection and sustainable use.	Montenegrin Development strategy is built upon the Agenda 2030 and closely relies on the SDGs, thus puts emphasis on the preservation of natural capital and introduction of green economy areas that will also be funded through this Programme. Moreover, the Programme specific objectives cover all four key resources and supports values elaborated within them.

	3.Natural resources aim at stop degradation of value of sustainable natural resources, their management, unsustainable practices of urban development, mitigate effects of natural and anthropogenic hazards. 4.Economic resources aim at decrease of GHGs by 30%, resource efficiency in key economic sectors, improvement of waste management system in view of circular economy, sustainable management of coastal area and supporting blue economy, transition to green economy, increase of competitiveness for sustainable development.	
Maritime Development and Integrated Maritime Policy Strategy of the Republic of Croatia for the Period from 2014 to 2020	The Strategy aims at strengthening the role of the maritime sector in the development and competitiveness of the Republic of Croatia through policies and initiatives of sustainable growth of economic activities at sea and in the coastal area, strengthening the impact of the Croatian maritime sector on the European and global market, validating the exceptional geographical location of the Adriatic Sea and its environmental properties, as well as the development of high technologies and services in the maritime sector on the foundation of traditional knowledge and acquired capacities, taking special account of the high availability of effective and contemporary public services in the maritime sector, marine environment protection and navigation safety. Strategic objectives include: 1.Sustainable growth and competitiveness of the maritime economy 2.Safe and environmentally sustainable maritime transport, infrastructure and maritime domain	The connection between the strategy and the Interreg programme can be made through the increase of level of response in case of a threat to human lives and property at sea, especially in view of climate changes and seismicity of the area. The programme will focus on finding joint solutions and developing sustainable systems that will help all the relevant stakeholders to jointly promote disaster prevention and resilience, as well as the climate change adaptation. The Programme should therefore also support developing integrated response to emergency situations at sea through innovative, GIS systems, but also establishment of joint pollution control and services, including ensuring conditions or sustainable acceptance and disposal of ship waste and waste water.
River Basin Management Plan of the Republic of Croatia 2016-2021	The content of the document complies with the requirements of the EU water directives and covers water status management and flood risk management. By implementing the Programme of Measures under the RBMP, Croatia continues with systematic fulfilment of water management obligations it assumed by signing the EU Accession Treaty.	The abundance of water resources is one of the great riches of the programme area. However, much like other parts of Europe, the programme area has been very much exposed to the negative effects of climate changes. Floods and wildfires are increasingly frequent due to more extreme weather conditions. The responsibility for the preservation of the Adriatic Sea as a common resource and a sensitive eco-system, as well as the need to foresee the climate change adaptation measures in the coastal area are at the forefront of cross-border challenges that the countries and regions in the programme area share. The Programme will contribute to achievement of the RBMP objectives through making the area and water management sector more resilient to climate change.
Water Management Plan for the Sava River Basin District in the	There two river basin districts in the Federation of Bosnia and Herzegovina: Sava River basin district and Adriatic basin district. Water management plan	The abundance of water resources is one of the great riches of the programme area. However, much like other parts of Europe, the programme area has been

Federation of Bosnia and Herzegovina	is the key document for decision makers and other stakeholders in the decision-making process about use and exploitation, protection and pollution reduction within a river basin district. This document is primarily focused on the "water management significant issues" with the purpose to ensure achievement of environmental objectives defined in the EU WFD (2000/60/EC), both for surface and for groundwater.	very much exposed to the negative effects of climate changes. Floods and wildfires are increasingly frequent due to more extreme weather conditions. The Programme will contribute to achievement of the RBWP objectives through making the area and water management sector more resilient to climate change and by ensuring that water quality and quantity status will not be deteriorated through the implementation of the Interreg Programme.
Water Management Plan for the Adriatic River Basin District in the Federation of Bosnia and Herzegovina 2016-2021	Provisions of the WFD, that is its principal objectives, have been transposed into the Federation of BiH legislation through the Water Act. The preparation of WMPs is mandatory as per the Water Act, as well as their updating every 6 years. Objectives of WMP have been defined in line with the WFD and the Water Management Strategy of the Federation of BiH, based on the pressure and impact analysis, monitoring results, hydrological status assessment, protected area boundaries, WMP for Neretva and Trebišnjica basin, key types of measures. The new WFD for the upcoming 2022-2027 period is pending adoption.	The abundance of water resources is one of the great riches of the programme area. However, much like other parts of Europe, the programme area has been very much exposed to the negative effects of climate changes. Floods and wildfires are increasingly frequent due to more extreme weather conditions. The responsibility for the preservation of the Adriatic Sea as a common resource and a sensitive eco-system, as well as the need to foresee the climate change adaptation measures in the coastal area are at the forefront of cross-border challenges that the countries and regions in the programme area share. The Programme will contribute to achievement of the RBMP objectives through making the area and water management sector more resilient to climate change and by ensuring that water quality and quantity status will not be deteriorated through the implementation of the Interreg Programme.
Flood Risk Management Plan in the Sava River Basin	Sava FRMP was prepared in order to establish joint objectives of flood risk management in compliance with the principles of long-term sustainability, to identify non-structural measures and structural measures in areas of mutual interest, and to enable consistent and coordinated approach in managing these risk at the level of the entire basin. The objectives of the Plan are to avoid new risks, reduce existing risks, strengthen resilience, raise awareness and implement solidarity principle.	The Plan identifies areas of mutual interest in the transboundary context, where the Programme may assist through implementation of non-structural and operational measures developed for achieving risk reduction and strengthening resilience of the programme area to climate change.
Sava River Basin Management Plan	The 2nd Sava River Basin Management Plan (RBMP) has been developed according to the requirements of the EU Water Framework Directive (WFD) which establishes a legal framework to protect and enhance the status of all waters and protected areas including water dependent ecosystems, prevent their deterioration and ensure long-term, sustainable use of water resources. The RBMP brings the Programme of measures prepared for surface water, groundwater, other water management issues such as invasive alien species,	The abundance of water resources is one of the great riches of the programme area. However, much like other parts of Europe, the programme area has been very much exposed to the negative effects of climate changes. Floods and wildfires are increasingly frequent due to more extreme weather conditions. The Programme will contribute to achievement of the RBWP objectives through making the area and water management sector more resilient to climate change and by ensuring that water quality and quantity status will not

	and quantity and quality of sediments, protected areas and ecosystem services and financing the programme of measures. It also proposes guidelines for integration of water protection in activities having the greatest impact on water systems such as flood protection, navigation, hydropower exploitation and agriculture and planning within the climate change context. It particularly distinguishes main pressures present in the RBD, which are physical alteration, and diffuse source of pollution, followed by point source of pollution and dams or barriers, and specific pressures such as spread of invasive alien species.	be deteriorated through the implementation of the Interreg Programme.
Low-Carbon Development Strategy of the Republic of Croatia until 2030 with an outlook to 2050	The purpose of this Low-Carbon Strategy is to initiate changes in Croatian society that will contribute to the reduction of greenhouse gas emissions and which will allow for the separation of economic growth from greenhouse gas emissions. The Low-Carbon Development Strategy leads to a vision of a society in which we will live healthier and more comfortably, with low-carbon growth and efficient resource management. The existing national building stock will be renovated, and new buildings will be built according to the principles of nearly zero energy buildings and the circular economy. Energy supply will be more secure, from renewable sources and with low emissions, and energy consumers will also be energy producers. The combination of on-site electricity generation and public grid supply will provide a high level of security of electricity supply. The transport system will be intermodal and integrated, mainly with electric vehicles and with the use of low-carbon and climate-neutral fuel. Industry and agriculture will be efficient and connected to all sectors of the economy, while reducing the generation of waste materials in an integrated and circular economy. The general objectives of the Strategy are as follows: • achieving sustainable development based on knowledge, a competitive low-carbon economy and efficient use of resources • increasing the security of energy supply, sustainability of energy supply, increasing energy availability and reducing energy dependence	Policy Objective “Greener Europe” is extremely important for the development of the programme area due to the common problem of all three countries. Diversity in the use of energy resources and insufficient use of RES are among the main challenges. In the programme area, there is significant potential for the use of RES that needs to be used wisely. The development of the programme area in relation to the Policy Objective "Green Europe" was recognized precisely through the mentioned potential and favourable capacities (public institutions leading energy reconstruction, development agencies and tourist communities participating in nature protection projects). However, further steps are needed to achieve better energy efficiency, reduce pollution caused by the excessive use of fossil fuels in transport and heating, and better environmental protection in general. This includes building new RES capacity and further developing and diversifying existing energy sources. The possibility of a relevant cross-border partnership in this policy objective is considered very likely. Regarding energy efficiency and environmental protection, the following needs arise in the programme area: • Increase in the use of RES in the programme area; • Need for more effective climate change adaptation plans; • Need for a coordinated approach to tackling climate change adaptation, and need for urgent revision of planning documents to include climate change risks; • The need to identify climate change risks and take solutions to strengthen resilience to climate change; • Implementation of energy-efficient and smart solutions, especially in buildings (public and private) where joint (deep) energy and seismic retrofit should be promoted emphasizing cross-sectoral approach by integrating also sustainable transport and IT sectors;

	• solidarity by fulfilling the obligations of the Republic of Croatia under international agreements, within the framework of EU policy, as part of our historical responsibility and contribution to global goals • reduction of air pollution and the impact on the health and quality of life of citizens.	• Strengthening the capacity of local governments to encourage change towards a green transition; • Implementation of smart metering solutions and monitoring of quality parameters in the field of energy efficiency and environmental protection The need for educational campaigns and communication activities to raise public awareness in order to adapt to climate change.
Framework Energy Strategy for Bosnia and Herzegovina up to 2035	The strategy provides context and energy development in Bosnia and Herzegovina, based on three aspects: security of energy supply, price competitiveness and implementation of decarbonisation policy. Carbon, being the dominant natural resource in power generation, cannot be completely eliminated from use, but it is exceptionally important to conduct the future exploitation and production more efficiently, with application of adequate technology and work methods. Bosnia and Herzegovina currently cannot achieve energy security independently in all its segments, since they do not have own production of gas and oil. A system of reserves and diversification of energy sources should therefore be built, trying to increase own production, integration with regional markets, energy efficiency trends and achieve cleaner energy objectives.	In the programme area, there is significant potential for the use of RES. Exploiting this potential requires large investments in infrastructure, while substantial cross-border effects would require improvement and harmonization of regulatory conditions at national levels, both of which goes beyond the framework of cross-border cooperation programs. The impact of cross-border cooperation, however, is expected on the development of favourable models and exchange of experiences and practices that contribute to the reduction of CO_2 emissions. Also, the program aims towards the effects in reducing energy consumption, the introduction of innovative technologies in the field of renewable energy sources and in particular supporting models and practices that raise the energy efficiency of buildings and households. The actions will be focused on public infrastructure, creation of knowledge-base and human resources required for energy transition, as well as on national, regional and local agencies that promote energy efficiency and support and encourage end users to use energy from renewable sources and rationalise the energy consumption. Considering increasing energy demands and increasingly limited resources, the development of energy saving and energy efficiency enhancement methods will be a priority in the future development of the area.
Energy Development Strategy of the Republic of Montenegro until 2030	Energy strategy is a strategic mechanism foreseeing fulfilment of adopted energy policy objectives. Energy strategy of Montenegro recognises three principal priorities and twenty key strategic guidelines. The three priorities include safety in energy supply, development of competitive energy market and sustainable energy development. Ensuring energy development is based on rational use of own energy resources with observation of environmental protection principles, increasing energy efficiency and increased use of renewable energy sources. Montenegro still heavily relies on fossil fuels, especially coal, while oil and gas are imported.	Diversity in the use of energy resources and insufficient use of RES are among the main challenges in all three countries. In the programme area, there is significant potential for the use of RES. Exploiting this potential requires large investments in infrastructure, while substantial cross-border effects would require improvement and harmonization of regulatory conditions at national levels, both of which goes beyond the framework of cross-border cooperation programs. The impact of cross-border cooperation, however, is expected on the development of favourable models and exchange of experiences and practices that contribute to the reduction of CO_2 emissions. Also, the program aims towards the effects in reducing energy consumption, the introduction of innovative technologies in the field of renewable energy sources and in particular supporting models and practices that raise the energy efficiency of buildings and households. The actions will be focused on public infrastructure, creation of knowledge-base and human resources required for energy transition, as well as on national, regional and local agencies that promote energy efficiency and support and

		encourage end users to use energy from renewable sources and rationalise the energy consumption. Considering increasing energy demands and increasingly limited resources, the development of energy saving and energy efficiency enhancement methods will be a priority in the future development of the area. Regarding energy efficiency and environmental protection, the following needs arise in the programme area: • Increase in the use of RES in the programme area; • Need for more effective climate change adaptation plans; • Need for a coordinated approach to tackling climate change adaptation, and need for urgent revision of planning documents to include climate change risks; • The need to identify climate change risks and take solutions to strengthen resilience to climate change; • Implementation of energy-efficient and smart solutions, especially in buildings (public and private) where joint (deep) energy and seismic retrofit should be promoted emphasizing cross-sectoral approach by integrating also sustainable transport and IT sectors; • Strengthening the capacity of local governments to encourage change towards a green transition; • Implementation of smart metering solutions and monitoring of quality parameters in the field of energy efficiency and environmental protection The need for educational campaigns and communication activities to raise public awareness in order to adapt to climate change.
Climate Change Adaptation Strategy in the Republic of Croatia for the period to 2040 with a view to 2070	Adapting to climate change is fundamentally a horizontal issue, i.e. a problem that needs to be resolved in an integrated way with a high degree of co-ordination between participants. Even so, eight key sectors have been selected (hydrology; water and marine resources; agriculture; forestry; fishery; biodiversity; energy; tourism and health) and two cross-sectoral thematic areas (spatial planning; coastal areas management and risk management). In addition to the sectoral measures, a set of horizontal measures has been defined, which are relevant to several sectors, i.e. have a cross-sectoral character (spatial planning and management of coastal areas and risk management).	The natural environment is one of the key elements of the programme areas attractiveness and its socio-economic development potential. Its diverse geographical conditions, presence of the two types of climate, richness in water resources, the fact that it belongs both to Danube basin through Sava river basin in the north, and to the Adriatic Sea in the south makes it an area with high biodiversity, rich in different, but also very sensitive ecosystems. The abundance of water resources is one of the great riches of the programme area. However, much like other parts of Europe, the programme area has been very much exposed to the negative effects of climate changes. Floods and wildfires are increasingly frequent due to more extreme weather conditions. Such events demand direct joint action once they take place, but the area already has different local and national models of cooperation in monitoring and prevention in place.

Climate Change Adaptation and Low Emission Development Strategy for Bosnia and Herzegovina	Bosnia and Herzegovina is taking steps to address climate change both nationally and internationally. Within the country, climate change is increasingly recognized as an issue of key strategic importance. Increasing levels of energy efficiency, greater renewable energy use, and improved energy and transport infrastructure and services will lead to international investment, job creation and business enterprise in a resource-efficient economy. Negative impacts of climate change will be minimised by reducing vulnerability and taking advantage of opportunities brought about by climate change. The transition to a 'green economy' will particularly benefit the vulnerable and disadvantaged by being socially inclusive and contributing positively to gender equity. The predicted changes provide both opportunities and challenges for tourism, linked with ecosystem protection and protected area management. The climate changes, particularly the increased summer temperatures, are expected to have implications for human health, including a negative impact on the elderly and those with cardiovascular diseases. Effective adaptation measures are a necessity to reduce these vulnerabilities and increase the resilience of both the population and the major sectors of the economy.	The natural environment is one of the key elements of the programme areas attractiveness and its socio-economic development potential. Its diverse geographical conditions, presence of the two types of climate, richness in water resources, the fact that it belongs both to Danube basin through Sava river basin in the north, and to the Adriatic Sea in the south makes it an area with high biodiversity, rich in different, but also very sensitive ecosystems. The abundance of water resources is one of the great riches of the programme area. However, much like other parts of Europe, the programme area has been very much exposed to the negative effects of climate changes. Floods and wildfires are increasingly frequent due to more extreme weather conditions. Such events demand direct joint action once they take place, but the area already has different local and national models of cooperation in monitoring and prevention in place. The programme will thus focus very much on finding joint solutions and developing sustainable systems that will help all the relevant stakeholders to jointly promote disaster prevention and resilience, as well as the climate change adaptation.
National Climate Change Strategy of Montenegro (NCCS)	The Strategy comprises mitigation and additional mitigation of GHGs, strategic framework including the estimate of costs and social and economic impacts of implementation of measures provided by the strategy, as well as the appertaining action plan. It is a key instrument in climate change management and the obligation of the Government to act against climate change in an integrated multisectoral way, with observation of international obligations as per UNFCCC. Th principal objectives include: -low-carbon development possibilities, including GHG reduction -guidelines for the preparation of National Climate Change Adaptation Plan -additional activities needed to harmonize Montenegrin and EU regulations in this sector.	The natural environment is one of the key elements of the programme areas attractiveness and its socio-economic development potential. Its diverse geographical conditions, presence of the two types of climate, richness in water resources, the fact that it belongs both to Danube basin through Sava river basin in the north, and to the Adriatic Sea in the south makes it an area with high biodiversity, rich in different, but also very sensitive ecosystems. The abundance of water resources is one of the great riches of the programme area. However, much like other parts of Europe, the programme area has been very much exposed to the negative effects of climate changes. Floods and wildfires are increasingly frequent due to more extreme weather conditions. Such events demand direct joint action once they take place, but the area already has different local and national models of cooperation in monitoring and prevention in place. The programme will thus focus very much on finding joint solutions and developing sustainable systems that will help all the relevant stakeholders to jointly promote disaster prevention and resilience, as well as the climate change adaptation.
Waste Management Plan for the Republic of Croatia for the	Waste Management Plan is an implementation document of the Waste Management Strategy the principal objectives of which are derived from the waste management state assessment and obligations arising from EU	The transition to a circular economy is necessary if greenhouse gas emissions are to be completely reduced, as half of the emissions come from resource

period 2017-2022	legislations. By 2022 Croatia shall enhance its municipal waste management systems, enhance its special waste category management, enhance its hazardous waste management, rehabilitate locations polluted by waste, implement education and information activities, improve its waste management information systema and its administrative procedures in waste management.	extraction and processing. Croatia has significant potential to transition existing value chains in rural and coastal areas into sustainable and circular bio-economies. Moreover, recent technological developments are creating increasing opportunities to use waste and residues from agriculture, fishery, aquaculture, and forestry value chains to raise productivity, lower costs, reduce risks, produce value added products, and develop new markets. Improving the recycling process and increasing the rate of reused waste are key items, as the increase in waste production per capita is visible in the programme area. Circular economy and supply of raw materials is still not a sufficiently highlighted priority in the area, systems are largely not in place and infrastructure is lacking for innovative and new techniques in waste re-usage. When it comes to circular economy objective, the following needs have emerged: • Promoting joint circular economy policy development, • Raising awareness of the need to move to a circular economy; • Improving the infrastructure for separate waste collection and recycling; • Increasing resource efficiency and waste recycling across sectors • Strengthening circular value added chains across the borders • Encouraging small and medium-sized enterprises to develop innovative and efficient production methods; • Encouraging research and innovation that contribute to the circular economy. The Programme supports reduction of waste generation and landfilling through use of waste biomass for energy production and implementation of circular solutions, and use and reuse of sustainable materials provided in S= 2.2 Promoting renewable energy in accordance with Renewable Energy Directive (EU) 2018/2001 including sustainability criteria set out therein. Sustainability criteria regard protection of high biodiversity land and land with high carbon stock, that is aiming at minimising the risk of using forest biomass derived from unsustainable production. Moreover, Installers of biomass, heat pump, shallow geothermal and solar photovoltaic and solar thermal energy shall be certified by an accredited training programme or training provider. Training programme shall give account of market situation of biomass, cover ecological aspects of its use, fire

		protection, combustion and fitting systems, design, installation and maintenance of boilers and stoves, as well as good knowledge of EU standards and technologies.
Waste Management Plan of Montenegro	Montenegro's waste policy is shaped by a number of overarching goals: reducing municipal waste generation and landfilling and accelerating the expansion of the separate collection and recycling of recyclable materials. The Revised National Waste Management Plan of Montenegro 2015 – 2020 lists a number of measures aimed at achieving these goals, for example the introduction of economic instruments with incentives and penalties to promote waste separation and recovery, the construction of recycling centres and sorting plants, the introduction of a collection system for packaging waste, the elimination of illegal dumping of waste and the rehabilitation of old landfills. Measures designed to lead to an increase in the willingness of the population to participate in separate collection systems are to be intensified.	Circular economy and supply of raw materials is still not a sufficiently highlighted priority in the area, separate waste collection and waste recycling has only recently become an important subject (especially in Montenegro and Bosnia and Herzegovina). Systems are largely not in place and infrastructure is lacking for innovative and new techniques in waste re-usage. Although the circular economy requires much more extensive focus than simply on improving waste management, this seems to be the main focus. Of the three countries involved, only Croatia currently has plans to move to bioeconomy and plan more sustainable use of resources, while for Bosnia and Herzegovina and Montenegro, the organization of recycling and reuse of waste is still a challenge. It is necessary in the programme area to develop awareness of the need for a sustainable lifestyle, encourage small and medium-sized enterprises to develop innovative and more efficient production methods (and point out the benefits it brings) and encourage research and innovation.
Republic Waste Management Plan in Republika Srpska	Waste management plan defines and orients waste management based on the existing state analysis and waste management objectives as specified by the Waste Management Strategy. The Plan observes the waste management hierarchy and is aligned with the EU legislative framework in the waste management sector. Moreover, there are 4 hot spots in Republic of Srpska, including Oil refinery in Brod, Oil Refinery in Modriča, Plumb and zinc mine in Srebrenica, „Red mud“ location in Zvornik. The plan also elaborates special short and long-term objectives in view of aligning of legislative framework of Republika Srpska with the acquis, capacity building in the waste management sector, waste generation prevention, and improvement of municipal waste collection system, establishment of separate collection system for special categories of waste, establishment of separate collection system for hazardous waste, establishment of industrial waste management system, rehabilitation and closure of illegal landfilling and establishment of regional waste management centres.	Circular economy and supply of raw materials is still not a sufficiently highlighted priority in the area, separate waste collection and waste recycling has only recently become an important subject (especially in Montenegro and Bosnia and Herzegovina). Systems are largely not in place and infrastructure is lacking for innovative and new techniques in waste re-usage. Although the circular economy requires much more extensive focus than simply on improving waste management, this seems to be the main focus. Of the three countries involved, only Croatia currently has plans to move to bioeconomy and plan more sustainable use of resources, while for Bosnia and Herzegovina and Montenegro, the organization of recycling and reuse of waste is still a challenge. It is necessary in the programme area to develop awareness of the need for a sustainable lifestyle, encourage small and medium-sized enterprises to develop innovative and more efficient production methods (and point out the benefits it brings) and encourage research and innovation.

The relevant international legislation taken into consideration for the purpose of establishing SEA objectives for the Programme, and the way in which they were taken into consideration and integrated into the Programme are analysed in the **Table 3**.

Table 3. Legislation taken into account for the purpose of establishing SEA objectives

Convention	Environmental policy objectives	Principle SEA objectives
United Nations Framework Convention on Climate Change (UNFCCC) (Rio de Janeiro, 1992)	The Convention identified climate change as a serious global problem and commits the international community to combat it. The parties to the Convention aim to stabilize greenhouse as concentrations in the atmosphere at a level that would prevent dangerous human-induced interference with the climate system (global warming). In order to achieve this goal, the Convention defines responsibilities of industrialized and developing countries in other to take account of their different capabilities and current emission values.	- Sustainable management of natural resources - Protection of biodiversity, ecosystems and wildlife - Promotion of resilience and disaster risk reduction
UNFCCC Kyoto Protocol (1997)	The Protocol operationalizes the UNFCCC by committing industrialized and developing economies to reduce greenhouse gasses in accordance with agreed individual targets for CO2, CH4, N2O, PFCs and SF6.	- Reduction of greenhouse-gas emissions
Paris Agreement (Paris 2015)	Paris Agreement is a legally binding international treaty on climate change. Its goal is to limit global warming and achieve climate neutral world by 2050 and it also aims to strengthen countries' abilities to deal with the impacts of climate change and support the countries in their efforts.	- Reduction of greenhouse-gas emissions - Promotion of resilience and disaster risk reduction
UN Convention on Biological Diversity (Rio de Janeiro, 1992)	The Convention is the international legal instrument for the „conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources".	- Sustainable management of natural resources - Protection of biodiversity, ecosystems and wildlife
Convention on the Conservation of European Wildlife and Natural Habitats – Bern Convention ((Bern, 1979)	The Convention aims to promote cooperation between the signatory countries in order to conserve wild flora and fauna and their natural habitats and to protect endangered migratory species. The signatory parties are responsible to promote national policies for the conservation of wild flora, fauna and natural habitats, integrate the conservation objectives into national planning, development and	- Sustainable management of natural resources - Protection of biodiversity, ecosystems and wildlife

	environmental policies and to promote education and disseminate information on the need for their conservation.	
Convention on the Conservation of Migratory Species of Wild Animals – Bonn Convention (Bonn, 1979)	Convention aims to build and strengthen global conservation efforts for migratory species in the air, on land and in the seas.	- Sustainable management of natural resources - Protection of biodiversity, ecosystems and wildlife
Convention on Wetlands of International Importance especially and Waterfowl Habitat - Ramsar Convention (Ramsar, 1971)	The parties to the convention agree to nominate at least one wetland in its territory to the List of Wetlands of International Importance, agree to manage all their wetlands based on the concept of wise use, which is the maintenance of the ecological character of the wetland and allowance of sustainable use for the benefit of people and the environment	- Sustainable management of natural resources - Protection of biodiversity, ecosystems and wildlife
Council Directive 79/409/EEC on the conservation of wild birds (EU Birds Directive)	This directive relates to the conservation of all species of naturally occurring birds in the wild state in the European territory of the Member States to which the Treaty applies. It covers the protection, management and control of these species and lays down rules for their exploitation. Member States shall take the requisite measures to maintain the population of the species referred to in article 1 at a level which corresponds in particular to ecological, scientific and cultural requirements.	- Sustainable management of natural resources - Protection of biodiversity, ecosystems and wildlife
Council Directive 92/43/EEC on the conservation of natural habitats an of wild fauna and flora (EU Birds Directive)	The aim pursued by this Directive is to ensure biodiversity through the conservation of natural habitats and of wild fauna and flora in the territories of the Member States. Pursuant to this Directive, measures shall be designed and undertaken in order to maintain or restore, as the case may be, natural habitats and species of wild fauna and flora. To this end, a coherent European ecological network of special areas of conservation shall be set up under the title Nature 2000 (art. 3).	- Sustainable management of natural resources - Protection of biodiversity, ecosystems and wildlife
Directive 2000/60/EC of the European Parliament and of the Council of 20 October 2000 establishing a framework for Community action in the field of	WFD objectives include improving water quality, protection aquatic ecosystems and reducing water pollution. Also, the Directive requires Members states to coordinate efforts to contribute to control transboundary water problems.	- Improving water quality and reducing water and sea pollution

water policy (Water Framework Directive)		
European Landscape Convention (Florence, 2000)	The Convention introduced a Europe-wide concept centering on the quality of landscape protection, management and planning and covering the entire territory, not just outstanding landscapes. Convention supports cross-border cooperation on local and regional level, and preparation of joint landscape programmes.	- Protection of cultural and ambiental values
Convention on Protection of the World Natural and Cultural Heritage (World Heritage Convention, Paris, 1972)	The Convention aims to promote cooperation among nations to protect heritage around the world that is of such outstanding universal value that its conservation is important for current and future generations.	- Protection of cultural and ambiental values
Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Helsinki, 1992)	The Convention promotes sustainable management of shared water resources, implementation of sustainability objectives, prevention of conflicts and promotion of peace and integration. It requires control and reduction of transboundary impact, and use of transboundary waters in a reasonable and equitable way to ensure their sustainable management.	- Advancement of co-ordinated efforts to adapt to the impacts of climate change and avoid tensions
Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives (Waste Framework Directive)	The Waste Framework Directive sets the basic concepts and definitions related to waste management, including definitions of waste, recycling and recovery. It requires that waste be managed • without endangering human health and harming the environment • without risk to water, air, soil, plants or animals • without causing a nuisance through noise or odours • and without adversely affecting the countryside or places of special interest It explains when waste ceases to be waste and becomes a secondary raw material, and how to distinguish between waste and by-	- Sustainable management of waste

	products. The Directive also introduces the "polluter pays principle" and the "extended producer responsibility". The foundation of EU waste management is the five-step “waste hierarchy”, established in the Waste Framework Directive. It establishes an order of preference for managing and disposing of waste.	
Convention on Environmental Impact Assessment in a Transboundary Context (1991, Espoo)	The Convention sets out the obligations of the parties to assess the environmental impact of certain activities at an early state of planning. It also lays down the general obligation of States to notify and consult each other on all major projects under consideration that are likely to have a significant adverse impact across boundaries.	- Advancement of co-ordinated efforts to adapt to the impacts of climate change and avoid tensions
Convention on Access to Information, Public Participation in Decision Making and Access to Justice in Environmental Matters (Aarhus, 1998)	The Aarhus Convention establishes a number of rights of the public, both individuals and associations, with regard to the environment. The Parties are required to make necessary provisions so that public authorities contribute to these rights to become effective. It includes the right to access to environmental information, public participation in environmental decision-making, and access to justice.	

4. CURRENT STATE OF THE ENVIRONMENT IN THE PROGRAMME TERRITORY AND LIKELY EVOLUTION OF THE ENVIRONMENT WITHOUT IMPLEMENTATION OF THE PROGRAMME

4.1 Current state of the environment

This chapter provides the description of the current state of the environment in the Programme territory for the purpose of providing context for understanding the likeliness of development of both positive and negative impacts as a result of the implementation of the Programme. Apart from the current state, development trends have also been taken into consideration of the environmental factors established in scoping as of the most concern.

The description of the current state of the environment is based on the already existing data sources. Because of the strategic nature of the programme which is relatively abstract, environmental baseline was also described on a strategic level and will be used to define sensitivity of the area in general, and the description of the likely development of the environment without the implementation of the Programme, that actually represents the zero alternative, will be used as a reference point for the assessment. Collection of more specific data will be required for the assessment of impacts at project level.

4.1.1 Demography

Interreg IPA Cross-border Cooperation Programme Croatia-Bosnia and Herzegovina-Montenegro 2021 - 2027 covers the territory of border areas between Croatia and Bosnia and Herzegovina, Croatia and Montenegro and between Montenegro and Bosnia and Herzegovina.

Programme area covers 12 counties on the Croatian side, Brčko District of Bosnia and Herzegovina and 109 municipalities/cities on the side of Bosnia and Herzegovina and 11 municipalities on the side of Montenegrin border. This amounts to total of 87.453,95 km² of programme area with 5.587.836,00 inhabitants.

On the Croatian side, the programme territory covers 38.405,00 km^2 and includes following counties: Zagreb County, Sisak-Moslavina County, Karlovac County, Bjelovar-Bilogora County, Lika-Senj County, Požega-Slavonia County, Brod-Posavina County, Zadar County, Šibenik-Knin County, Vukovar-Srijem County, Split-Dalmatia County, and Dubrovnik-Neretva County (**Figure 2**).

On the side of Bosnia and Herzegovina, the programme territory covers 42.578,50 km² and includes Brčko District of Bosnia and Herzegovina and 49 municipalities/cities from the Republika Srpska and 60 municipalities/cities from Federation of Bosnia and Herzegovina (**Figure 3**).

On the side of Montenegrin border, the programme territory covers 6.508 km^2 and includes municipalities as follows: Herceg Novi, Kotor, Tivat, Budva, Bar, Ulcinj, Cetinje, Nikšić, Podgorica, Danilovgrad, and Tuzi (**Figure 4**).

Main urban areas in Croatia are cities of Split (161.132 inhabitants), Zadar (70.829 inhabitants), Velika Gorica (61.198 inhabitants), Slavonski Brod (50.039 inhabitants), Karlovac (49.594 inhabitants), Sisak (40.185 inhabitants), Šibenik (42.589 inhabitants) and Dubrovnik (41.671 inhabitants). Main urban

areas in Bosnia and Herzegovina are Banja Luka (185.042 inhabitants), Tuzla (110.979 inhabitants), Zenica (110.663 inhabitants), Mostar (105.797 inhabitants) and Bihać (56.261 inhabitants). Montenegrin part of the programme area has Podgorica, Bar and Herceg Novi as main urban areas (185.937 inhabitants, 42.048 inhabitants and 30.864 inhabitants respectively). Population change in the programme area is significant in last 30 years.

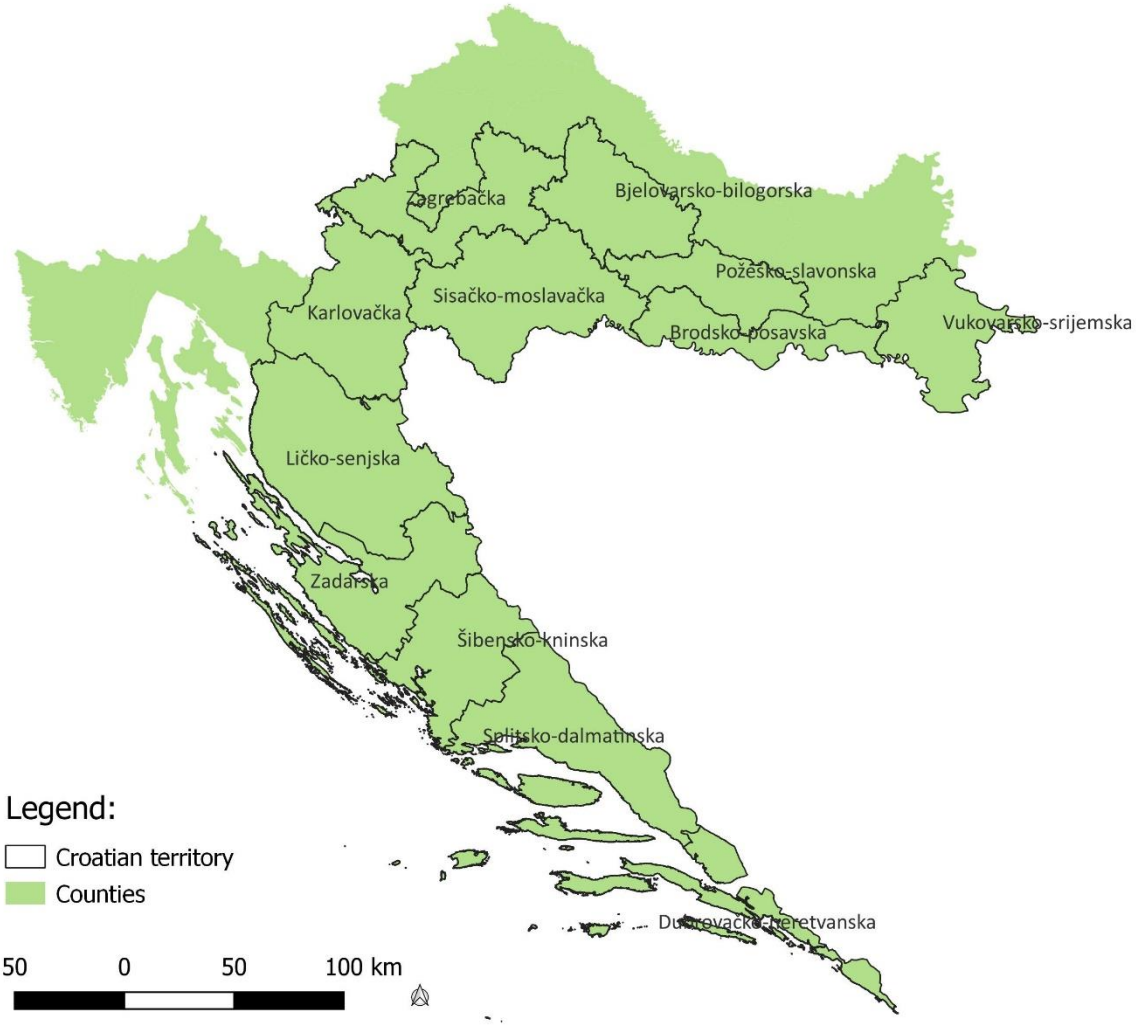


Figure 2. Croatian territory in Programme area

Figure 3. BiH territory in Programme area

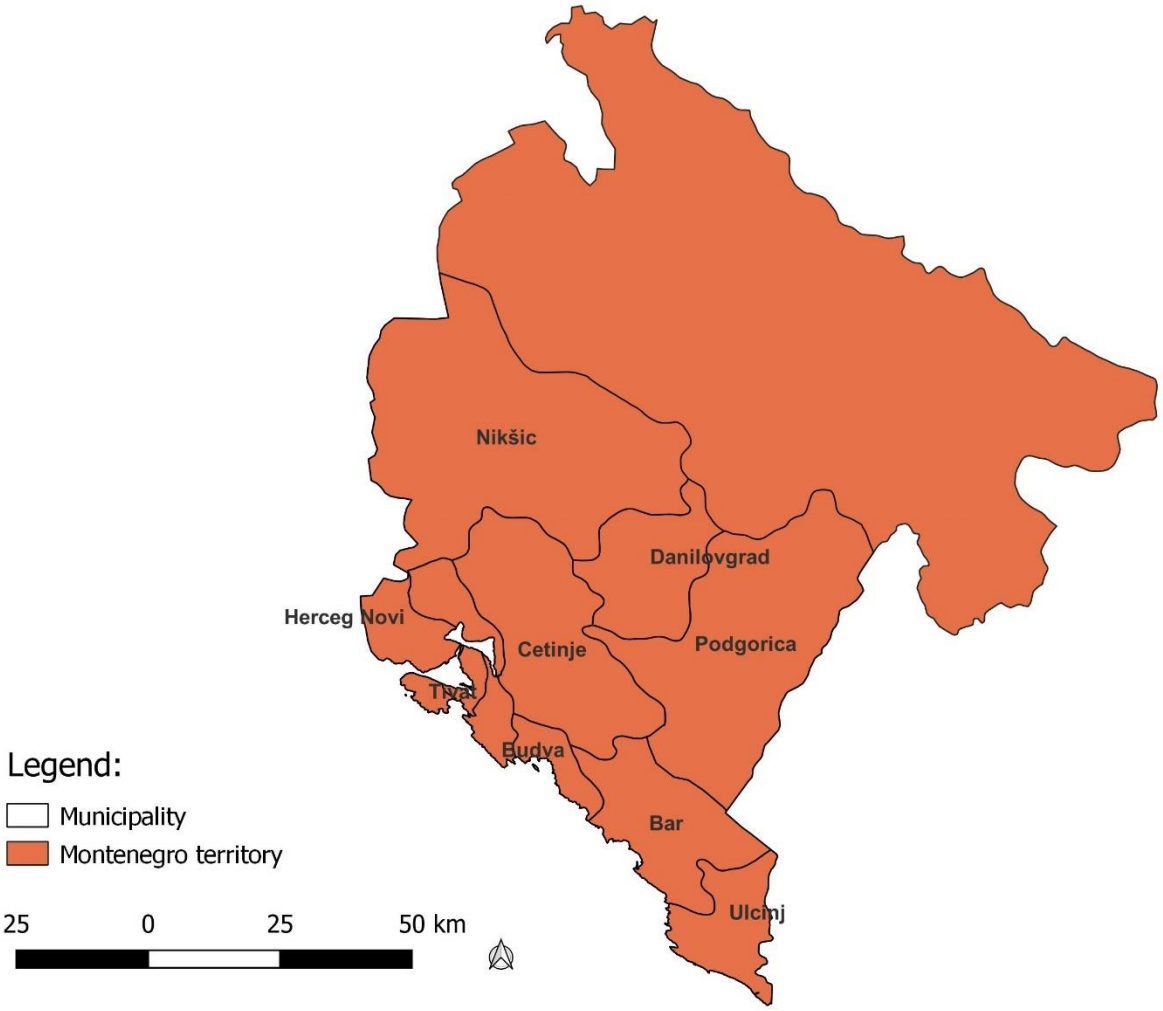


Figure 4. Montenegrin territory in Programme area

There is a significant decrease in number of inhabitants in Croatia and Bosnia and Herzegovina, while Montenegro has slight increase in population. The territories of the countries concerned located within the program area, but also the entire territories of the states concerned are characterized by depopulation. Demographic decline due to low birth-rate and high emigration rate leads to an ageing population and a decrease in the total population. All this poses are danger to the pension system and economy in general.

Tourism and culture play an important role in the economies and job creation in the majority of the programme area. The programme area is largely dependent on tourism. The Adriatic coastal part of the area relies on tourism as the dominant form of economic activity. In the Pannonian and continental areas, tourism still plays secondary, but to have a more significant role in economy. Its optimum development can only be achieved if the advantages present in the rural environments or specific natural and cultural characteristics of areas are in the forefront of the tourist offer.

The COVID-19 pandemic resulted in lockdowns and other containment measures had major impacts on health, economy in the programme area, but also on cross-border cooperation.

4.1.2 Air and climate

4.1.2.1 Air quality

Air quality in the Programme area is mainly affected by industrial and agricultural activities, emissions from residential sector and traffic and transport in urban areas. High concentrations and frequently exceeded permitted daily mean concentrations are most pronounced during the heating season, because of the use of solid fuels (coal and wood). The air quality assessed in terms of the concentration of SO_2, NO_2 and O_3 is within the prescribed threshold limit value, with no major concentration variations on an annual basis.

The increased exposure to air pollution and its linkage to higher prevalence of lung, respiratory, or chronic obstructive pulmonary disease (COPD) is also likely to increase the vulnerability of the affected population to the currently emerging COVID19 pandemic.

The EU accession process provides an incentive to improve air quality in this part of Europe by adapting legislation and learning from the experience of other EU countries. In addition to strengthening the legal and policy framework for air quality management (AQM) at the national level, it is important to develop subnational solutions, particularly for urban pollution hot spots. By acting on air pollution reduction, countries prepare the grounds for the long-term transition to a low-carbon economy and

climate change mitigation, yet the synergies and trade-offs have to be carefully evaluated and understood.

The **Figure 5** show the data on the most recent measurements taken over from Europe's air quality monitoring network. They have been taken on 27 January 2022.

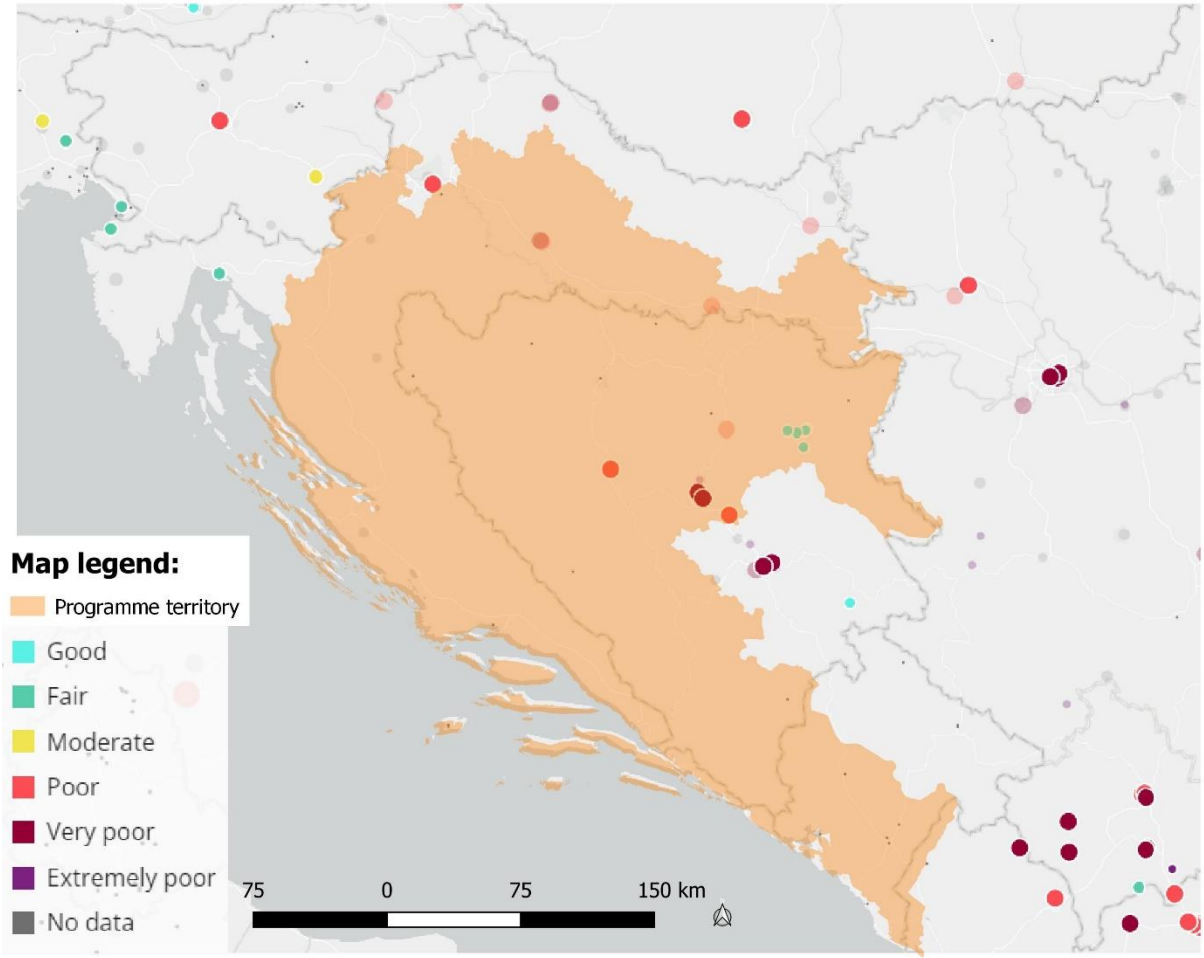


Figure 5. Map of air quality index

Source: https://www.eea.europa.eu/themes/air/air-quality-index/index. 27.1.2022.

The map of European Air Quality Index displaying up-to-the minute data for the whole of Europe where we can see the air quality of individual countries, regions and cities.

Air quality in the programme area as measured at the air quality monitoring stations shown in the map is poor or very poor quality. Measurements of up to five key pollutants supported by modelled data determine the index level that describes the current air quality situation at each monitoring station.

The poor air quality on programme area depends on the current microclimatological conditions at the measurement site. The position of large cities and industry around them should also be taken into account of pollutant level.

In the table below there is a kay explained with five pollutant and index level (**Figure 6**).

Pollutant	Index level (based on pollutant concentrations in µg/m3)					
	Good	**Fair**	**Moderate**	**Poor**	**Very poor**	**Extremely poor**
Particles less than 2.5 µm ($PM_{2.5}$)	0-10	10-20	20-25	25-50	50-75	75-800
Particles less than 10 µm (PM_{10})	0-20	20-40	40-50	50-100	100-150	150-1200
Nitrogen dioxide (NO_2)	0-40	40-90	90-120	120-230	230-340	340-1000
Ozone (O_3)	0-50	50-100	100-130	130-240	240-380	380-800
Sulphur dioxide (SO_2)	0-100	100-200	200-350	350-500	500-750	750-1250

Figure 6. Key to air quality map
Source: https://www.eea.europa.eu/themes/air/air-quality-index/index

On the **Figure 7** the air quality stations in programme area measures poor and very poor air quality, wich means 50-100 and more that 100 pollutant concentrations in µg/m3[1], for PM_{10}.

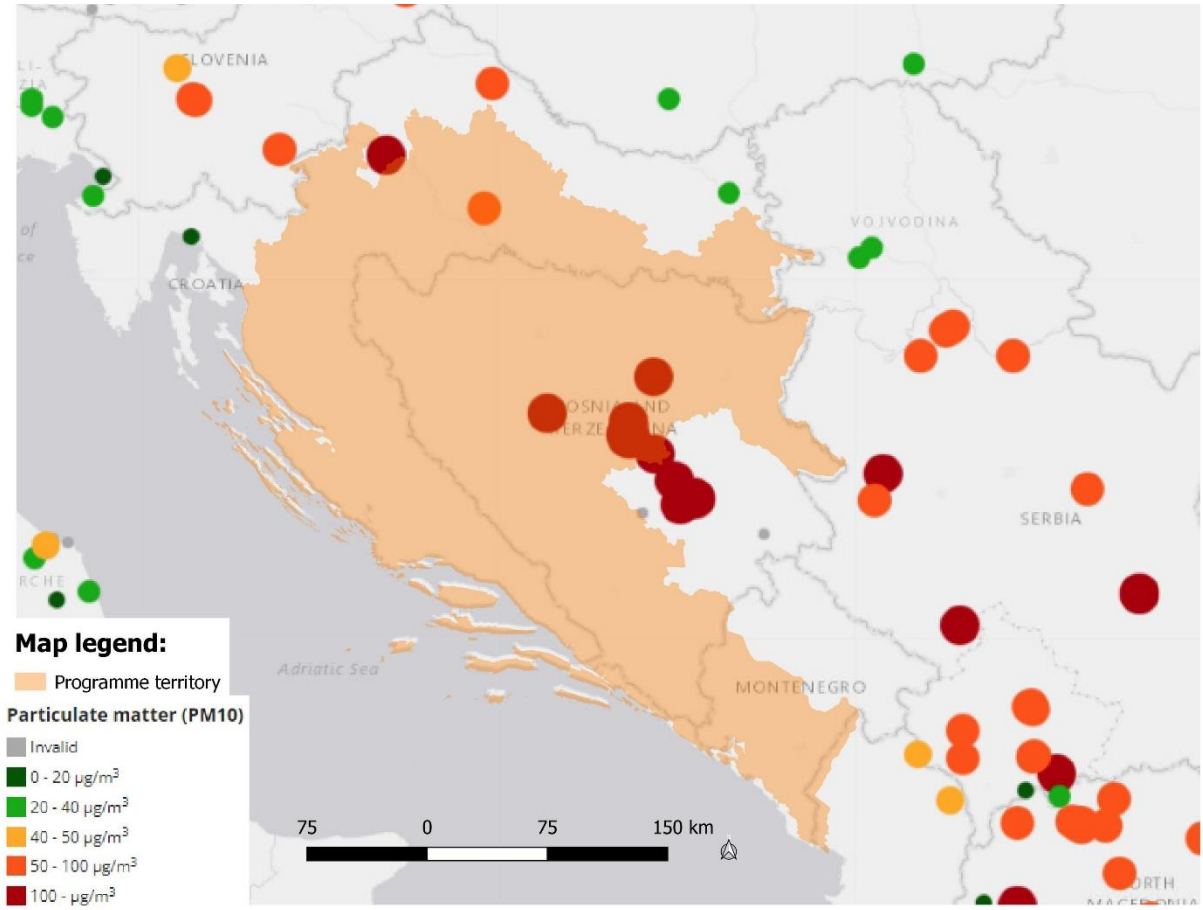


Figure 7. Map of air quality in Programme area in accordance with PM 10 pollutant
Source: https://www.eea.europa.eu/data-and-maps/explore-interactive-maps/up-to-date-air-quality-data, 27.1.2022.

[1] The concentration of an air pollutant (eg. ozone) is given in micrograms (one-millionth of a gram) per cubic meter air or µg/m3.

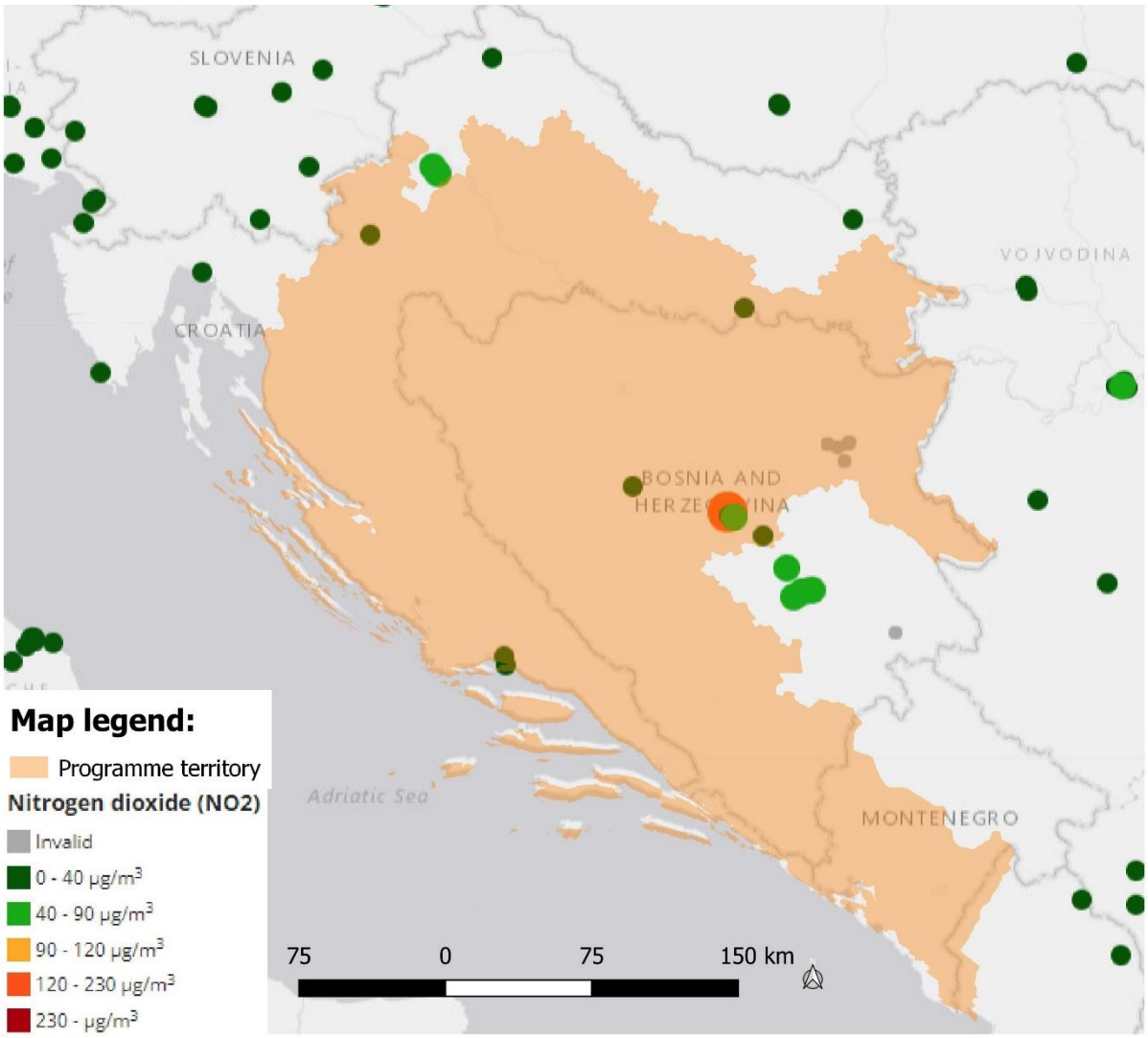


Figure 8. Map of air quality in Programme area in accordance with NO_2 pollutant

Source:https://www.eea.europa.eu/data-and-maps/explore-interactive-maps/up-to-date-air-quality-data, 27.1.2022.

In the **Figure 8** the air quality stations in programme area measures good air quality, which means 0-40 µg/m3, for NO2 and poor air quality on Bosnian and Herzegovina territory nearby city of Zenica (120-230 µg/m3, for NO2). It depends on industry and current microclimatological conditions.

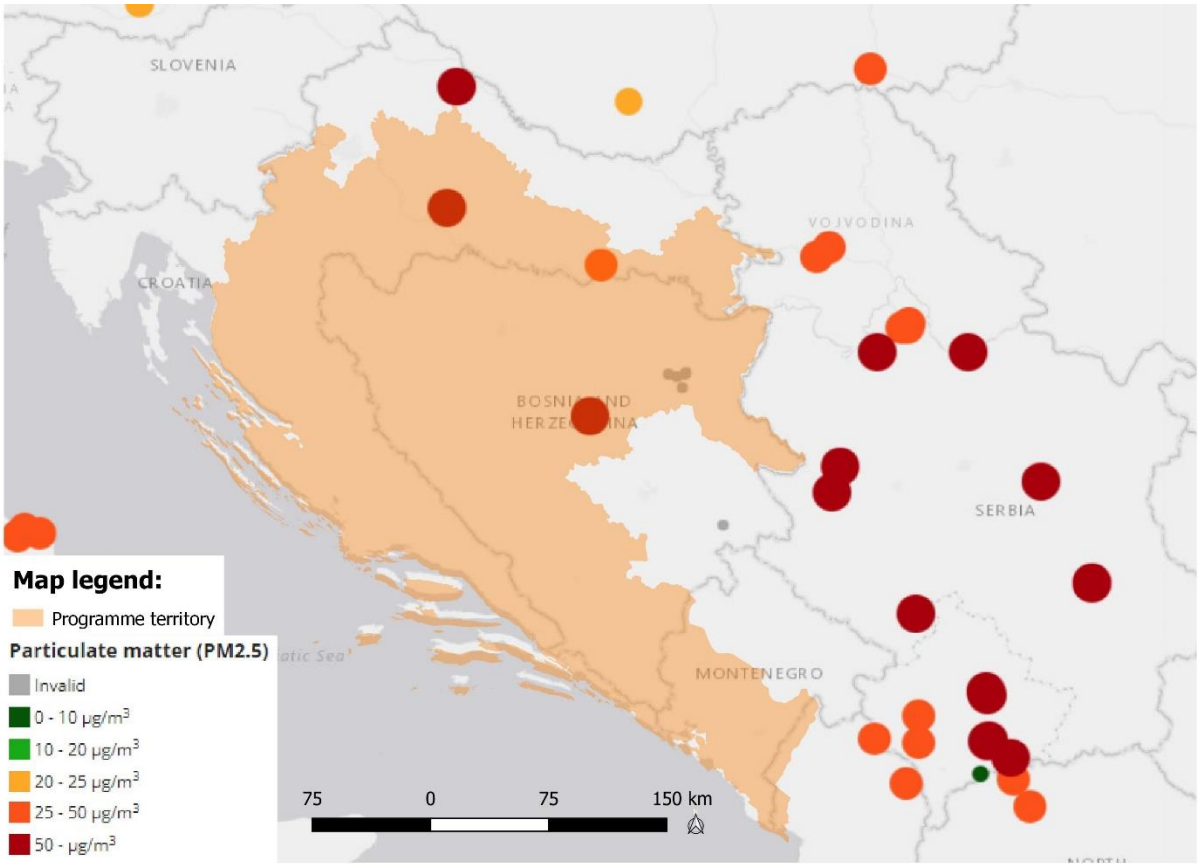


Figure 9. Map of air quality in Programme area in accordance with $PM_{2.5}$ pollutant

Source:https://www.eea.europa.eu/data-and-maps/explore-interactive-maps/up-to-date-air-quality-data, 27.1.2022.

In the **Figure 9** the air quality stations in programme area measures poor and very poor quality, which means 25-50 and more that 50 µg/m3, for $PM_{2.5}$.

The regional problem is ozone pollution which is not only consequence of emissions within the programme area. This pollution is characteristic of entire Programme territory due to its geographical location and climate conditions. The ozone pollution is cross-border problem with long-range transport from territory of west Europe.

4.1.2.2 Climate

The most important climate modifiers for the Programme area are the Adriatic and the Mediterranean seas, the Dinarides orography with their form, altitude and position relative to the prevailing air flow, and openness of the its north-east parts to the Pannonian plain, and the diversity of vegetation.

Croatia's climate is determined by its position in the northern mid-latitudes and corresponding weather processes on a large and medium scale. North and central part of Croatia which make a part of the programme territory belongs to temperate continental climate and throughout the whole year it is in a circulation zone of mid-latitudes, where the atmospheric conditions are very variable. They are characterised by diversity of weather situations with frequent and intense exchanges during the

year. These are caused by moving systems of low or high air pressure, often resembling vortices hundreds and thousands of kilometres in diameter.

The climate of continental Croatia and programme territory also is modified by the maritime influence of the Mediterranean which is stronger in the area south of the Sava river than in the north part and which weakens towards the east. Orography for example, facilitates intensification of short term heavy precipitation on the windward side of the orographic obstacle or the appearance of precipitation shadow on the leeward side. Weather characteristics differ between seasons.

The greatest part of Croatia has a continental moderately warm, rainy climate. The mean annual air temperature in the lowland area of northern Croatia is 10-12 °C. In the south part of Croatia which is also in the programme territory is Mediterranean climate with dry and hot summers. The mean annual temperature ranges from 12 to 17° C along the coast area. The Adriatic coastal areas and islands experience as much as 2.700 hours of sunshine per year.

General climate characteristics of Bosnia and Herzegovina are greatly influenced by characteristics of Adriatic sea, local topography, especially Dinarides which are located along coast and run from NW to SE parallel to the coast and atmospheric circulation on a macro scale. On the basis of temperature characteristics the territory of Bosnia and Herzegovina may be divided into three temperature zones: warm, moderate and cold. The warm zone corresponds to the Adriatic coast and lowland Herzegovina. In lowland Herzegovina summers are hot and winters are very mild. Mean winter temperatures are above 5° C, whereas summer temperatures reach 40° C. Mean annual temperatures have the value of above 12° C. Moderate areas include plain and hilly regions in the central part of the country. Summers are warm and winters are moderately cold. Mean winter temperatures are around 0°C and summer temperatures reach 35°C. Mean annual temperature ranges between 10°C and 12°C, whereas in the area above 500 m, it is below 10°C. Cold regions refer to mountainous areas where summers are fair (days moderately warm and nights chilly), while winters are very cold. During at least 3 months of the year, these regions have a mean temperature lower than 0°C.

Annual precipitation amounts range from 800mm in the north along the Sava River to 2000mm in the central and south eastern mountainous regions of the country. Maximum rainfall occurs mostly at the end of autumn or beginning of winter; i.e., in November or December.

The climate of Montenegro is Mediterranean on the coast with heavy rains from September to April, but on the continental part and in higher altitude it's more continental with colder winters. Precipitation in Montenegro is plentiful, especially in the coastal strip and in mountainous regions. The rainy season is long and runs from September to April. On the coast the climate is mild but also rainy

in autumn and winter, while in summer is hot and sunny. Winters are mild with average temperatures in January around 7-8° C.

Programme area is marked on the European Koppen map, **Figure 10** as the area of temperate continental climate / humid continental climate (Dfb) and in the south part of the area in Csa - warm Mediterranean climate and Csb – temperate Mediterranean climate.

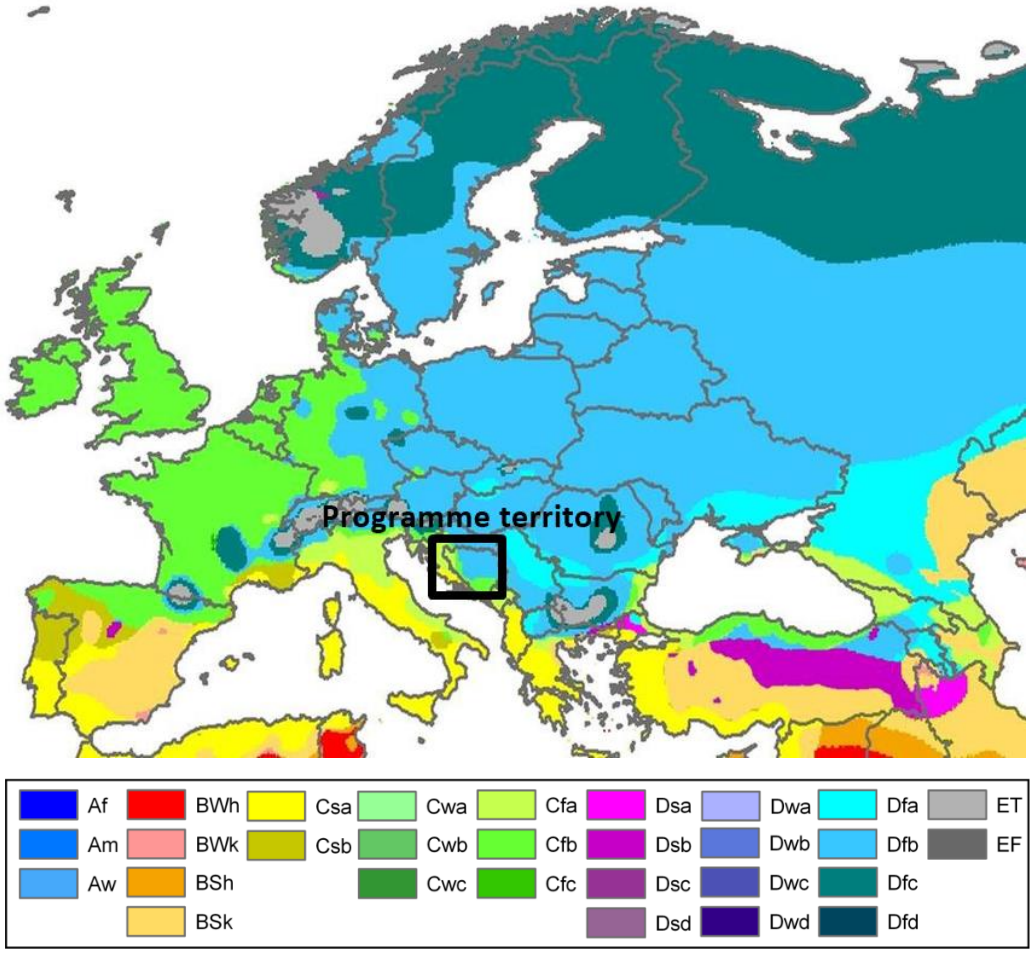


Figure 10. Koppen map of Europe
Source: https://commons.wikimedia.org/wiki/File:Europe_K%C3%B6ppen_Map.png

4.1.2.3 Climate change

Climate change is no longer a growing threat, but it is happening now and will get more serious in the future, even if global efforts to reduce greenhouse gas emissions prove effective. Climate change affects all aspects of the environment and economy and sustainable development of the society. They affect frequency and intensity of extreme weather events, such as precipitation, floods, torrent, storms, draughts, heat waves or fires, but also gradual changes such as air temperature rise, soil and water rise, desertification etc. Therefore, minimising the risks from global climate change requires targeted actions to adapt to the impacts of climate change, in addition to actions to reduce greenhouse gas emissions. Adaptation must be tailored to the specific circumstances in different regions and cities of Europe.

In this part of Europe, the 1991-2000 period was the warmest decade of the 20th century. The increase of mean annual air temperature which in the 20th century was between +0,02C up to +0-07C per 10 years, continued and amplified in the 21st century as well. The summer of 2012 was very hot in this part of Europe. In the programme area, the magnitude and frequency of heat waves have increased.

Croatia

During the period from 1961 to 2010, the trends of mean, mean minimum, and mean maximum air temperatures show warming throughout Croatia. Trends in annual air temperature are positive and statistically significant, and changes are greater in the continental part of the country than on the coast and in the Dalmatian hinterland. The maximum air temperature was exposed to the biggest change (increase). The highest contribution to the overall positive air temperature trend was due to the summer trends, and the trends for winter and spring equally contributed to the increase in mean maximum temperatures. The slightest changes were in regard to the autumn air temperature. Observed warming is also reflected in all temperature extremes indices.

In addition to the "historical" climate simulation for the period 1971-2000, the RegCM, regional climate model, calculated change (forecasts) for the future climate in two periods: 2011-2040 and 2041-2070, assuming the IPCC scenarios of greenhouse gases concentrations development RCP4.5 and RCP8.5. The RCP4.5 scenario is characterized by the medium level of greenhouse gas concentrations with relatively ambitious expectations of their future reduction, which would peak in around 2040. The RCP8.5 scenario is characterized by a continuous increase of greenhouse gas concentrations, which, by the year 2100, would be up to three times higher than today.

In **Table 4** is a future changes for the RCP4.5. scenario.

Table 4. Climate projection in the Republic of Croatia to year 2040 with a view to year 2070.

Future climate projections according to the RCP4.5 scenario compared to the period 1971-2000 obtained by climate modelling		
Parameter	**2011-2040**	**2041-2070**
Air temperature	Medium: increase of 1 to 1.4 °C (all seasons, the entire Croatia) Maximum: increase in all seasons 1-1.5°C Minimum: the highest increase in winter, 1.2-1.4 °C	Medium: increase from 1.5 to 2.2 °C (all seasons, the entire Croatia - especially continent) Maximum: up to 2.2°C in summer Minimum: the highest increase in continent in winter 2.1-2.4°C and 1.8-2°C coastal zone
Precipitation	Average annual quantity: a slight decrease (except for a slight increase in the northwest of Croatia)	Average annual quantity: further decrease trend (up to 5%) in almost all of Croatia except for north-western parts.
	Seasons: different signs; winter and spring in most of Croatia a slight increase + 5-10%, and summer and fall decrease Decrease in the number of rainy seasons. The number of dry seasons would increase	Seasons: decrease in all seasons (up to 10% of the mountains and northern Dalmatia) except in winter (increase of 5 - 10% in northern Croatia) The number of dry seasons would increase.
Snow cover	Decrease	Further decrease (especially mountainous areas)
Wind	Winter and spring without change, but in the summer and especially in the autumn on the Adriatic increase of medium wind speed at 10m up to 20-25%	Winter and spring mostly without change, but the trend of strengthening in summer and autumn in the Adriatic
Evapotranspiration	Increase in spring and summer 5 - 10%	Increase in spring and summer 5 - 10%
Air humidity	Year-round increase most in summer in the Adriatic	Year-round increase most in summer on the Adriatic
Soil humidity	Decrease in northern Croatia	Decrease throughout Croatia (most in summer and autumn).
Extreme weather conditions	6 to 8 days more than the reference period (15-25 days a year) Decrease in number of cold days (with Tmin <10C) and increase in Tmin values along with increase of days with heat (with Tmax >+ 30°C). Warm nights increase (number of days with Tmin ≥ + 20°C)	Further decrease in the number of days with Tmin <-10 °C and up to 12 days with heat more than the reference period (6-8)
Solar irradiance	In the summer and autumn increase throughout Croatia, in spring increase in northern Croatia; in winter decrease throughout Croatia	Increase in all seasons except winter (the highest increase in mountainous and central Croatia)
Mean sea level	2046-2065 19-33 cm (IPCC AR5)	2081-2100 32-65 cm (estimation of average mean values for the Adriatic from various sources)

Source: Climate Change Adaptation Strategy in the Republic of Croatia for the period to 2040 with a view to 2070 (White Book)

According to the **Table 4**, in the period from 2011 to 2040, mean annual air temperature values are expected to increase almost uniformly (1.0 to 1.2 °C) throughout Croatia. In the period 2041-2070, the expected trend of rising temperatures would continue and would amount to between 1.9 and 2 °C. Warming will be higher in summer than in winter, in some places even exceeding the seasonal mean by more than 2.5 degrees. As a result of increased ground-level pressure over central and southern Europe in winter, the winters in Croatia will be more stable than at present. The scenario predicts reduced precipitation amounts in summer; however, no amplitude of decrease may be identified with certainty. An overall temperature rise and fall of humidity, especially in winter, will result in reduced snowfall and less snow on the ground. The cloudiness is expected to decrease, even by up to 15% in winter. Since climate change depends on geographic position, development and vulnerability of the region, their impact will also be different, meaning that adaptation has to be tailored to specific circumstances.

The projections of sea level rise have not been obtained with the RegCM model, but the results have been taken from the IPCC AR5. According to the CMIP5 Global Model (IPCC AR5) results for the mid-21st century (2046-2065) shows expected increase in global mean sea level under the RCP4.5 od 19-33 cm. In the period from 2081 to 2100 for the increase would be 32-63 cm. This global sea level rise will not be evenly reflected in all areas.

Bosnia and Herzegovina

Climate change risks in Bosnia and Herzegovina (BiH) are heightened by high unemployment among a generally vulnerable population, damaged infrastructure, and lags in technical innovation. Despite abundant water resources, the country is facing water use and availability challenges that will likely worsen with warming temperatures and increased risks of drought and extreme precipitation. The agriculture sector is also vulnerable to these stressors.

BiH's rich biodiversity faces habitat shifts and loss, as well as increased risk from forest fires and pathogens. BiH's largest climate vulnerabilities are in energy and infrastructure, which require significant modernization informed by the country's climate risks. Greenhouse gas emissions in the country are dominated by electricity and heat production.

Below is a future changes in BiH (**Table 5**).

Table 5. Climate projection in BiH

HISTORICAL CLIMATE	FUTURE CLIMATE
BiH's climate has experienced significant changes in the last 50 years:	**Limited knowledge exists on climate changes specific to BiH, but data for Europe's Mediterranean region suggests that:**
• Since 1961, average annual air temperatures have increased 0.4°C – 0.8°C, with seasonal variations. The highest increases in temperatures were recorded during the summer months (June – August).	• Mean seasonal increases in temperature will average 1°C by 2030, with the highest increases occurring in the summer but also pronounced in the fall.
• Long term (50+ years) changes in rainfall trends are minimal though some dana suggest decreases in rainfall during spring and summer and increased rainfall during winter, accompanied by decreased snowpack, which can significantly affect water availability during the spring and summer months.	• Temperature increases will be more pronounced in the inland areas.
	• A marked increase in high temperature extremes and meteorological droughts across Europe will likely also affect BiH

Source: https://www.climatelinks.org/countries/bosnia-and-herzegovina

Montenegro

During the period 1949-2005 changes occurred in the value of climatic parameters for air temperature and precipitation at the national level. Measurements indicate a clear trend towards an increase in air temperatures throughout most of the territory of Montenegro in the second half of the twentieth century. Summers have become very hot, especially over the last 18 years. For the summer period from 1991 to 2005, average temperature deviations from the climatological norm, expressed as a percentage, ranged from 90 to 98 %.

Projected seasonal temperature increase in 2001-2030 (SRES A1B Scenario), compared with 1961-1990, is 0.6 - 1.3°C, depending on the season and the area of Montenegro. Except for autumn, it is evident that the temperature changes are significantly greater in the northern, mountainous part of Montenegro, compared with smaller changes in the area near the Adriatic Sea

Results of scenarios for future climatic models in the region indicate that there will be further significant change in temperature, for example during the period 2071-2100, the northern part of the country will experience an increase in summer temperatures by up to 4.8 °C.

Annual precipitation is generally stable. Exceptions are the northern regions of Montenegro and the coast. In the north-east of the state, precipitation has been increasing since 1949, whereas on the coast there is a trend towards a slight reduction.

Projected seasonal precipitation change in 2001-2030 (SRES A1B Scenario), compared with 1961-1990, is negative or positive, depending on the part of Montenegro and the season

4.1.2.3.1 Climate impacts and vulnerabilities

There are five major characteristics of the changing climate in the programme area: increase in total average temperature, decrease in precipitation, although not radical and increase in frequency and intensity of extreme weather events, sea level rise and wild fires

According to the SEEFCCA 2021 document, the impacts of climate change are identified as risks in rising sea levels, extreme temperatures and precipitation, drought, wind, storms, fires and floods.

In the table below (**Table 6**) are projections of risks of climate changes in Southeast Europe during the 21st century.

Table 6. Projected changes of natural hazards as a result of climate change in Southeast Europe

Hazard	**Projected changes in behaviour of natural hazards as a result of climate change**		
	2030-e	**2050-e**	**2070-e**
Flooding	Risk of flash floods to increase; snowmelt flooding likely to arrive earlier in the year.		100-year floods to become less frequent
Droughts	Warmer temperatures and increasing numbers of consecutive dry days Decrease in surface runoff by up to 23%.	Surface runoff to decrease by 20 to 30 %	Surface runoff to decrease by up to 36%; 100-year droughts return every 50 years or less
Extreme temperature (high)	Extreme high temperatures to rise, longer-lasting heat waves	Higher average summer temperatures, heat waves are more frequent, begin earlier in the year and last longer	
Extreme temperature (low)	Winter extreme low temperatures increasing;	Up to seventeen fewer frost days per year by mid-century	Risk of cold waves significantly decreased.
Storms and high winds	Wind speeds to increase slightly.	Higher wind speeds along the Adriatic coast bring more coastal storms and coastal flooding from storm surges	
Wild fires	Risk increases as longer droughts and higher extreme temperatures become more common.		

Source: SEEFCCA 2021

The greatest impacts of the climate change are expected on human health, ecosystems, water resources and sectors including energy and infrastructure and agriculture.

Flooding in the programme territory can occur throughout the year, with the peak in spring when the precipitation is high and there is snow melt. It is expected that by the end of the 21st century, floods will increase to up to 20% in the frequency of 100-year floods for large rivers such as the Sava. Apart from harmful effects of water, reduced precipitation may increase incidents of droughts and reduce surface and groundwater levels, thus having an impact on water-supply.

Potential impacts of climate change and major signifiers of vulnerability is on various sectors in Programme territory and also in this part of Europe: agriculture and forestry, biodiversity, energy, human health and civil protection, tourism, water resources.

In agriculture the climate change will affect rainfed crops, and increase in temperature may also increase fungal diseases and pests.

More frequent extreme events such as heavy rainfall and flooding may damage electricity distribution systems and cause disruptions in power-supply, power outages, reduced power production on both sides of the border. Floods may moreover lead to landslides, and threaten housing, roads, bridges and other infrastructure.

Significant changes in vegetation as a result of climate changes is expected to grasslands, riparian habitats and forested ecosystems. Decline in forest cover, habitat changes and loss of biodiversity is expected, as well as population and distribution of population of species.

Sea levels are predicted to rise by global average of between 0.09 and 0.88 m by the end of the century as a result of thermal expansion of melting of polar ice caps. Even very small rises in sea levels can translate into high levels of coastal recession. Global sea levels are predicted to rise between 0.09 and 0.88 m by 2100, and sea-level rise in the Mediterranean is potentially a significant risk for Croatia and Montenegro. How-ever, it is difficult to predict the exact effects of sea level rise along the Adriatic coast due to the fact that the area is tectonically highly active, and local uplift or subsidence could have a greater influence on coastal dynamics than sea level rise. Nevertheless, any sea-level rise is likely to increase the risk of coastal erosion and coastal flooding from storm surges.

Forest fires represent an uncontrolled spread of fire and can be natural or anthropogenic (artificial) in origin. Anthropogenic fires most often occur under controlled conditions for the rapid cleaning of the overgrown surface when rejuvenating the stand or in case of incidental situations due to human negligence.

Climate change reflected in an increasing period of sunny days with a temperature of more than 35°C leads vegetation to a degree of dryness when the slightest human negligence or negligence is sufficient to cause a fire that can spread very quickly. Part of the anthropogenic fires caused by the clearing of land from weeds and other undesirable vegetation, while some were deliberately caused.

The Mediterranean area is one of the most vulnerable areas since the fires in the world, where around 95% of fires are anthropogenic.

The conditions conducive to fires in the Program Area and their spread are strong winds with possible strong gusts and seasonal high air temperatures and an increase in the number of dry days, which completely dry the vegetation.

EFFIS is The European Forest Fire Information System has been established jointly by the European Commission services and relevant fire services in the EU Member States and European countries.

The 2020 mapped burnt area total of 27.477 ha in Croatia was over twice the amount recorded in 2019, although still below the 67.342 ha mapped in 2017. 79 fires over 30 ha were mapped between January and September, but 80 % of the damage occurred in April. 8 of the fires were over 500 ha, and the largest in Dalmatia region (Šibensko-kninska County) in April, was almost 6.000 ha size. None of the fires were mapped in protected areas. Forest and other wooded land was burned in about 55 %, other natural land in 35 % and agriculture areas in 10 %.

The total mapped burnt area in Bosnia were highest for over a decade, and the third highest total recorded across the area covered by EFFIS. Large fires were mapped from January to September, but 80 % of the damage occurred in March and April. In total there were 340 fires of over 30 ha, burning 100.107 ha. The largest fire of the season in Bosnia occurred in April in Bosansko Grahovo province, covering over 8.000 ha, and there were a further 44 fires over 500 ha mapped of which 18 exceeded 1.000 ha. About 52 % was forest or other wooded land was burned, and about 33 % of other natural land, also was burned agriculture areas in 16 %.

The fire season in Montenegro was the worst since 2017. and significantly above the long term average. Fires were mapped from January to November, with most of damage occurring in March and April. There were 16 fires of more than 500 ha, and the largest was mapped at over 1.000 ha in April. About 65 % was forest and other wooded Land, burned on territory of Montenegro, and 26 % of other natural land.

Figure 11, shows the locations of the large fires in 2020., in Programme territory.

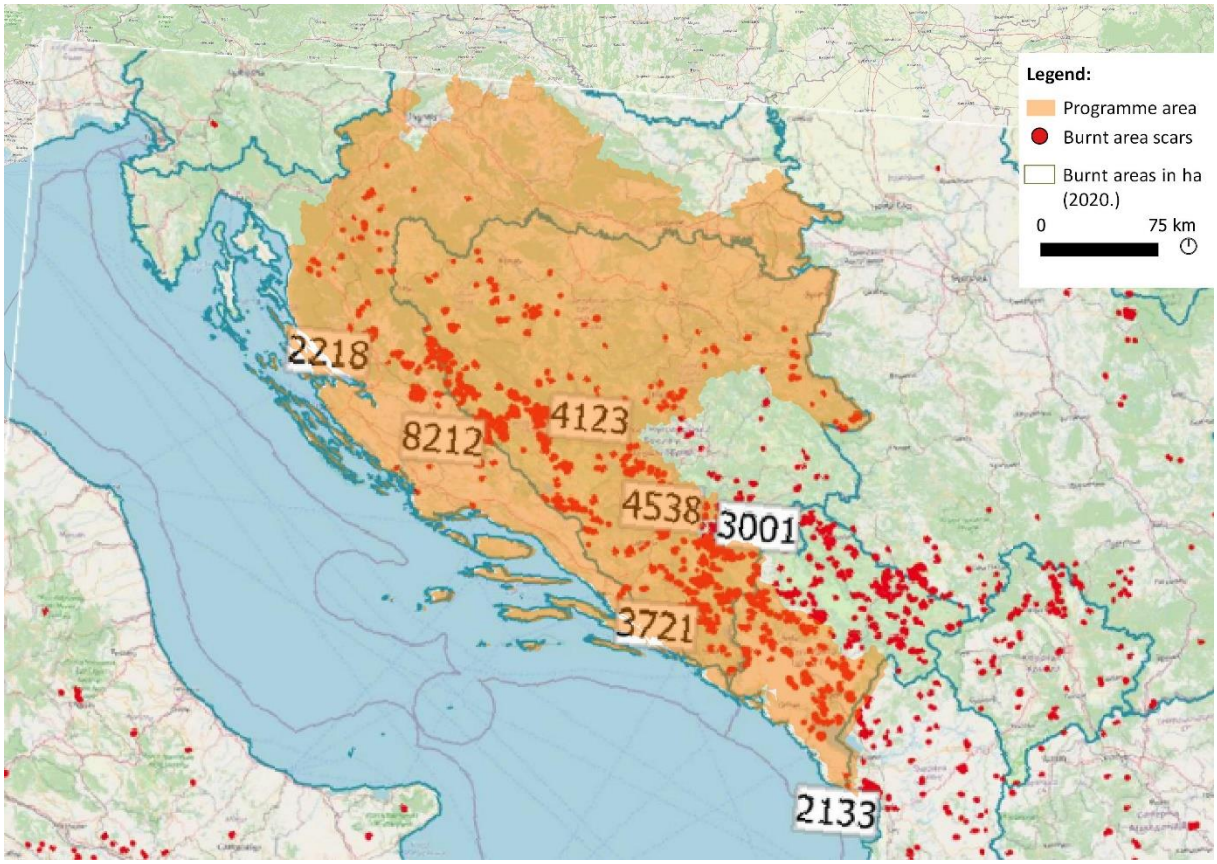


Figure 11. Burnt area scars in 2020 with largest fires indicated in ha

Source: Advance EFFIS Report on Forest Fires in Europe, Middle East and North Africa 2020, JRC Technical Report, 2021.

4.1.3 Earthquakes and seismic activity

Seismic activities in the Programme area on the territory of all three countries are shown by European Seismic Hazard Map.

The European Seismic Hazard Map displays the ground shaking (i.e. Peak Horizontal Ground Acceleration, PGA) to be reached or exceeded with 10 % probability in 50 years. This reference value represents the shaking to be exceeded during the human lifetime in a standard building, corresponding to the average recurrence of such ground motions every 475 years, as prescribed by the national building codes in Europe. It's important to note that these values can be exceeded with a 10 % probability every 50 years. The ground shaking is expressed in terms of the unit gravitational

acceleration g. The share peak ground acceleration value across Europe ranges from 0g to over 0.5g Low hazard areas (PGA ≤ 0.1g) are coloured in blue-green, moderate hazard areas in yellow-orange and high hazard areas (PGA>0.25g) in red-black.

The Programme territory is in area from 0.0g to 0.4g. If these seismic wave accelerations are compared with the MCS scale, then acceleration from 0.0g to 0.4g it may correspond to an earthquake magnitude from 6 to 9°. According to the MCS scale, these would be earthquakes from strong earthquakes, very strong earthquakes and devastating earthquakes.

Some parts of the Programme area, for example, Dalmatia region in Croatia and almost whole Montenegro, are in high risk of strong earthquakes (**Figure 12**).

Very strong earthquakes, magnitude 7° can cause damage to furniture in buildings, less built buildings can collapse and damage can occur on those more strongly built. Devastating earthquakes of magnitude 8 or 9° can significantly damage buildings, up to 50%. Some houses and buildings are demolished to the ground and most of them can remain unusable. Cracks and landslides may form in the soil and landslides.

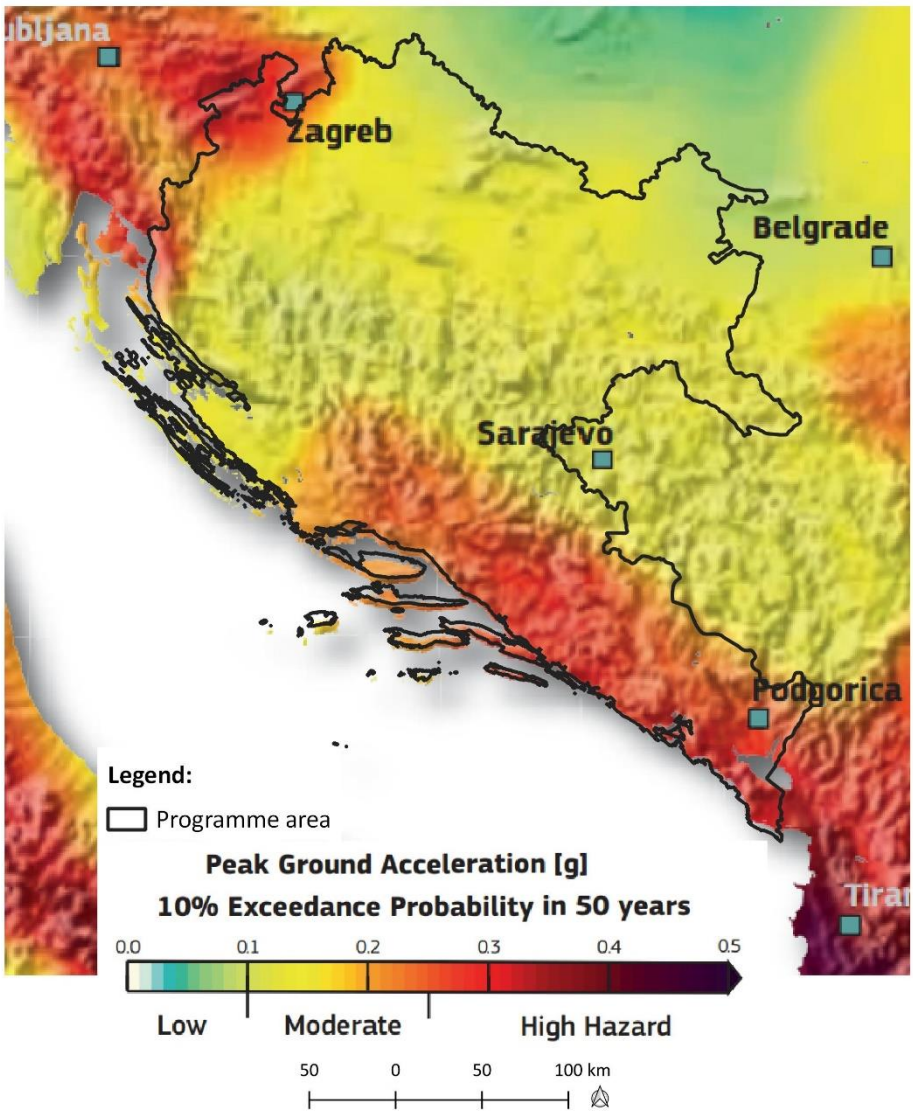


Figure 12. General Programme area on European Seismic Hazard Map

Source: https://op.europa.eu/en/publication-detail/-/publication/b1d1d53c-1201-4225-87c6-56340dd5cc15, European Seismic Hazard Map edited by D.Giardini, J.Woessner and L.Danciu, Swiss Seismological Service, ETH Zurich, 2013.

4.1.4 Hydrography and water body status

The EU Water Framework Directive 2000 is by far the most important water legislation in the EU, the primary purpose of which is to establish a new integrated approach to water protection, improvement and sustainable use. It applies to all water bodies, including surface waters, groundwater, transitional waters and coastal waters which is achieved through a set of measures and controlled by extensive monitoring programme. WFD has been transposed into Croatian, BiH and Montenegro legislation and its application is mandatory in the Republic of Croatia as a Member State.

The programme area can be in hydrological terms divided in two major basins: Danube River Basin (Sava River Basin District)and Adriatic River Basin District (**Figure 13**).

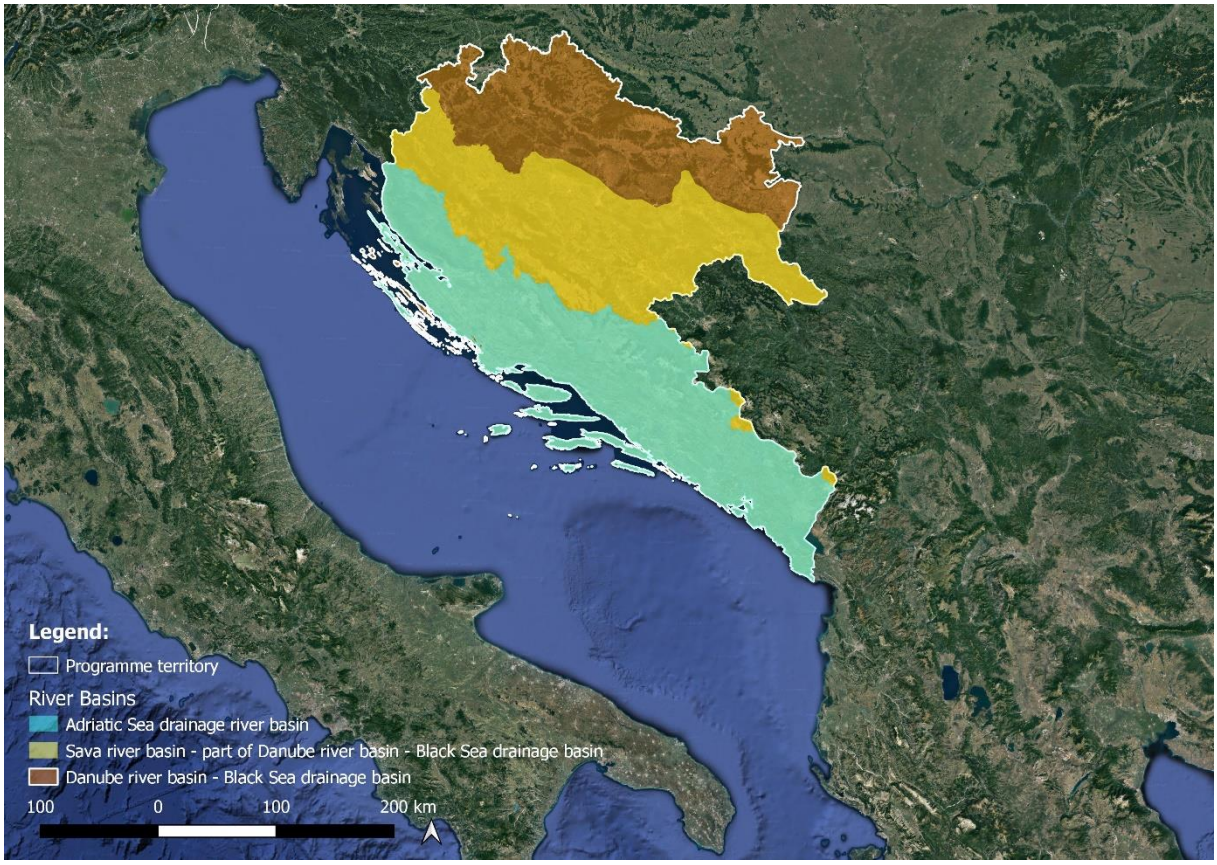


Figure 13. River basins in the Programme territory

Source: http://ihp-wins.unesco.org/layers/geonode:river_basins_dinaricalps

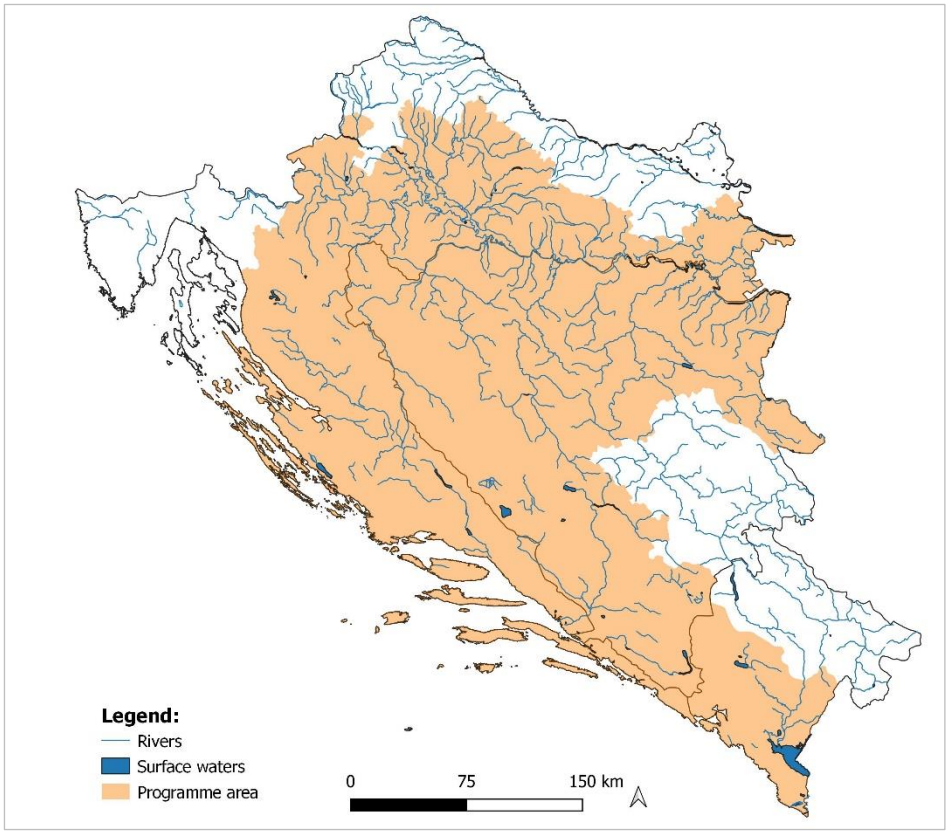


Figure 14. Hydrological network in the Programme area

As mentioned above, we can divide the program area into the Danube River Basin (Sava River Basin) and the Adriatic Basin.

The Danube River Basin is Europe second largest river basin. It's the world's most international river basin, flowing through the territory of 19 countries. The ecosystems of Danube River Basin are highly valuable in environmental, economic, historical and social terms but they are subject to increasing pressure and serious threats of pollution from agriculture, industry and cities. The Danube River Basin – based on its gradients – be divided into three sub-regions: the upper basin, the middle basin and the lower basin (including the Danube Delta). In the Programme area is Middle Basin which is the largest of three sub-regions extending from Bratislava to dams of the Iron Gate Gorge on the border between Serbia and Romania. The Danube is joined by the waters of three major tributaries – the Drava, Tisza and Sava.

The Sava River is the largest tributary in terms of water flow within the Danube River system. The entire area of the Sava River Basin is located between the Pannonian Plain and the central Dinaric area. The development of the Sava river valley is linked to the development of the Pannonian basin created in the Middle Tertiary.

The Adriatic River Basin including a part of coastal territory of Croatia, BiH and Montenegro. The Adriatic River Basin in the program area includes mainly karst area where more significant surface flows such as the Neretva, Krka, Cetina, etc. have been formed. This area is mainly formed from permeable rocks or karstified limestones of Mesozoic and Cenozoic with rare waterproof deposits.

Adriatic River Basin District

The Adriatic is a semi-enclosed sea forming a distinct sub-region within the Mediterranean Sea. Owing to its semi-enclosed and relatively shallow nature, the Adriatic is highly vulnerable to anthropogenic pressures. Its waters are exchanged with those of open seas of the Mediterranean Sea with an average depth of around 50 meters.

The Adriatic Sea is most significant tourism and recreational area in Europe and a major maritime route for the goods transported to central and south-eastern European markets and because of that is threatened by many pollution. Due to geomorphological, ecological and demographic factors, all parts of the Adriatic Sea are not equally exposed to pollution and its consequences. Slow water exchange mechanisms make it particularly vulnerable to anthropogenic activities. The most vulnerable area is the shallow and closed northern Adriatic with its urbanization, tourism, fishing and nautical tourism or maritime transport.

According to the *Adriatic Sea Environment Program – Rapid Assessment of Pollution Hotspots for the Adriatic Sea*, there are three major causes of trans-boundary pollution in the Adriatic are:

- municipal sewage point-sources and agriculture nonpoint discharges along the coast and the main rivers in the Adriatic basin, which pollute coastal waters and have created a highly eutrophic system in its northern sections
- chemical and oil discharges from point sources such as industry and port wastes
- solid waste and litter from unsanitary waste dumping in cities and towns at the coast and/or transported via rivers discharging into the Sea, as well as its leachates

In addition to the above pollution, in the program area the problem on the Coast of the Adriatic Sea was created by excessive littoralization in the last century, illegal coastal construction accompanied by wild discharges of municipal wastewater and mass bathing tourism.

The priority pollution source in Montenegro part Is untreated wastewater where they have been improvements in the wastewater management infrastructure over the last decade but there is still substantial funding required for developing treatment capacity and sewerage networks in the coastal municipalities. Boka Kotarska Bay is identified as the priority pollution hotspot.

The main identified pollution source at the Croatia coast I solid waste. There are almost no sanitary landfills at the coast and there are numerous dumping sites. Due to the karstic nature of terrain, leachates from waste dumping sites are quickly released in the sea increasing health risks of local population and endangering tourism activities. The priority pollution hotspot sites are Ploče and the Delta of the Neretva River and Rijeka. Ploče and the Delta of the Neretva River are an important trans-boundary site receiving pollution that originates from Croatia and Bosnia and Herzegovina. The river Neretva discharges nutrients originating from agricultural run-off and untreated municipal wastewater from the upriver sources in Bosnia and Herzegovina.

4.1.4.1 Status of bodies of water

The status of water bodies are the result of natural processes and specificities, different use of water and anthropogenic factors. The WFD stipulates that Member States should achieve good status for all

surface and groundwater bodes, which is assessed through their ecological status. Ecological status is influenced by water quality and habitat degradation. On the EU level, the percentage of water bodies with less than good ecological status varies, with Croatia having 50-60% of surface water bodies which are not in good status.

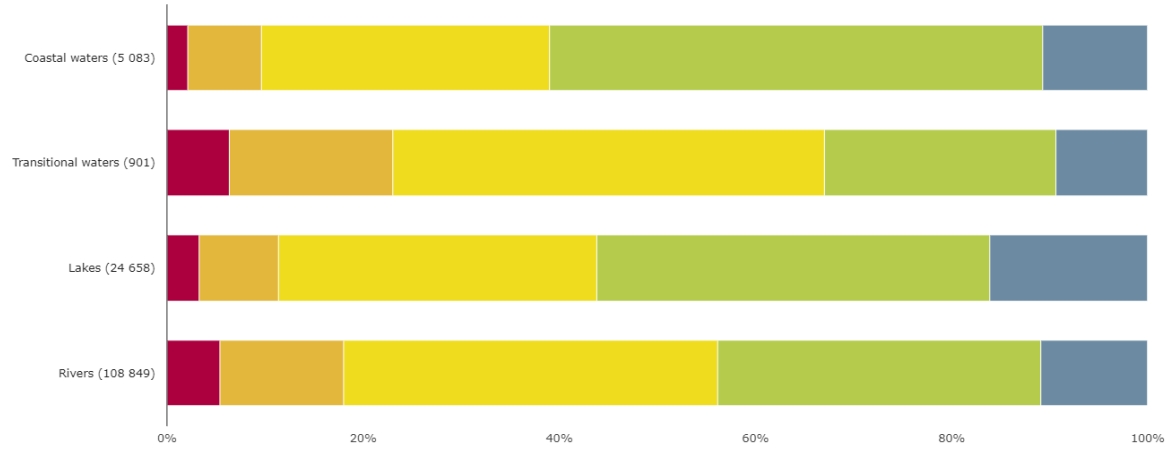


Figure 15. Distribution of ecological status in the EU by count of water bodies *Source: (https://www.eea.europa.eu/ims/ecological-status-of-surface-waters)*

Groundwater on the other hand is a major source of drinking water and a base flow of rivers and wetlands. Maintaining its quantity and quality is therefore vital for both humans and water-dependent ecosystems. Pressures on groundwater chemical quality may arise from diffuse pollution from agricultural sources, nitrogen pollution in areas with low connection to public sewerage systems and contaminated sites from waste or industry.

According to EEA 2018 Report, Croatia falls within the group of Member States with low percentage of groundwater bodies not in good chemical status.

The program area is well situated in terms of water supply, but to maintain such a state it is necessary to properly dispose of water resources, as well as ensuring a clean water supply for all residents. Wastewater treatment is still a relatively underdeveloped concept but will become increasingly necessary in the future. In addition, it is important to protect groundwater from pesticides and nitrates from the soil. In this process, the implementation of water regulations is important, as well as investment in infrastructure for monitoring and management of surface and groundwater.

Among the numerous causes for water pollution, the most significant remain:

- uncontrolled discharge of municipal waste-water without connection to public sewer system
- industry lacking appropriate sewerage and waste-water treatment
- agriculture through use of mineral fertilizers and protection agents, and undeveloped farms, and
- waste management.

However, it is a fact that current water status and protection against pollution is primarily the result of lack of funding, mostly for the construction of WWTPs, and not the lack of legal regulations.

In the Programme territory there are three major problem groups regarding water quality:

- insufficient drinking water quality
- overexploitation of groundwater
- insufficient protection of water sources

Insufficient water quality is specific for rural areas, since households are generally not connected to public water supply, and use individual solutions such as illegally bored water wells instead. Water management companies differ in level of development, staffing and organization, and are the main suppliers of water services.

Improvements in urban waste management, increase in connections to water-supply and sewerage systems, and agriculture and expected to bring improvements as regards water quality, and it is unlikely that new sources of pollution will be created in the upcoming programme period.

4.1.4.2 Flood risk management

Floods are naturally occurring phenomena which can incur heavy economic and human losses. However, through the right measures, they can be reduced and their impacts limited. Under the Floods Directive, all Member States have to prepare flood hazard maps and flood risk maps identifying areas with medium and extreme event likelihood. Protection against detrimental effects of water is mostly ensured through the construction of protective and regulation water structures. Floods are also supported by erosion, especially in torrential areas, after removal of vegetation.

Floods in the Programme Area can be divided into river floods, flash floods, floods in karst fields (lack of sink capacity, heavy rainfall), rising sea level floods (tides or extreme south wind with waves), flooding on wetlands, floods in urban areas and incidental floods.

Sava Flood Risk Management Planning identified the areas of mutual interest for flood protection in the Sava River Basin. AMIs represent basic structural elements for analysis and a framework for identification of non-structural and national structural measures that may contribute to achieving flood risk management objectives of common interest in the Basin.

- Avoidance of new flood risks
- Reduction of existing flood risks (during and after the floods)
- Strengthening resilience
- Raising awareness about flood risks
- Implementing solidarity principle.

The floods in Sava basin occur generally in spring, after snow melt and in autumn after heavy rainfall. The wide flood plains of the Sava River and the natural lowland areas act as detention areas and retentions of the flood waves. Spring floods last longer and their maximum discharges are relatively low, while the autumn floods exhibit very high peak flows of short duration. However they often overtop the river banks and inundate very large floodplain areas which remain under water for a long time. Flood protection system of Srednje Posavlje is incomplete and existing embankments at many locations are lower than needed. Due to reduction in peak flows of flood waves in lowland retentions system of Srednje Posavlje is crucial in flood protection in Slavonian section of Sava downstream from Stara Gradiška and from floods from neighbouring countries. The concept of flood protection of the Danube is based on embankments and wide inundation zones along watercourses.

On some sections they do not meet their required height, so they need to be reconstructed. The biggest remaining problem of flood protection in the Danube basin is uncontrolled torrents that threaten settlements and agricultural areas.

Coastal areas in the territory of Croatia and Montenegro are at particular risk of flooding because the population is also high, and erosion and rising sea levels due to climate change increase the likelihood of high waters.

Climate change and variability in the coastal area are due to changes taking place on a regional and global scale. For the coastal area, the most important elements of these changes are: increasing the variability of all climatic factors, rising sea levels, changes in the occurrence of storm slowdowns and waves, changes in the precipitation regime, rising air temperature, rising sea surface temperature, rising sea salinity and changes in wind regime.

The effects that will cause the greatest material damage are on coastal zone floods and on the consequent impact on coastal infrastructure and coastal erosion. Extreme conditions, stormy weather and heavy rains cause flash floods that most often occur at the same time as strong southerly winds accompanied by waves. These two phenomena in the coastal area are causing more and more frequent flooding. In addition, rising sea levels will increase the frequency and intensity of coastal flooding multiple times.

Flooding of coastal areas can have an impact on human activities as well as on human safety and health and on the stability of coastal buildings and infrastructure, orderly the functionality of water supply, sewage, electricity supply, etc. Already, the burden of sewage and stormwater drainage is highlighted as a problem, which will increase with a more frequent occurrence of flooding. Also, there are possible impacts on maritime transport, as rising sea levels will cause a mismatch in the height of the ship's docks. The appearance of sudden and heavy precipitation can generate large water waves and cause torrential waters and water levels that will result in coastal erosion (destruction of beaches) and interruptions in infrastructure and possible water pollution and their spillage into the sea.

Particularly significant changes and the most intense floods are expected in the area of inland water contact with the sea, as the effects of changes in hydrological regimes of inland waters and rising sea levels will be added up.

In the part of Programme area which belongs to the part of Adriatic River basin, the following areas are most exposed to floods: in the area of the lower Neretva river in Croatia, area of Neretva delta, Neretva river valley in Bosnia and Herzegovina, and karst areas in Bosnia and Herzegovina like Mostarsko blato, Livno valley, Kupres valley, Nevesinje, Dabarsko, Bileća, Trebinje etc. In part of Montenegro, flooding occurs around the major rivers (Morača, Bojana) and on the plains (Bar, Cetinje). There are seasonal flooding around Lake Skadar.

4.1.5 Biodiversity

Biodiversity conservation is a particularly important topic in the Programme area given the richness and diversity of natural areas. Preservation of biodiversity and ecosystems and nature protection are necessary elements for the path to greener Europe.

4.1.5.1 Biodiversity in the Programme area

The Republic of Croatia has a great wealth of biological and landscape diversity, and a very high level of conservation, particularly within the context of Western and Central Europe. Nevertheless, a trend of loss of biological and landscape diversity persists in the country. Croatia can be divided into 16 distinct landscape units, which include features such as karst fields and rivers, mountain chains and limestone plateaus. Forests cover 44% of the country's land surface, of which 37% comprises high forests and the remainder different degrees of degraded forest vegetation. Approximately 95% of forest vegetation exists in a state of natural composition, which is rare and extremely valuable at both European and global level. Seventy-eight percent of forest vegetation is state-owned. Covering 54% of the country, the karst area is unique because it runs along the entire Adriatic coast and also extends into the continental region. Wetlands have the highest level of biological and landscape diversity and are the most threatened of Croatia's ecosystems. Meadows of marine sea grass (*Posidonia oceanica*) are common along the Croatian coast, and are considered among the most representative and important Mediterranean coastal ecosystems because they are primary producers where many organisms feed or in which they reproduce or find shelter.

The number of known taxa (species and subspecies) in Croatia is almost 40.000, although it is suspected that the total number of species is considerably higher (between 50.000 to more than 100.000). According to the available data, Croatian flora consists of 8.582 known taxa, while certain estimates put this number at almost 10.000 taxa. The estimated number of fungi in Croatia is 17.000 which is twice that of the flora. However, fungi are by far the most poorly researched group of organisms in Croatia. To date, 3.800 fungi species have been recorded, representing only 22% of the estimated number. With 101 mammal species, 90 of which are autochthonous, Croatia is among 8 European countries with the greatest mammal diversity. Croatia's ornithofauna is amongst the richest in Europe when considering the 78 bird species which breed in Croatia and are threatened at the European level. The total number of bird species is 396. Among the 38 species of reptiles in Croatia, 9 are endemic. Twenty species of amphibians, including 8 endemics, have been recorded in Croatia. With 151 freshwater fish species in the rivers and lakes, 18 of which are Croatian karst endemics, Croatia is one of the most diverse countries in Europe in terms of ichthyology. This species diversity is the result of the country's geographic position, covering two river basins (Adriatic and Black Sea) and the presence of distinct karst habitats. The Black Sea (Danube) River Basin (covering 62% of the territory) is inhabited by 81 fish species, while the number of species in the Adriatic Basin (covering only 38% of the territory) is as high as 88 species. 433 fish taxa have been recorded in the Adriatic Sea, accounting for 65.2% of all known fish taxa in the Mediterranean Sea. This number is a subject to constant change. To date, 15.474 taxa of terrestrial and 1.780 taxa of freshwater invertebrates have been recorded in Croatia. They are dominant in abundance and diversity, but are insufficiently studied. 351 taxa of terrestrial invertebrates and 172 taxa of freshwater invertebrates are endemic. Most endemic freshwater species inhabit underground waters. The most threatened groups among the threatened species according to the Red Lists are freshwater fishes (42%) and cave fauna (37%), followed by terrestrial and aquatic snails, dragonflies and breeding birds (each 23%).

There are almost 3.000 species from 16 different taxonomic groups assessed within Croatian Red List, out of which more than 45% of taxa are threatened. Within the assessed taxonomic groups, the largest share of threatened species are freshwater fishes (~42%), cave fauna (~37%) and snails (~25%).

National habitat classification of Croatia defines the following main habitat classes, with each divided into four levels of habitat types (the first eight classes contain the majority of natural habitat types in Croatia):

A inland surface water and wetland habitats
B inland unvegetated and sparsely vegetated habitats
C grassland, bogs, fens and tall forbs habitats
D scrub habitats
E forest habitats
F coastal habitats
G marine habitats
H underground habitats
I cultivated non-forested land and habitats with weeds and ruderal vegetation
J constructed and industrial habitats
K complexes

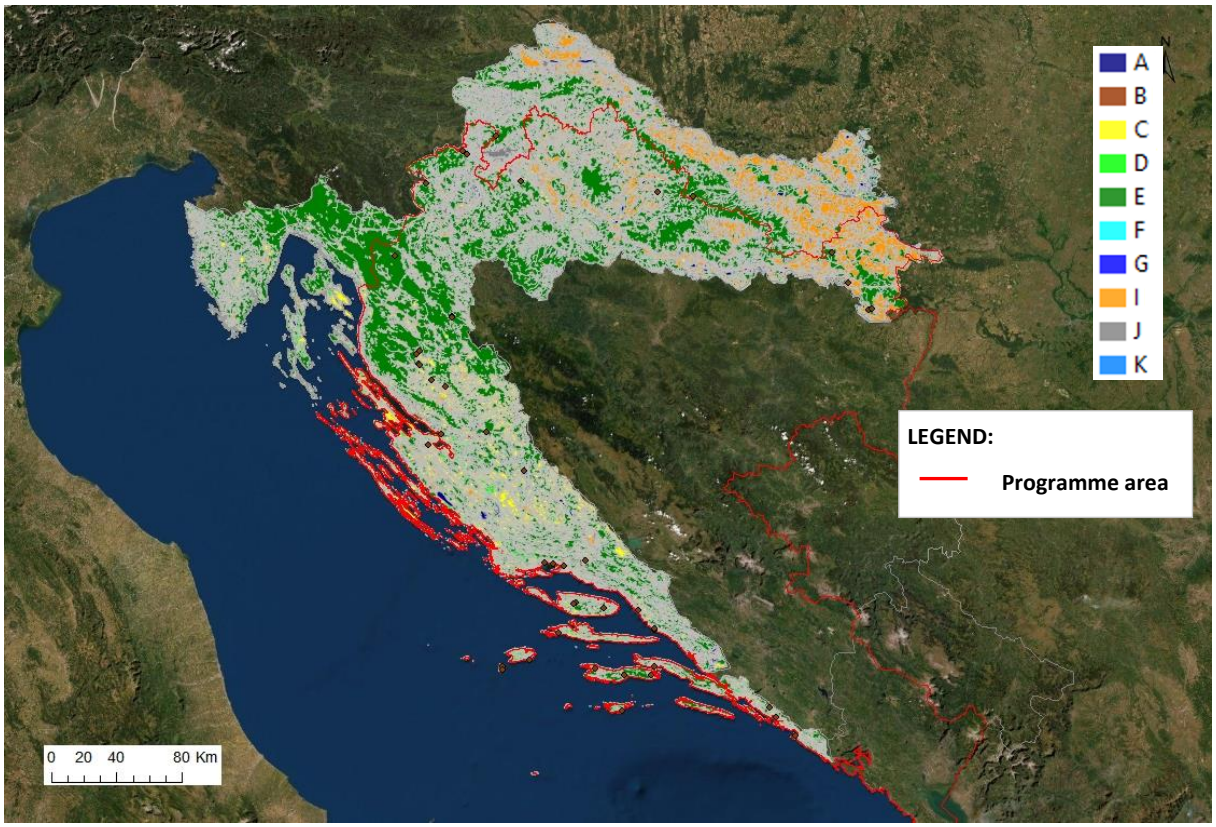


Figure 16. The map of terrestrial non-forest habitats (2016) in the Programme area (Croatia)

Also, Croatia has 97 Important Plant Areas, covering 964.655 hectares. The majority qualify through the presence of both threatened species and threatened habitats.

Only 18 IPAs in Croatia are either fully or partly protected at national level and overlap with existing protected areas (Parks of Nature or National Parks). In four cases the area of the IPA is greater than that of the protected area, 14 IPAs and Protected Areas overlap 100%.

The top ten threats to IPAs in Croatia are similar to those throughout the region[2], but the issue of land abandonment is the greatest threat to Croatian IPAs, affecting 62% of sites. Development related threats affect 44% of sites and 33% are threatened by development specifically associated with tourism: coastal and island IPAs are especially vulnerable. The influence of climate change is only broadly assessed and remains unknown for many sites.

To the north, federation of BiH has access to the Sava River, and to the south, in Neum, where it has an exit to the Adriatic Sea. By its geographic position, BiH belongs to Adriatic and Black Sea basin. BiH is prevailingly mountainous country, covered with forests. Average altitude above the sea is 500 meters, and the highest peak is Mt. Maglić (2,387 m). Out of the total land area, 42% are mountains, 24% hills, 29% karst area, and 5% lowlands. BiH has a high value of water resources in the Balkan Peninsula, because it has many surface and underground water streams. There are seven main river basins in BiH (Una, Vrbas, Drina, Bosna, Sava, Neretva, Trebišnjica and Cetina), of which 75.5% belong to the Black Sea Basin, and 24.5% to the Adriatic Sea basin. With respect to biological diversity, although it is a matter of general knowledge that BiH is rich in terms of genetic and species diversity, as well as diversity of ecosystems, there are no accurate and up-to-date general and specific data on status of biological diversity in BiH.

According to the current laws on protection of nature in the entities and the Brčko District (BD), entities and the district are obliged to establish information systems for protection of environment. The complete inventory of flora, fauna and fungi in BiH; ecosystems and types of habitats in BiH has not been done in the way to have lists of flora or fauna, or data bases. Progress in implementation of this provision is seen in the establishment of information system for protection of environment in RS with modules, where some of the modules are active and contain part of the data on endemic species and registry of plant species in RS. Flora of RS is the registry of data on distribution and taxonomy of higher plants in RS, with almost 70,000 collected spatial data, which are related to 2,638 taxa at the level of species and sub-species. The data base is of “open” type, which implies ongoing work on collection and unification of the existing and new information on flora of RS. Also, in FBiH the Fund for Environmental Protection of FBiH performs activities on the establishment of the information system for nature protection of the Federation of BiH.

The first serious step in direction of identifying ecosystems and landscape diversity in BiH was made when making the First National Report of BiH for UNCBD from 2008, under the title Overview and status of biological and landscape diversity in BiH, BiH - land of diversity. The 2008 report summarizes the most important research and results. The data shown in the report can be considered the only attempt to develop inventory of ecosystems and landscape diversity in BiH to date. Biological diversity of BiH is a result of the overall diversity of environmental conditions in this area, and based on the information from 2008, the following types of landscape may be identified in BiH: Mediterranean; submediterranean; Mediterranean mountainous; hilly; upland; peripanonic; panonic; mountainous; and karst landscapes, and in them more than hundred different ecosystems.

[2] Development: tourism, urban, industrial and infrastructure development; Poor forestry practices: damaging afforestation and deforestation and inappropriate management of forests; Water mismanagement dredging and canalisation, drainage, management systems and constructions of dams/dykes.

Speaking of inventory data for different groups of organisms, 30% of endemic flora of the Balkans (around 1,800 species) are found on the territory of BiH. Flora, fauna and fungi of BiH are among the most diverse in the whole of Europe, and high share of endemic species and relics give it importance at the level of global biological diversity. The best studied are the chordates and vascular plants, while the least known are the invertebrates, fungi and bacteria.

Red Lists have been recently produced for each of the country's two autonomous entities (Republika Srpska and the Federation of Bosnia and Herzegovina). In regard to the former, 818 species of vascular plants, 304 bird species, 46 fish species, 57 mammal species, 20 amphibian species, 25 reptile species, 273 insect species are contained in the Red List. As for the Federation of Bosnia and Herzegovina, 658 plant species, 27 mammal species, 40 bird species, 6 reptile species, 4 amphibian species, 36 fish species, and a large number of invertebrate species are Red-Listed. It should be noted that these lists have not been harmonized and that no single list yet exists at state level.

Montenegro is home to diverse geological base, landscapes, soils and climates. It can be divided into two main bio-geographical regions (Mediterranean and Alpine) with a variety of ecosystems falling within these two eco-regions. Although there is no formal, widely recognized classification of ecosystems in Montenegro, from the point of view of biodiversity conservation, the following ecosystems are distinguished in the NBSAP: alpine, forest, dry grasslands, freshwater and marine and among these, the following habitats: coastal, caves, canyons, and karst as a specific geological formation. Within its land cover, 60% is covered by forests. Montenegro's maritime zone extends out to 12 nautical miles (22.26 km) from the shore, covers 2,504.8 km^2, and reaches a maximum depth of 1,233 meters, supporting extensive sea grass (*Posidonia oceanica* and *Cymodocea nodosa*) populations.

The wealth of flora and fauna species puts Montenegro among the most biologically diverse countries in Europe, classifying it as a global biodiversity hotspot. Estimates suggest that over 1,200 species of freshwater algae, 300 species of marine algae, 589 species of moss, 3,250 species of vascular plants, 2,000 fungi and 16,000-20,000 species of insects are found in Montenegro.

Freshwater systems of Montenegro belong to the Black Sea basin, where around 30 species of fish have been registered and the Adriatic Sea with 60 species of fish. Disparities in the distribution of species between these two basins are the consequence of geological past of the Adriatic basin which survived glaciation and became a refuge for many species of freshwater fish. The Adriatic basin and the southern Mediterranean part of Montenegro is rich in the number of endemic species and a high level of genetic diversity, not only fish but of other organisms as well.

The fish fauna of the Adriatic Sea is considered diverse with 117 registered families, but has a low level of endemism. There is a relatively high diversity of terrestrial and water amphibians and reptiles in Montenegro. There are currently 56 species (18 species of amphibians and 38 species of reptiles), and 69 registered sub-species from 38 genera, and this list is unlikely to be final.

There are 352 bird species present in Montenegro. In terms of species diversity around 65% of European ornithofauna is recorded in Montenegro. Out of the aforementioned number, 215 species belong to nesting birds, seven species are potential nesting birds, 109 species of birds registered in Montenegro are nesting migratory species, 106 species are considered resident (non-migratory), while 10 are considered extinct (e.g., *Aegypius monachus*).

Montenegro also has a rich mammal fauna. The largest number of species appear in the mountainous region in the north. Apart from some researches on individual species, and estimations of users of hunting grounds concerning hunting population, there are no data about the size of the population of mammals in Montenegro.

Benefits and ecosystem services arising from biodiversity in Montenegro range from provision of wood for heating, timber, grazing for cattle, sustaining aquifer stability, fertility of soil, protection from erosion, landslides and floods, benefits for tourism and climate regulation. They are particularly utilised by the rural poor, whose livelihoods directly depend on the availability and quality of ecosystem services. Although there is potentially great economic value surrounding these services, it can be said that, there is little knowledge within the general public about biodiversity issues and the need for its conservations and sustainable use.

Montenegro has 27 Important Plant Areas, covering 708,606 hectares.

Also, on 22 April 2021, Montenegro has declared its first Marine Protected Area (MPA) in Platamuni. The value of biodiversity is the primary reason for this declaration. On 16 September 2021, the Montenegrin Ministry of Ecology, Spatial Planning and Urbanism proclaimed the establishment of Katič Nature Park, the second marine and coastal protected area in Montenegro.

4.1.5.2 Protected areas

There are a total of 1193 protected areas in Croatia, 783 Natura 2000 sites - 38 Special Protection Areas (Birds Directive) and 745 Sites of Community Importance (Habitat Directive) - as well as 410 sites designated under national laws.

Nationally-designated protected areas

According to the Croatian Nature Protection Act, a protected area is defined following IUCN's definition (Dudley, 2008). Croatia has designated 410 protected areas divided into nine national protected area categories, totalling 821.330,01 ha. This accounts for 9,3 % of the total country surface protected. If compared to the global and European levels, Croatia is significantly behind in protecting the marine ecosystems, as less than 2% of the marine area is protected.

Different types of protected areas are: Strict Reserve, National Park, Special Reserve, Nature Park, Regional Park, Natural monument, Significant Landscape, Park-Forest and Horticultural monument.

Table 7. Overview of the current state of protected areas in the Republic of Croatia

Category of Protected areas	number PA %	Area (ha)	surface RH
STRICT RESERVE	2	2.413,57	0,03
NATIONAL PARK	8	97.958,72	1,11
SPECIAL RESERVE	79	40.770,33	0,46
NATURE PARK	12	494.996,05	5,62
REGIONAL PARK	2	102.556,31	1,16
NATURAL MONUMENT	79	203,85	0,002
SIGNIFICANT LANDSCAPE	79	137.809,59	1,57
PARK - FOREST	27	2.866,10	0,03
HORTICULTURAL MONUMENT	120	1016,11	0,01
Area of protected areas within other protected areas		59.323	
TOTAL ZP IN RH	408	880.590,63	10

Out of the total number of protected areas, 228 are in the Programme area, of which 7 are Nature Parks (Plitvička jezera, Sjeverni Velebit, Paklenica, Kornati, Krka and Mljet).

The current territory of protected areas for BiH is 2.28%, with 3.24% in the FBiH and 1.30% in the RS respectively. There are 30 protected areas in BiH, covering 1,062.82 km², which is 2.07% of the BiH territory. According to the former legal regulations, 153 protected areas were designated in BiH, though the majority were left without legal protection after the adoption of new nature protection laws in both entities.

The Spatial Plan of the Federation of BiH (2008–2028) envisages the establishment of 14 new protected areas with a total spatial coverage of about 4,488 km^2, which is 18.5 % of the territory of the FBiH, while the Spatial Plan of the Republika Srpska by 2025 plans to put 15 to 20% of the territory under protection. The figure below shows the planned protected areas.

The protected area management category system is complex, as it is based on the legal regulations in each entity. Both systems have six categories that are relatively easily comparable.

Table 8. Number and surfaces of protected areas in the Federation of BiH

Category of Protected areas	Number	Land surface/km²
Strict Nature Reserve	-	-
National Park	1	198
Nature Monument	4	77,69
Protected Habitat	-	-
Protected Landscape	7	570,56
Protected Area with Sustainable Use of Natural Resources	-	-
TOTAL	12	846,24

Source: IUCN, Summary of national assessments of the state of nature conservation systems in South-Eastern Europe, 2018, https://portals.iucn.org/library/sites/library/files/documents/2018-040-En-Asses.pdf

Table 9. Number and surfaces of protected areas in the Republic of Srpska

Category of Protected areas	Number	Land surface/km²
Strict Nature Reserve	2	5,93
National Park	2	199,6
Nature Monument	12	10,41
Protected Habitat	-	-
Protected Landscape	-	-
Protected Area with Sustainable Use of Natural Resources	2	0,63
TOTAL	18	216,57

Source: IUCN, Summary of national assessments of the state of nature conservation systems in South-Eastern Europe, 2018, https://portals.iucn.org/library/sites/library/files/documents/2018-040-En-Asses.pdf

Protected areas in Montenegro cover 1,721.12 km², which is 12.46% of the country's territory. Five national parks (Durmitor, Skadar Lake, Lovćen, Biogradska Gora and Prokletije) comprise the largest surface under the protected area regime (7.3%).

Table 10. Number and surfaces of protected areas in Montenegro

Category of Protected areas	Number	Land surface/km²
National park	5	1.004,27
Natural monument	57	44,93
Landscape with outstanding features	2	1,96
Strict nature reserve	3	4,2
Special nature reserve	1	1,5
Nature park	8	795,83
TOTAL	76	1852,69

Source: http://www.prirodainfo.me/Izvjestaji/PoVrstiZasticenogPodrucja

Natura 2000 sites

Natura 2000 is the largest coordinated network of protected areas in the world, which is one of the outstanding EU achievements. It stretches across all Member States and currently covers over 18% of the EU's land area and more than 6% of its sea's territories. The Natura 2000 biogeographical process encourages cooperation and makes sure that protection measures can be tailored to suit specific regional needs.

Natural ecosystems and their vital services are under pressure from urban sprawl, intensive agriculture, pollution, invasive species and climate change. EU nature legislation, most notably the Birds Directive and the Habitats Directive, forms the backbone of biodiversity policy and the legal basis for nature protection network.

The Birds Directive (Directive 79/409/EEC) adopted in 1979 is the oldest piece of EU legislation on the environment and one of its cornerstones. Amended in 2009, it became the Directive 2009/147/EC. It laid down the basic requirements for the protection of all naturally occurring wild bird species in EU. Habitat loss and degradation are the most serious threats to the conservation of wild birds. The Directive therefore places great emphasis on the protection of habitats for endangered and migratory species. It establishes a network of Special Protection Areas (SPAs) including all the most suitable territories for these species. Since 1994, all SPAs are included in the Natura 2000 ecological network, set up under the Habitats Directive 92/43/EEC.

The Habitats Directive ensures the conservation of a wide range of rare, threatened or endemic animal and plant species. Some 200 rare and characteristic habitat types are also targeted for conservation in their own right. Adopted in 1992, the Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora aims to promote the maintenance of biodiversity, taking account of economic, social, cultural and regional requirements.
Natura 2000 sites in Croatia cover 257 species and 77 habitats from the nature directives. The number of species and habitats protected in each site varies depending on the location of the site, the biodiversity in the region, the designation being used, and the features the site is being created to protect. The Natura 2000 network covers 36.67% of the land territory and 16. 26% of inland waters and territorial sea (29.34% of the total area of the Republic of Croatia).

The network includes 783 Natura 2000 sites - 38 Special Protection Areas (Birds Directive) and 745 Sites of Community Importance (Habitat Directive). Around one quarter of Natura 2000 surface (26.14%) is already protected in Croatia.

Table 11. Natura 2000 network in Croatia

	Land surface / km²	% of the country's land surface	Coastal marine waters/ km²	% of the country's internal and territorial waters	Total surface / km²	% of the country's total surface	Number of Natura 2000 sites
Sites of Community Importance (SCI)	16.059,57	28.38	4.903,12	15.44	20.962,69	23.73	735
proposed Sites of Community Importance (pSCI)					1.827,02		5
Special Areas of Conservation (SAC)	624,23	1.10	193.99	0.61	818,220	0.93	5
Special Protection Areas (SPA)	17.107,55	30.23	1.040,13	3.28	18.147,68	20.54	38
Natura 2000 total	20.754,97	36.67	5.204,63	16.39	25.959,60	29.38	783

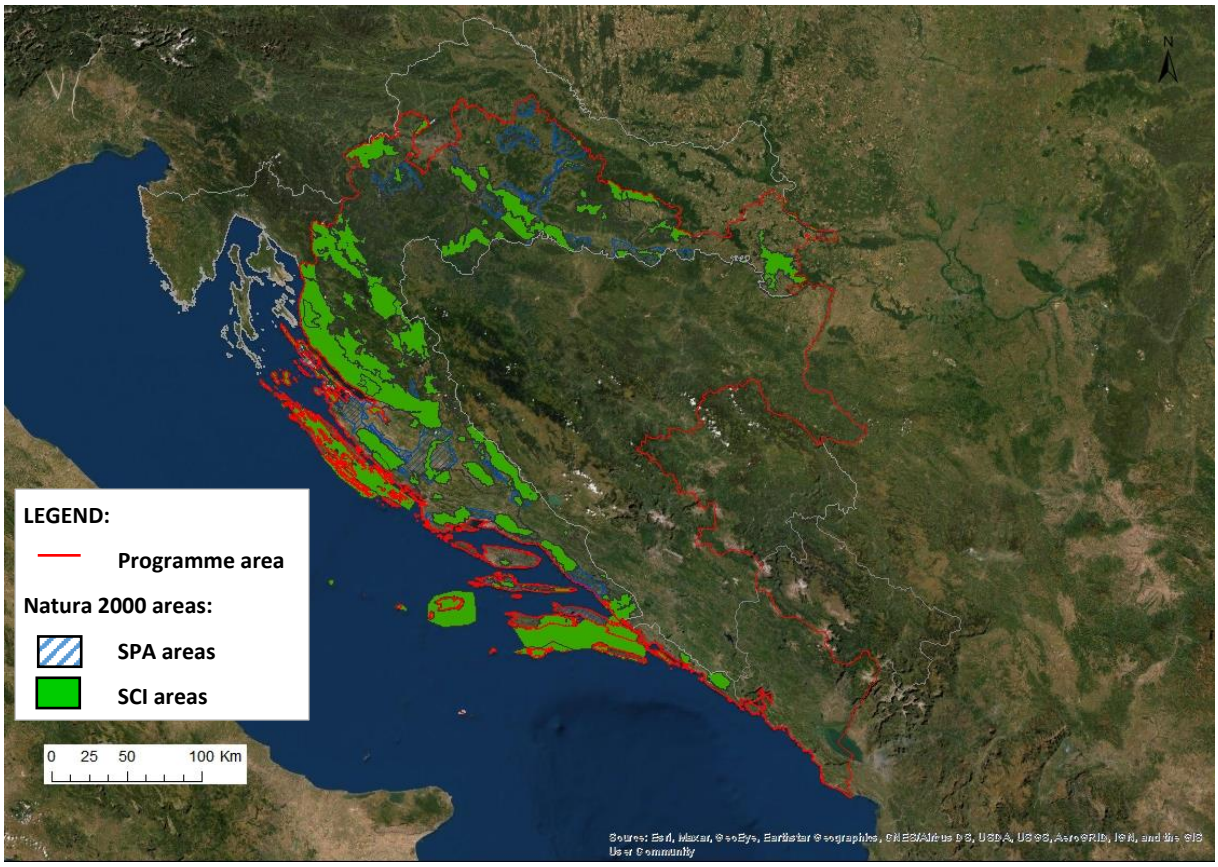


Figure 17. Natura 2000 network sites in the programme area (Croatia)

Following the Decision of the Croatian Ministry of Economy and Sustainable Development (hereinafter: MINGOR), the Programme does not require Main Assessment as a part of the Appropriate Assessment as significant adverse impacts on ecological network may be excluded.

The project 'Support to the implementation of the Birds and Habitats Directives in BiH', funded by the Government of Sweden and the EU (2012–2014) supported the identification of potential Natura 2000 sites, preparation of three management plans for proposed Natura 2000 sites (Tišina, Vranica and Orjen-Bijela Gora), preparation of the draft regulations and decrees supporting the establishment of the Natura 2000 network, and establishment of the Natura 2000 information system. Through field research, experts identified over 200 species and 60 habitats of the future Natura 2000 network in a total of 122 areas, which is 18,63% of BiH's territory. This project marked a significant contribution to raising knowledge and public awareness about nature in BiH and the importance of Natura 2000.

The identification of the Emerald Network sites in BiH was carried out through two projects funded by the Council of Europe. The pilot project 'Establishment of the Emerald Network in BiH' (2004–2006) resulted with identification of 11 Areas of Special Conservation Interest, covering 1.8% of the country's territory. The list of sites, including its habitat types was developed as one of the results of the project. The Council of Europe decided to extend the pilot project with a second project which resulted in a detailed overview of species in the Areas of Special Conservation Interest. During this project, 17 more potential areas were identified to be part of the Emerald Network. The most recent updated list of candidate Emerald Sites includes 29 nominated sites, covering 4.04% of the country's territory.

The preparatory activities related to Natura 2000 network establishment started in 2009 within the scope of the project 'Montenegro and Natura 2000: Strengthening the capacity of government and civil sector to adapt to EU nature protection acquis', through cooperation with WWF, the then Institute for Nature Protection of Montenegro and Daphne-Institute of Applied Ecology. The project resulted with a draft Reference List of Natura 2000 Habitats and Species in Montenegro, using previous knowledge from the Emerald Network project and desktop data analysis. The draft version of the Catalogue of Natura 2000 Habitats for Montenegro was also prepared.

Nevertheless, the results did not allow for full identification and mapping of potential Natura 2000 sites. This is one of the objectives of the IPA project 'Strengthening of the environmental protection system in Montenegro', which began in mid-2016.

The Ministry of Environmental Protection and Physical Planning, in cooperation with the experts, initiated work on the development of the Emerald Network in Montenegro within a project funded by the Council of Europe (2005–2008). Standard forms for most of the Emerald Network sites were completed. The proposal of the Emerald Network's Areas of Special Conservation Interest consisting of 32 areas was officially nominated to the Standing Committee of the Bern Convention.

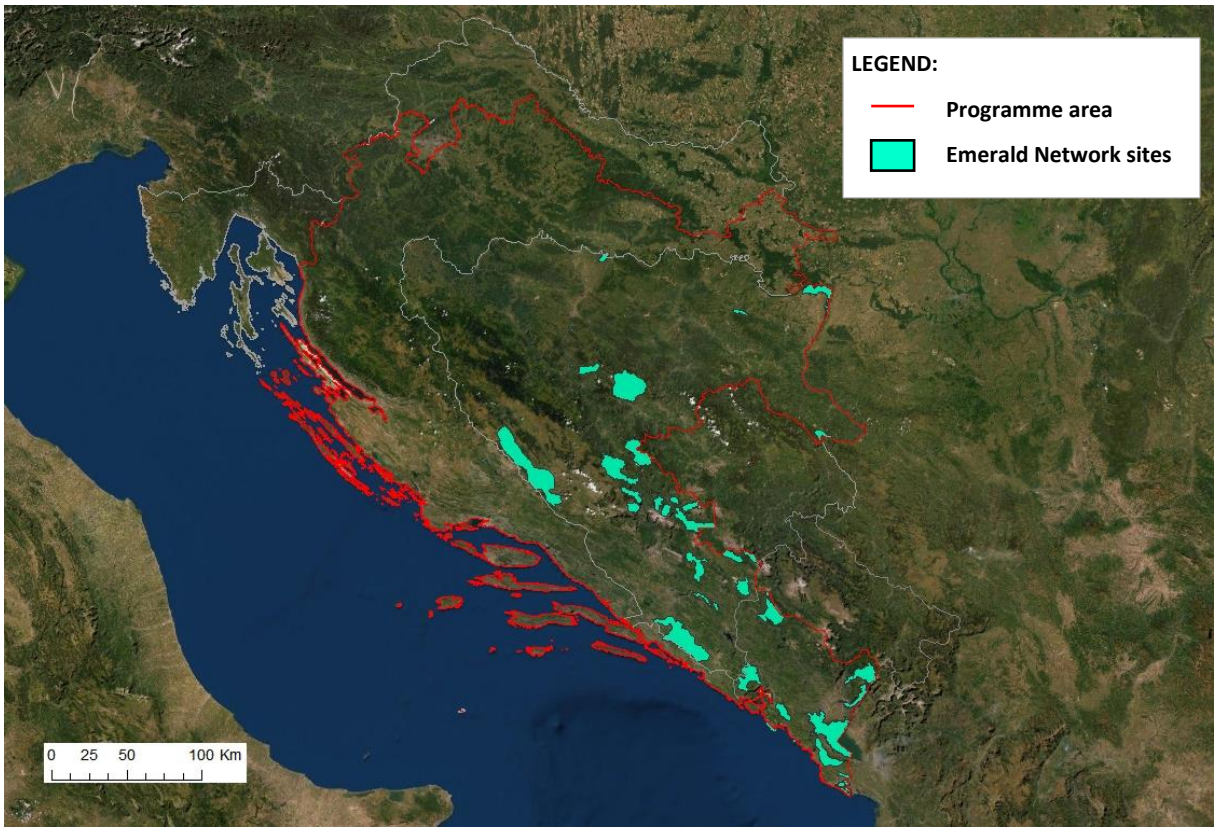


Figure 18. Emerald Network sites in the programme area (BiH, Montenegro)
https://www.eea.europa.eu/data-and-maps/data/emerald-network-data

4.1.5.3 Internationally important areas

In Croatia, Plitvice Lakes National Park has been on the UNESCO World Heritage List since 1979 and along with Ancient and Primeval Beech Forests of the Carpathians and Other Regions of Europe belong

to World natural Heritage Sites in the country. Velebit Mountain Nature Park is a UNESCO Biosphere Reserve (1977), while the Regional Park Mura-Drava-Danube was designated as the Mura Drava Danube transboundary Biosphere Reserve in 2012, shared with Hungary. Five Ramsar Sites in Croatia include four sites designated in 1993; the nature parks Kopački Rit, Lonjsko Polje and Mokro Polje including Krapje Đol, Crna Mlaka, Neretva River Delta; and one site designated in 2013; Vransko Lake. Furthermore, international recognition of Papuk Nature Park as Papuk UNESCO Global Geopark adds to the network of diverse internationally designated sites in Croatia since 2015.
A number of protected areas are under consideration for applying for international recognition. Kornati National Park, Velebit Mountain Nature Park and Telašćica Nature Park are on the Tentative List of World Heritage Sites. The Lika field and the Ogulin-Plaški plateau are being evaluated as possible Ramsar Sites. Mljet and Kornati national parks, and Telašćica and Lastovo otočje nature parks are also being considered for the List of Specially Protected Areas of Importance for the Mediterranean, under the Barcelona Convention.
At the regional level, Croatia is currently engaged in preparation of a nomination 'Dinaric karst' for inclusion on the Tentative List of the UNESCO World Heritage Convention, jointly with BiH, Italy, Montenegro, Serbia and Slovenia. Another similar initiative currently in realization is related to the European beech forests serial site.

Three protected areas in BiH are Ramsar Sites: Hutovo Blato (2001) and Livanjsko Polje (2008) in the Federation of BiH, and Bardača Wetlands (2007) in the Republic of Srpska. Hutovo Blato and Bardača are also Birdlife's Important Bird Areas, together with Boračko Jezero (Federation of BiH).

In Montenegro, Durmitor National Park has been a UNESCO World natural Heritage Site since 1980. Together with the Tara River canyon, it forms the Tara River Basin Biosphere Reserve, established in 1976. Montenegro has two Ramsar Sites: Skadarsko jezero (1995) and Tivat Saline (2013).

4.1.5.4 Threats to biodiversity and ecosystem services in the Programme area

Habitats and wild species in Croatia are predominantly threatened by anthropogenic activities due to the use of natural resources, or due to takeover and use of space. On the other hand, disappearance of certain human activities, such as mowing or grazing, can also have a negative impact on biodiversity and result in natural succession, change in ecological conditions and disappearance of species. All types of grassland are endangered as a result of abandonment of extensive agriculture. Wet habitats, such as peat bogs, are particularly threatened.

The construction of transport infrastructure (roads, railways, navigation channels) represents one of the key reasons behind habitat fragmentation in the Republic of Croatia. Impacts of increasing traffic can be seen in increased noise, consequential disturbance of animals and pollution along roads and railways, resulting in unfavourable living conditions in the surrounding habitats. Additional consequences include road kills, inability of animals to access natural resources, and intensified spreading of invasive species. Habitat fragmentation is also caused by increasing urbanization and intensive agriculture.

Projects that affect upon integral units of forest areas have a particularly significant impact. Forests are threatened mainly by pollution, inappropriate water management, transportation and other

infrastructure, conversion of forest into agricultural land and for infrastructure construction, deforestation, fragmentation, forest fires and uncontrolled cutting in private forests.

The major threats to freshwater ecosystems include the construction of hydroelectric power plants, accumulations, construction of drainage channels for irrigation, stocking by alien species and introduction and translocation of invasive alien species, as well as pollution.

Dams represent physical barriers that interrupt the migrations of organisms along rivers and watercourses, and they impact upon changes in habitat conditions both upstream and downstream. As a consequence of habitats degradation including change of biotic and abiotic characteristics, the most threatened vertebrate group are freshwater fish species. The impact of dams is present along most of the Croatian rivers, and the consequences include the disappearance of certain fish species and changes to the quantitative and qualitative structure of fish communities. Regulation of watercourses and changes in the water regime represent the key threats to all water dependant habitat types such as river gravels, sand shores and muddy shores, karst watercourses with tufa-creating communities and tufa barriers, as well as all types of wet grasslands and floodplain forests.

Invasive Alien Species (IAS) are one of the key threats to biodiversity in the Republic of Croatia. They also have a direct negative impact on the economy, due to the harm caused to infrastructure and hydro energy facilities, but also an indirect negative impact, due to decreased labour effectiveness caused by the health problems associated with allergies.

Climate change is also considered one of the key reasons of the loss of biodiversity at the global level due to impacts on nesting times, migrations and distribution of species. These effects have already been detected in the Republic of Croatia, for example in the periods of arrival of certain migratory bird species and the beginning of their nesting.

Some of the largest threats to biodiversity in marine and coastal ecosystems are the combined activities of high anthropogenic pressure (including the high level of exploitation of marine natural resources), degradation and loss of habitats, invasive species, excessive fishing, trawling, the absence of no-take zones and ineffective supervision. The major threats to freshwater ecosystems include the construction of hydroelectric power plants, accumulations, construction of drainage channels for irrigation, stocking by alien species and introduction and translocation of invasive alien species, as well as pollution.

Pressure from the development of tourism infrastructure is a major threat in coastal areas. Caves in tidal areas are threatened by pollution, creation of coastal embankments and by swimmers' activities. Submarine springs are threatened by pollution, backfilling of the coastal area and construction along the coast. In particular, karst estuaries are highly exposed to anthropogenic activities and threatened by coastal filling, pollution and intensive exploitation. Saltwater lakes are rare and endangered by illegal sewage disposal, waste, invasive species and an excess of visitors. Coralligenous communities are threatened by pollution and excessive fishing and, as a result, species such as lobsters and groupers have become extremely rare. Damage from anchors and trawling also damages these ecosystems as does intensive diving activities. Meadows of marine sea grass ecosystems are threatened by the anchoring of vessels, trawling, pollution, shading and invasive species such as green algae (Caulerpa).

One of the most important direct mechanisms of nature protection implemented in other sectors is the integration of nature protection requirements in physical planning documents and in natural resource management plans. Inclusion of green infrastructure in spatial planning can significantly contribute to mitigating a decrease in habitat fragmentation.

The integration of nature protection requirements, nature protection measures and conservation guidelines for the ecological network is also ensured in the process of adoption of water area management plans, and in the preparation and implementation of projects and works in water management. The Water Act itself requires the achievement of good ecological status of waters, which includes chemical, biological and hydromorphological elements of water quality. When it comes to watercourses with disrupted hydrological status due to performed works, provisions of the Water Act require the implementation of revitalization/restoration measures. Provisions on the integration of nature protection requirements and nature protection measures also pertain to the agricultural sector.

However, there is a need to strengthen the principles of conservation and sustainable use of natural resources in sectoral plans, strategies, programmes and policies, and in natural resource management plans and physical planning documents. Moreover, it is necessary to define effective conservation measures, including for species and habitat types sensitive to climate change, and integrate them into sectoral documents, in order to get sectors more involved in management planning and in the management itself, including the financing of management.

The Strategy and action plan for the protection of biological and landscape diversity of the Republic of Croatia from 2008 has not dealt with ecosystem services directly, and this topic was tackled comprehensively for the first time in the Report on the State of Nature in the Republic of Croatia for the period 2008-2012. However, in the early 1990s, this topic was recognized within the services provided by forest ecosystems, as reflected in the concept of "non-market forest functions" that was integrated in the Forest Act. The concept of ecosystem services has a major potential as an added value in the existing approach to nature protection, but it is still not sufficiently recognized in various sectors. Inter alia, the goals are to make natural values more visible, in order to use state-of-the-art approaches and scientific knowledge to ensure the adoption of high-quality strategic decisions at the local and national level, aligned with sustainable use of natural resources.

Several studies on the topic of ecosystem services have been published in the Republic of Croatia so far. Other activities include the publication of a study entitled Mapping and Assessment of Ecosystems and Their Services in the Republic of Croatia, also intended for the wider public, as well as the Ecosystem Map of the Republic of Croatia, which is available via the GIS web service of IENC. However, more work is needed in the field of ecosystem services, including revision of map of ecosystem services as well as preparation of the list of priorities for restoration of ecosystems and their services.

Some of the main pressures to biodiversity in BiH are caused by habitat conversion, resources overexploitation, pollution, and uncontrolled introduction of invasive species. Intensive processes of habitat conversion are evident primarily in karst habitats which are transformed into agricultural lands. Overexploitation affects diverse ecosystems, including oak forests in continental areas, Pannonian oak forests, upland beech-fir tree forests, upland deciduous forests, arable land, and freshwaters. Dozens

of invasive fish species are present in BiH's freshwaters, but there are no detailed data on their numbers and distribution.

BiH faces many other threats to biodiversity, including water pollution, forest fires, transmission of plant diseases and other pests near protected areas, excessive exploitation of natural resources (including medicinal herbs and fungi), use of chemicals in agricultural production near protected areas and expansion of agricultural areas, fragmentation of forests due to existence of open quarries, poor water and forest management, excessive urbanization in planned protected areas, uncontrolled development of the energy sector based on the construction of hydropower plants, and global climate change and acidification of habitats.

Furthermore, the Federation of BiH detected the following key institutional problems that impact successful management of protected areas: Lack of financing, insufficient number of employees (experts and technical staff), insufficient scientific research and fieldwork, lack of promotion of protected areas on domestic and foreign markets, low level of public awareness about the values of protected areas, poor legislative framework for nature conservation, weak road infrastructure linking protected and non-protected areas and illegal activities such as illegal hunting, logging and waste disposal in protected areas.

There has been little research on the valorisation of ecosystem services in BiH. Available studies are mostly independent and isolated attempts by scientists, students and experts to bring the topic closer to the stakeholders and wider public. A few studies and assessments were conducted within the framework of various projects and most are linked to specific locations.

The period of isolation that Montenegro faced in the 1990s resulted in a break in cooperation with the scientific community and exclusion from wider initiatives related to biodiversity conservation which has caused significant gaps in knowledge. The state of biological diversity in Montenegro has been monitored within a limited scope since 2000 through the National Environmental Monitoring Programme. On the basis of available information, the following main categories of anthropogenic threats can be identified: uncontrolled urbanization and tourism development in natural habitats with associated infrastructure development; changes in land use practices, particularly in relation to agriculture and forestry; unsustainable and illegal use of natural resources (including illegal hunting, overharvesting etc); water, soil and air pollution from industrial and agricultural pollutants and municipal wastes; impacts of climate change, especially the effects of hot and dry periods on forest habitats causing wildfires which need to be the focus of more attention. Issues such as the impact of alien and invasive species and climate change are still poorly understood but can be expected to have a higher importance among threats to biodiversity in the future.

The cumulative effect of the above threats to biological diversity is the loss of habitats and their associated (often endemic) species, particularly of rare or endangered and along the coast. This has the potential to cause a reduction in the functionality and stability of natural ecosystems, particularly of forest and water ecosystems.

Awareness of the value and importance of ecosystem services for human welfare is at a low level in Montenegro, including among the general public and decision-makers. Ecosystem services, as important contributors to socio-economic development and human wellbeing, have been recognized

by Montenegro Ministry of Sustainable Development and Tourism (2014), though the valuation of ecosystem services and integration of the value of biodiversity in decision making is rare.

4.1.6 Human heritage and Landscape

4.1.6.1 Historical development of the area

Due to suitable climate and natural characteristics, the Programme Area had been inhabited from prehistoric times which left behind valuable prehistoric sites, art and artefacts. The Illyrian cultures inhabited the Programme area from the 10th century BCE and the area was a part of Illyria until the coming of Romans in early 2nd century when the area was divided into Roman provinces (Dalmatia, Pannonia). Roman impact was significant in terms of upgrading and development of the civilisation and overall (nowadays) heritage such as building of strategic cross-region roads, development of transport and trade while also leaving behind great examples of immovable cultural heritage such as forts, cities, bridges, aqueduct, palaces, etc. The Roman era is significant in terms of cultural heritage in this regions and a lot of the heritage from these times are today considered valuable on global and national levels. The Slavs began to settle in this territory during the 6th and 7th century and the area was mostly under the rule of Byzantium during the period from 12th to 15th century. During the Late Middle Ages, the Programme Area suffered frequent and strong attacks from the Ottoman Empire which also led to strong cultural impacts, mostly islamisation. The Ottoman attacks had spread and impacted all the way to central Croatian territory. The Austro-Hungarian Monarchy ruled the Area from late 19th century which had a big cultural impact on all branches of cultural heritage, predominantly architecture/ city planning and art. The Programme Area was later part of the Kingdom of Yugoslavia, later on socialist Yugoslavia until the States became independent. Socialist era was rich in cultural development, contributing to development of cities and new urban planning directions and supporting various art forms. The Croatian and Bosnian-Herzegovinian part of the Programme territory suffered grave damage during the War of Independence (1991 – 1995) which ruined a large set of cultural property, some of which isn't restored to this day. Monuments and important war sites today represent an extremely significant part of history, thus being some of the most important heritage sites in the PA.

4.1.7 Landscape

The PA can be divided into two characteristic regions – areas related to predominantly mountainous karst areas (Adriatic/Dinaric) which covers the majority of the Programme Area and the continental area of predominantly riverine plains (Pannonic). The Programme area covers a large set of various landscapes, grading from historical urban cores to specific and ''endemic'' rural cultural landscapes.

The continental part of the PA applies to the northern areas of the PA – central parts of Croatia and northern Bosnia and Herzegovina. The Sava river is the most defining element of the area, flowing through the entire northern part of the PA from northwest Croatia to northern Bosnia. Sava is also the natural border of these two states. This area mostly consists of lowland river plains, low Pannonic mountains and meandering rivers (Sava, Drina, Una, etc.).

Areas of the Programme which cover central and coastal Croatia, central and southern Bosnia and Herzegovina and entire Montenegro belong to the typically karst areas with it being its most defining

feature. This area contains various karst landscapes such as Dinaric mountains, karst rivers, karst fields, rocky terrain, etc. In these areas, typical and specific Adriatic and Mediterranean landscapes have been formed and subsisted throughout history. Fortified cities, terraced olive groves and vineyards, highland pastures, drywall heritage or cultivated sinkholes are some of the examples of the unique types of landscapes that have been created on these areas, most of which represent outstanding examples on national and/or international level.

Besides stated internationally recognised areas and other protected and recognised landscape on individual national level, most of the specific and unrecognised outstanding landscapes and landscape elements of this part of the PA are related to agriculture and rural spaces, such as rural settlements, terraced landscapes of olive groves and vineyards, specific spatial patterns of agricultural fields and cattle breeding, etc. Some regions in the PA are recognised as highly valuable in terms of stated landscape elements, such as the regions of former Republic of Dubrovnik and the area of Boka Kotorska.

It is also important to mention drystone wall heritage as a significant and unique part of Adriatic and Mediterranean landscapes, which is also on the Representative List of the Intangible Cultural Heritage of Humanity by UNESCO (''Art of dry stone walling, knowledge and techniques''). Transhumance (a form of nomadic pastoralism) has also had a significant impact throughout the history on shaping the heritage of the PA in terms of pastures and immovable forms of pastoral heritage, e.g. *katuni*[3] - seasonal settlements for shepherds.

Landscapes of the PA suffer similar problems and negative spatial trends. The main existing source of pressure on landscapes of various types is tourism and the urban sprawl which follows it. This is particularly emphasized on the coastline where the pressures are the highest in terms of ''sun and beach'' tourism and other highly attractive areas which leads to littoralisation and high percentages of artificial beaches and coastlines which can also have a negative impact on biodiversity and climate change as well. Deruralisation, deagrarisation and overall depopulation of ''ordinary and everyday'' landscapes cause the slow degradation of spatial identity, loss of key landscape elements and structure, inappropriate spatial structures in terms of use and design. These problems are closely linked to the unsatisfying implementation of landscape policies. All of the states of the Interreg Programme have signed and ratified the European Landscape Convention, but the practice of its goals isn't carried out well, vertically and horizontally. Lack of landscape management plans, awareness on professional and civil level, lack of sustainable development strategies, sustainable tourism and rural development strategies and/or programmes are few of many different reasons why landscape protection and preservation isn't developing in its full potential in the PA.

4.1.8 Cultural heritage

The cultural heritage of the PA consists of a large number of protected immovable cultural property, both fully protected and under preventive protection or proposed for protection. Immovable cultural properties include categories as: individual cultural property, cultural and historical complexes,

[3] *Katuni* – seasonal mountain settlements for summer cattle grazing (Laković, I. et al (2020.): Endangered Mediterranean Mountain Heritage – Case study of *katuns* at the Kuči Mountain in Montenegro)

cultural landscapes, archaeological and memorial sites. On the large and strategic scale of this SEA report, the most important cultural properties are those protected on large scale.

Heritage of the Programme Area consists of sites of different and diverse origins, be it heritage of Roman emperors in terms of forts and palaces to rural settlements, agricultural elements or medieval graveyards (stećci). In this part of the PA , some areas of outstanding values have been recognised and protected by the UNESCO World Heritage List and those include (**Figure 19**):

- Plitvice Lakes (Croatia)
- Cathedral of st James in Šibenik (Croatia)
- Historic City of Trogir (Croatia)
- Historical Complex of Split with the Palace of Diocletian (Croatia)
- Stari Grad Plain (Croatia)
- Old City of Dubrovnik (Croatia)
- Natural and Culturo-Historical Region of Kotor (Montenegro)
- Stećci Medieval Tombstones Graveyards (locations in Croatia, Montenegro, Bosnia and Herzegovina)
- Old Bridge Area of the Old City of Mostar (Bosnia and Herzegovina)
- Ancient and Primeval Beech Forests of the Carpathians and Other Regions of Europe (entire PA)
- Venetian Works of Defence between the 16th and 17th Centuries:
    - Defensive System of Zadar (Croatia)
    - Fort of St. Nikola, Šibenik – Knin County (Croatia)
    - Fortified city of Kotor (Montenegro)

Sites on the Tentative Lists of UNESCO World Heritage include these sites in the PA:

- The natural and architectural ensemble of Jajce (Bosnia and Herzegovina)
- Complex of travertine waterfalls in Martin Brod - Una National Park (Bosnia and Herzegovina)
- Strict Nature Reserve - Primeval forest “Perućica” (Bosnia and Herzegovina)
- The historic urban site of Počitelj (Bosnia and Herzegovina)
- The natural and architectural ensemble of Blagaj (Bosnia and Herzegovina)
- The natural and architectural ensemble of Blidinje (Bosnia and Herzegovina)
- The natural and architectural ensemble of Stolac (Bosnia and Herzegovina)
- Vjetrenica cave (Bosnia and Herzegovina)
- Diocletian's Palace and the Historical Nucleus of Split (extension) (Croatia)
- Hermitage Blaca (Croatia)
- Historical-town planning ensemble of Ston with Mali Ston, connecting walls, the Mali Ston Bay nature reserve, Stonsko Polje and the salt pans (Croatia)

- Kornati National Park and Telašćica Nature Park (Croatia)
- Primošten Vineyards (Croatia)
- The historic town of Korčula (Croatia)
- Velebit Mountain (Croatia)
- Zadar - Episcopal complex (Croatia)
- Cetinje Historic Core (Montenegro)
- Doclea (Montenegro)
- Old Town of Bar (Montenegro)
- Ulcinj Old town (Montenegro)

Cultural heritage plays an important role in the development of the PA in terms of attraction for tourism, especially on the coastal areas. Coastal parts of the PA often suffer too much pressure from tourist activities, resulting in negative impact to heritage sites itself and their context. Some of the most prominent impacts include generating more requirements for accommodation capacities which often aren't planned, designed and built with wider heritage, landscape and place identity in mind. This leads to problems such as urban sprawl in forms of tourist settlements of inappropriate dimensions and designs. Other negative impacts include physical damage of property, inappropriate landuse and other activities which may result in lack of respectful representation. In more recent times, rural tourism in its various forms is more and more popular so rural areas in the hinterland of the PA have an opportunity to develop tourist products and accommodation in an appropriate and sustainable level. Some areas already notice negative spatial trends in rural and traditional areas of higher heritage value such as inappropriate construction and design (non-traditional and non-contextual) which lead to loss of fundamental characteristics of areas.

Sites of cultural property contribute significantly the economic development of wider areas, therefore it's important to develop tourist activities in a sustainable manner. It's necessary to recognise and acknowledge cultural heritage (and landscapes) as a resource, implement specific sectoral strategies, plans, programmes and studies that will analyse the potential of heritage for future development.

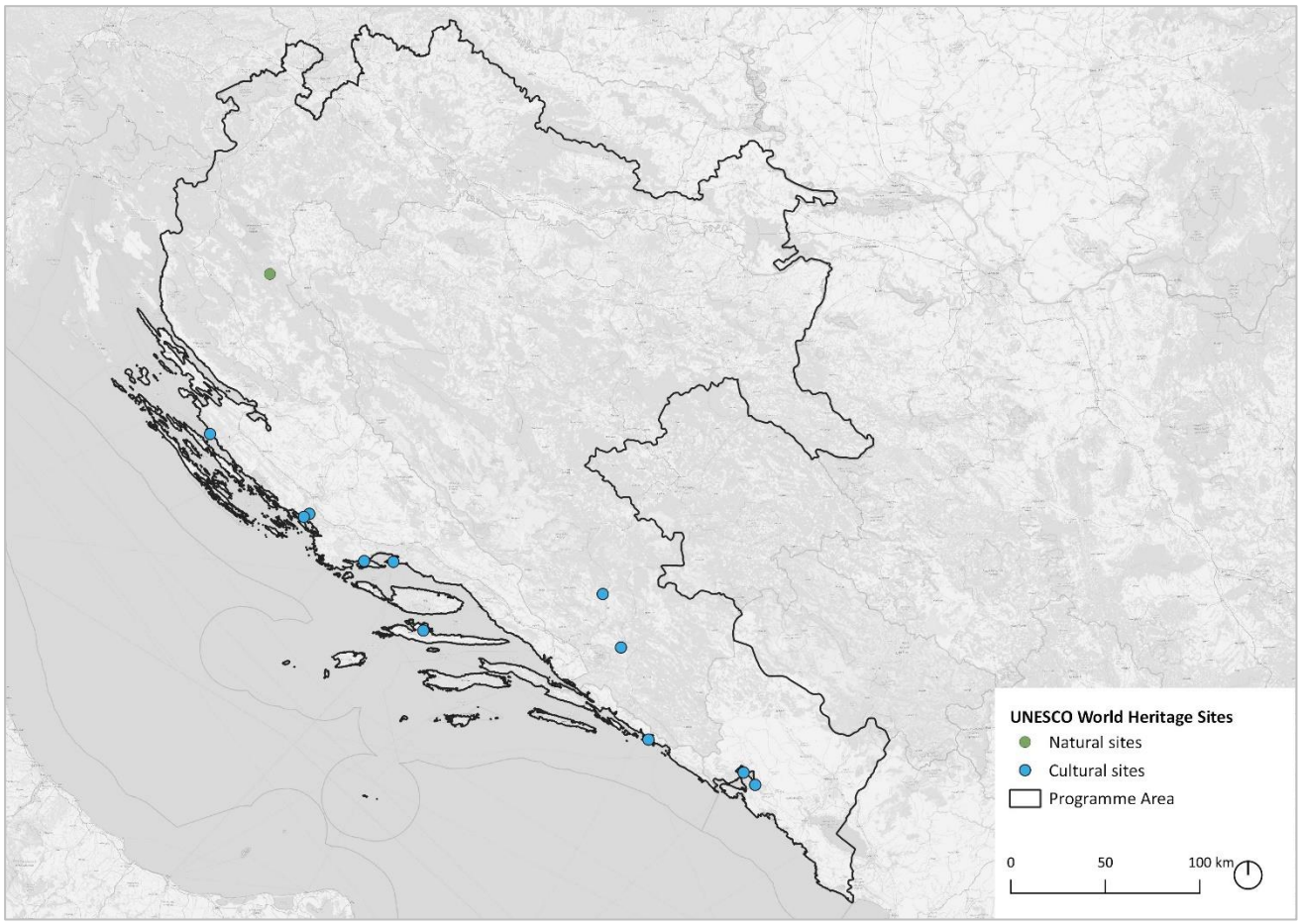


Figure 19. Sites on the UNESCO World Heritage List in the Programme area.

4.1.9 Human health and safety

Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity (WHO Constitution, 1946). it is by now well acknowledged that health is affected by policies, plans programmes and projects planned and implemented not just within the health sector, but in other sectors as well. This is in line with the broader concept of environmental and social determinants of health and provides space for action outside health sector to prevent negative impacts on human health, and to promote positive ones.

Today we also acknowledge the key role that natural and built environment has on human health, especially the impacts generated in interaction with environmental components, such as air, water or soil by which hazardous substances and contaminants come into contact with people. In the context of growing spatial development and urbanization, the impact of noise, light pollution and non-ionizing irradiation are becoming increasingly important.

Air

According to air quality maps for PM 10, PM 2.5. and NO_2, the air quality in the programme area is generally good.

The poor air quality on programme area depends on the current microclimatological conditions at the measurement site. The position of large cities and industry around them should also be taken into account of pollutant level.

While generally good in the programme area, further improvements are needed to reduce adverse effects of pollution generated from fossil fuel combustion from heating, transport and industry.

Soil

Soil is a key element of our environment its potential degradation can have major implications for both air and water quality, as well as human well-being. It can affect the wider environment, including climate change. The most dominant pressures on soil in the programme area are agricultural practices and changes in land use and land management, including spreading of urbanization. Such practices result in deterioration of soil quality such as loss of organic matter, contamination, soil erosion and landslides.

Water

Water supports wetland habitats and species, and is essential for our health, in addition to supplying households and industry with drinking water. Risk to human health may arise from flood events and poor quality private water supplies. The most important pressures come from water pollution due to discharge of untreated urban waste water, abstraction, energy production, flooding and introduction and spread of invasive and non-native species.

Groundwater is a major source of drinking water and maintaining its quantity and quality is therefore vital for both humans and water-dependent ecosystems. The program area is well situated in terms of water supply, but to maintain such a state it is necessary to properly dispose of water resources, as well as ensuring safe drinking water for all residents. It is important to protect groundwater from pesticides and nitrates from the soil. In this process, the implementation of water regulations is important, as well as investment in infrastructure for monitoring and management of surface and groundwater.

Climate change

Climate change impacts will affect human health across the region. Heat waves are expected to decrease workers' productivity and increase heat- and air pollution-related mortality. A warmer and wetter climate is also favourable for mosquitos that transmit diseases. Furthermore, extreme floods can directly threaten people's lives and increase the risk of water and vector-borne diseases, as well as other infectious diseases.

While it does not exactly cause conflict, it may be said that it increases pressures, or acts as a risk multiplier. To be more exact, climate change may affect peoples' lives by changing the access or availability of natural resources and lead to uneven economic development, it may put food supply and energy security at risk, and finally, it may also affect food production and increase food price.

Environmental noise

Environmental noise is defined as unwanted or harmful to human health and the environment harmful sound in outdoor area caused by human activity, including noise emitted by: road vehicles, rail, air, maritime and river transport, as well as facilities and interventions for which, according to special regulations in the field of environmental protection, obtains a decision on integrated conditions of protection environment, and the decision on the acceptability of the project for the environment. Today it has been proven and accepted that, except discomfort, noise also causes health disorders and various diseases.

The most intense impact of noise on humans is caused by traffic, especially road traffic. Noise from road traffic is present during the day and night and is a serious threat to the health of residents inhabited along main road routes. Bypasses are generally not built in the settlements, which means that noise from traffic corridors inevitably exists.

The most common sources of noise in the program area are from transport and industrial plants, while a smaller problem is caused by noise coming from local sources (households, catering establishments or some other smaller service facilities).

Allowed outdoor noise levels according to the purpose of the space are presented in the table below.

Table 12. Maximum allowable immission noise assessment levels in Croatia, Bosna and Herzegovina and Montenegro

Bread area	Space purpose	Maximum permissible rated noise levels of mission L_{RAeq} u dB(A)	
		for the day (L_{day})	for the night (L_{night})
CROATIA			
1.	Zone intended for rest, recovery and treatment	50	40
2.	Zone intended only for housing and residence	55	40
3.	Mixed, predominantly residential zone	55	45
4.	Mixed, predominantly business-use zone with housing	65	50
5.	Economic purpose zone (production, industry, warehouses, services)	At the border of this zone, noise should not exceed the permissible levels of the zone with which it borders.	
BiH			
1.	Hospital-spa zone	45	40
2.	Tourist, recreational, recovery	50	40
3.	Purely residential, educational and health institution, public green and recreational areas	60	50
4.	Commercial, business, residential and residential along transport corridors, warehouses without heavy transport	60	50
5.	Business, administrative, commercial, craft, service (utilities)	65	55
6.	Industrial, storage, service and transport area excluding housing	70	70
Montenegro			
1.	Silent zone in nature	35	30
2.	Silent zone in agglomeration	40	35

3.	Elevated noise protection regime zone	50	40
4.	Residential zone	55	45
5.	Mixed-use zone	60	50
6.	Zones heavily affected by noise from road transport	60	55
7.	Zone heavily affected by air traffic noise	55	50
8.	Zone heavily affected by noise originating from rail transport	65	60
9.	Industrial zone	At the border of this noise zone, it shall not exceed the noise level limits in the zone bordering the	
10.	Zone of exploitation of mineral resources	At the border of this noise zone, it shall not exceed the noise level limits in the zone bordering the	

Source: Ordinance on the highest permitted noise levels in the environment in which people work and reside (NN 143/21), the Ordinance on noise limit values, the method of measuring noise inside and outside catering establishments and the method of use and conditions that must be met by the sound limiter (Official Gazette of Montenegro, No. 020/19 and 042/19), the Noise Protection Act (Official Gazette of the Federation of BiH)

The system of monitoring noise in the environment, including complete maps with the state of noise emissions as well as adequate evaluation of the impact of noise on human health, is not found on the territory of Programme area.

The most common sources of noise in the program area are from transport and industrial plants, while a smaller problem is caused by noise coming from local sources (households, catering establishments or some other smaller service facilities).

Light pollution

Light pollution is a side effect of industrial civilization. Its sources are internal and external lighting, advertising, streetlights, harbours etc. Iti s excessive use of artificial light, and may have serious environmental consequences on human health, but also on wildlife and climate.

Light pollution occurs due to increased illumination of the sky during the night, excessive intensity of lighting use, and is caused by the scattering of visible and invisible light (UV and infrared light) of natural or artificial origin. Light pollution applies primarily to areas located outside the areas to be illuminated. The main cause of pollution is irregular lighting fixtures, that is, lighting fixtures that do not scatter light only towards the ground (vertically).

Light pollution causes the following negative consequences: endangering traffic safety, disturbing the migration of birds, bats, insects and other animals, disrupting plant growth, compromising natural balance in protected areas, obstructing observation of the sky, disturbing the image of the night landscape.

According to the light pollution map (**Figure 20**), it may be concluded that in the programme area light pollution is present in urban areas making parts of larger towns.

The largest cause of light pollution in urban areas is public lighting. It is also evident that in less developed parts light pollution is minimal. Past research suggests that the territory of the Republic of Croatia as well as the territory of the Republic of Montenegro and BiH Federation is severely light polluted. The areas that still possess the natural brightness of the night sky are small and isolated.

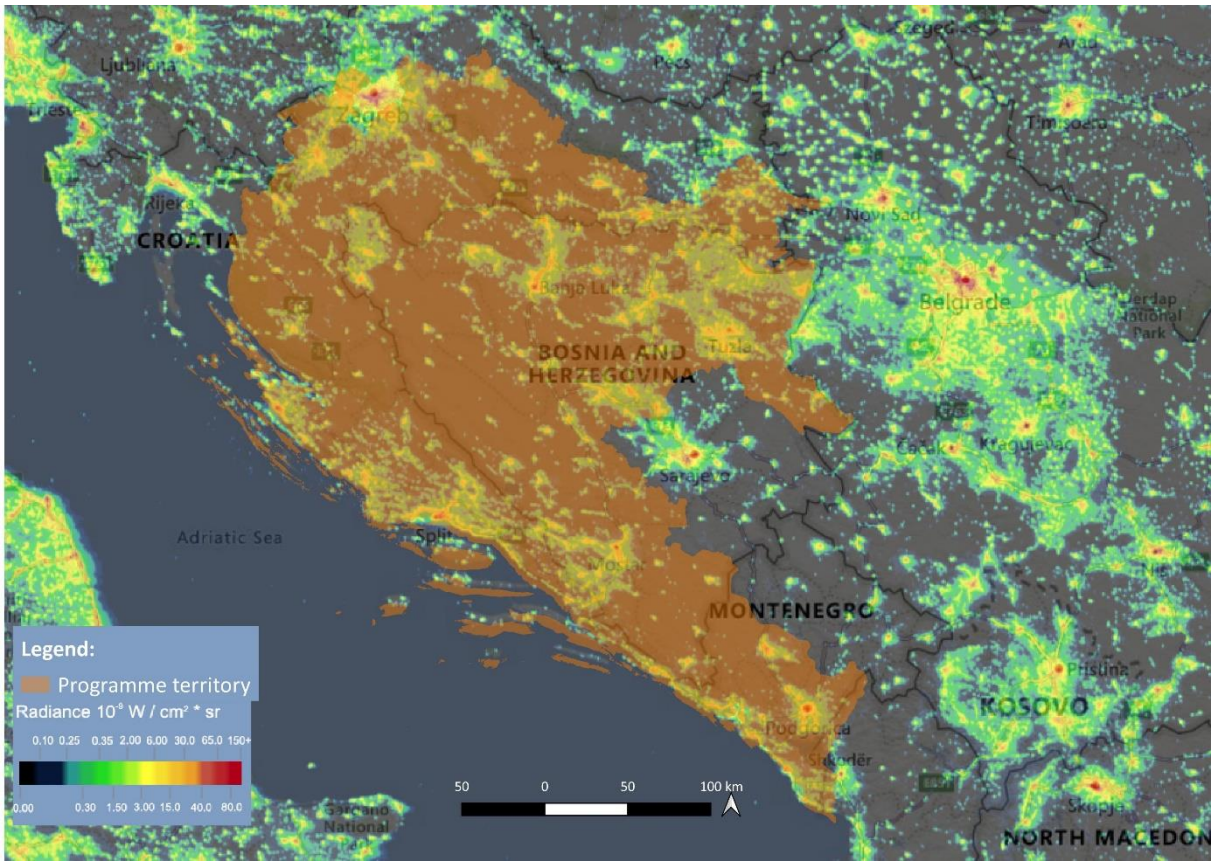


Figure 20. Map of light pollution in Programme area
Source: https://www.lightpollutionmap.info/

Electromagnetic radiation / Non-ionizing radiation

Non-ionizing radiations are electromagnetic fields and electromagnetic waves with a frequency lower than 3,000,000 GHz or ultrasound frequencies lower than 500 MHz that do not matter ions in interaction with substances. The source of non-ionising radiation is any device that produces one or more types of non-ionizing radiation.

Non-ionizing radiation includes low-energy ultraviolet radiation, visible light, infrared radiation, radio frequency and microwave fields, extremely low frequency fields as well as static electric magnetic fields.

The network of wireless communication with its associated transmitters is rapidly expanding, most intensively placed in urban environments and along roads, and although there are numerous works there is still not enough knowledge about the causal relationship between non-ionizing radiation and human health.

In Croatia, the body responsible for the construction and installation of base stations is the Ministry of Construction and Physical Planning, which regulates the requirements and procedures for obtaining the necessary consents and permits when setting up sources while the Ministry of Health controls the levels of electromagnetic fields around the source of electromagnetic fields. Source control is carried out before installation, after commissioning and if it has been proven that the actual levels of the

electromagnetic field are within the permitted limits, regular inspections are carried out during the operation of the source organized by the owner of the source. In addition, research and measurements are controlled by HAKOM – Croatia's regulatory agency for network activities, which has its own unit of measurement. That is, the Ministry of Health is responsible for implementing non-ionizing radiation protection measures in accordance with the Non-Ionizing Radiation Protection Act (OG 91/10) and the Regulations on Protection against Electromagnetic Fields (OG 146/14).

The Health Care Act (Official Gazette of the Federation of BiH, Nos. 46/2010 and 75/2013) in Bosnia and Herzegovina regulates the planning and realization of programs for the preservation and protection of health from non-ionizing radiation, at the level of cantons and municipalities.

In Montenegro, there is a Non-Ionizing Radiation Protection Act, which regulates the protection of the life and health of people who work with sources of non-ionizing radiation or are in the process of working in the fields of non-ionizing radiation, as well as protecting the environment from the harmful effects of radiation.

4.1.10 Waste Management

Waste management in the programme area, as defined by the relevant legislation, is based on the principles of sustainable development ensuring more efficient use of resources, reduced waste quantities and waste management in a way which contributes to sustainable management objectives; precautionary principle by undertaking measures to prevent negative impacts on the environment; „polluter pays“ principle and waste management hierarchy.

Integrated waste management system implies application of different waste management procedures which are mutually compliant due to safe and efficient removal of waste from the environment, thus minimising hazardous effects to human health and the environment, and at the same time with the acceptance of the environmental protection principles. Waste management hierarchy adopted in the participating countries is:

1. Prevention of generation of waste
2. Preparation of waste for reuse
3. Recycling
4. Other recovery procedures, such as energy recovery
5. Waste disposal.

Even though the EU waste directives have been transposed and legislation adopted, the implementation of waste hierarchy is not evident in practice. Recycling rates remain at a low level and many of the other key targets remain to be established. In the absence of other measures, the low disposal costs are insufficient to drive activity further up the hierarchy. Also, the management of hazardous wastes is problematic. Programme participants however have suitable management plans in place. Another problem is lack of statistical information on special types of waste (medical, etc.)

Waste management is still one of the greatest challenges and one of the most demanding areas in terms of adjustment to the EU standards. In the subsequent period, education and information activities directed to waste generation prevention and separation of useful waste at all levels have to be intensified. Moreover, as a prerequisite, existing and new infrastructure for waste management has

to be constructed and improved, which will allow for further development of the system and treatment of collected waste.

The main challenges and constraints in waste management include: topography and administrative barriers for which reason there are increased transport requirements, depopulation trends in the rural areas, lacking waste management infrastructure, reliance on waste management centres which have not yet been constructed, lack of market for recyclables.

Waste is an anthropogenic byproduct which cannot be avoided, which has many negative impacts on the immediate environment, from air, soil and water contamination to its contribution to climate change through GHG emissions.

In light of the new circular economy action plan which builds on the European Green Deal as a sustainable development tool, EU is seeking to reduce pressure on natural resources and promote circular economy processes, encourage sustainable consumption and ensure that the generated waste is kept in the economy as long as possible.

Croatia sees its contribution to the circular economy through the bioeconomy, the production of renewable biological resources and the conversion of these resources, together with waste streams, into value-added products such as food, feed, biological products, and bioenergy. Of great importance is biomass as the main raw material that will enable the decarbonization of the entire production chain - from the field to the table. There is also a strong emphasis on sustainable waste management, which includes primarily household recycling systems (where raw materials are created for reuse), while the rest is taken to waste management centres for further processing.

4.2 Likely evolution of the environment without implementation of the Programme

Consideration of likely environmental development without the implementation of the Programme is important for understanding the contribution of the Programme in environmental protection in relation to the current conditions. The analysis presented herein is based on presumptions that changes in the environment are inevitable as a result of natural processes, continued human activities which are not directly related to the implementation of the Programme, and have at the same time been regulated by other acts and instruments.

The analysis results have been presented in tabular manner and it shows the development trends during a longer periods of time, and the expert assessment of likely effects as a result of non-implementation of the Programme.

Table 13. Review of likely evolution of the environment without implementation of the Programme

Environmental topics	Likely evolution of the environment
Air and climate	Most important contribution of the Interreg Programme towards air and climate is the contribution towards sustainable development, mitigation of climate change and climate adaptation and improvement of resilience towards it. All of the stated principles and strategic development directions contribute indirectly to better air quality and climate issues. The most prominent concern is air pollution from five key pollutants (**Figure 6**) which is predominant in larger cities and highly urbanised areas. Transition to more energy efficient solutions, sustainable development and circular economy will indirectly improve the air quality mostly by cutting down emissions of pollutants and greenhouse gasses. Therefore, without the implementation of Interreg Programme, support and implementation of stated positive solutions would not be implemented and negative impacts in the current state of environment will be continued.
Climate changes	The sensitivity of climate change is one of the most important factors in the environment of today which transfers to objectives of mitigating the contribution to climate change and improving resilience of environment, all regarding resources, nature and human environment. Since climate change impacts a large set of environmental factors, the adjustments to climate change challenges should also include a large variety of appropriate measures, actions and activities. The most vulnerable environmental factors to climate change within the Programme area include biodiversity and ecosystems, water and human health. Subsequently, climate change can impact some economic activities in a high measure, e.g. agriculture which can impact human living conditions, state of the economy, change the state of habitats, landscapes and other important ecosystem elements and ecosystems as a whole. There are five major characteristics of the changing climate in the programme area: increase in total average temperature, decrease in precipitation, increase in frequency and intensity of extreme weather events, sea level rise and wild fires. The most important elements of climate changes in coastal area are: increasing the variability of all climatic factors, rising sea levels, changes in the occurrence of storm slowdowns and waves, changes in the precipitation regime, rising air temperature, rising sea surface temperature, rising sea salinity and changes in wind regime. The effects that will cause the greatest material damage are on coastal zone floods and on the consequent impact on coastal infrastructure and coastal erosion. The Programme Area is under high pressure from economic activities, be it use of natural resources or tourism. The Area is heterogeneous in its characteristics and macro-

	elements, so the overall environment can't be approached with the same assumption of evolution without the implementation of the Programme. Within the Interreg Programme, actions proposed in priority axes 2 and 4 are the ones that would contribute positively to climate change SEA objectives the most. The stated priority axes cover specific objectives and a large set of actions that work towards mitigating the impact on climate change and increasing resilience. Without the implementation of the Interreg Programme , it's possible to expect indirect negative impacts to climate change, e.g. contributing to climate change without improving resilience instead of the opposite. This particularly considers mitigating greenhouse gas emissions, transition to energy efficient solutions, disaster risk prevention and transition to circular and resource efficient economy.
Water status	One of the most important water bodies in the Programme Area is the area of Adriatic Riverine and the Adriatic River Basin District which is under the most development pressure from the tourism sector which mostly doesn't incorporate sustainable and nature-based solutions and isn't aware enough of importance of water pollution and sustainable water management. There are three major causes of trans-boundary pollution in the Adriatic River Basin District: municipal sewage point-sources and agriculture nonpoint discharges along the coast and the main rivers in the Adriatic basin, which pollute coastal waters and have created a highly eutrophic system in its northern sections, chemical and oil discharges from point sources such as industry and port wastes and solid waste and litter from unsanitary waste dumping in cities and towns at the coast and/or transported via rivers discharging into the Sea, as well as its leachates. The Interreg Programme supports sustainable tourism solutions which should also include appropriate water management in a manner that doesn't disrupt or worsen the quality and state of waters. Without implementing sustainable solutions, it's expected that the water status will most likely remain the same or worsen in a smaller fraction.
Biodiversity	The absence of the implementation of the Programme, i.e. activities related to the bioecological characteristics of the Programme area, may worsen the existing state of protected natural values and protected areas of nature as well as rare and endangered habitats and/or habitats suitable for endangered species.
Cultural heritage and landscape	The Interreg Programme highly focuses on creating a new and better, more sustainable basis for development – a smarter, greener and more social Programme Area. Actions proposed by the Programme support the principles of sustainable development when it comes to landscape and cultural heritage – indirectly and directly, mostly through actions regarding developing sustainable tourism solutions and offers, protecting, preserving and reconstructing cultural heritage and its resilience towards climate change. Without the implementation of stated actions and activities of the Programme, the landscapes and cultural heritage of the PA would develop in a manner which isn't sustainable enough for future standards and which doesn't support appropriate spatial development of areas within their context, e.g. tourism activities would most likely continue to develop in a way which continues the trends of littoralisation, urbanisation and deagrarisation which would lead to significant degradation of landscapes and spatial characteristics. Cultural heritage would also continue to degrade (in areas where it's applicable) and not be recognised as a resource which would indirectly contribute to lack of awareness and knowledge. Lack of physical regeneration of heritage sites would contribute to bad current state of sites that need physical and integral, holistic regeneration.

	Lack of implementation of the Interreg Programme could indirectly significantly contribute to environmental problems of landscapes and cultural heritage. One of the most important benefits of implementing the Interreg Programme is support to possible good practice activities which could cumulatively have a positive impact as a driving force for broader sustainable development.
Human health	Human health is one of the environmental factors that is dependent on the state of other environmental factors. Some of the most impactful environmental factors on human health are economic activities, climate change and circular economy, i.e. sustainable management of natural resources and waste management. Since the Interreg Programme covers and supports sustainable management of various sectors, including environment, in a large set of actions, lack thereof would indirectly negatively impact human health. Specific objective 4.5 regards health care and the resilience of health care systems, which is especially important when battling additional pressures coming from COVID – 19 pandemic and its consequences. Lack of implementation of objectives and actions that are focused on health and healthcare can impact the state of healthcare systems and health support to society which may reflect on human health.
Waste management	The main challenges and constraints in waste management include: topography and administrative barriers for which reason there are increased transport requirements, depopulation trends in the rural areas, lacking waste management infrastructure, reliance on waste management centres which have not yet been constructed, lack of market for recyclables. In light of the new circular economy action plan which builds on the European Green Deal as a sustainable development tool, EU is seeking to reduce pressure on natural resources and promote circular economy processes, encourage sustainable consumption and ensure that the generated waste is kept in the economy as long as possible. By not implementing the specific objective of SO 2.6 Promoting the transition to a circular and resource efficient economy and the actions in question, waste management in the programming area will remain at the current level with all its problems. The specific objective includes actions such as developing and implementing solutions for limiting landfilling of all types of waste, increasing awareness of policy makers about environmental opportunities of circular economy, improving waste management policies and competences of public sector (recovery of organic waste, processing and recycling of communal and industrial waste), etc. Failure to implement the program will increase the negative impacts on SEA objectives: Sustainable management of waste, Protection of human health and well-being, Reducing impacts on air and climate, Sustainable management of natural resources and Protection of biodiversity, ecosystems and wildlife.

5. ENVIRONMENTAL CHARACTERISTICS OF THE AREAS LIKELY TO BE SIGNIFICANTLY AFFECTED BY THE IMPLEMENTATION OF THE PROGRAMME

The Interreg Programme is by nature a strategic document which proposes implementation of interventions in order to achieve a set of objectives, which are described generically and may be implemented anywhere in the programme territory.

Considering the programming period of 6 years and the type of planned interventions, it may be concluded that the areas and environmental factors which are already under significant pressure, and those where there are already preconditions for implementation of the proposed actions and activities will be most affected by the implementation of the Programme. Since the Programme focus is on integration of EU low-carbon policies and implementation of green and innovative solutions into new and existing processes in the Programme territory its primary course of action is reduction of GHG emissions and building resilience across sectors.

Anthropogenic impact on climate change is manifested mostly through the increased emissions of greenhouse gases into the atmosphere, which in turn enhance global warming and result in climate change occurrence. The energy sector has the greatest contribution to greenhouse gas emissions, mostly CO_2. Energy sector covers all activities in connection to fossil fuel consumption from stationary sources and fugitive emissions from fuel. Energy sector also includes the transport sector with appertaining fuel consumption from road, air, rail, sea and inland water traffic. Within the entire transport sector, road traffic emissions make up for more than 95% of total emissions (Croatia).

Apart from efforts to reduce impacts on climate, another course of action is directed to strengthening the resilience to climate change, that is, adaptation of the overall environment to climate change. According to the IPCC – Intergovernmental Panel on Climate Change, Southeast Europe, to which the Programme territory also belongs, has been recognized as one of the most vulnerable areas to climate change. With the purpose of better adaptation of the area to climate change, SEEFCCA 2012[4] document has been published, in which the greatest hazards and risks caused by climate changes were recognized, while the Strategy of Climate Change Adaptation for the Period to 2040 with a view to 2070, along with the Action plan for climate change adaptation was published in 2017. The said documents recognize the main hazards in the Programme territory as: rise of the sea water level, extreme temperature and precipitation, draught, wind, storms, fires and floods, and the vulnerable sectors as hydrology and water resources, agriculture and fishery, forestry, biodiversity and natural ecosystems, tourism and human health.

The littoral coastal is facing the increased concentration of population, the consequences of unsystematic tourism development and the growing need for exploitation of maritime resources. At the same time, it is exposed to hazards of natural disasters, especially due to climate changes and seismological conditions. Moreover, there is a growing conflict of interest among individual user categories and the lack of integral development approach, resulting in the increased pressure on the area, and ultimately damages or permanent loss of valuable natural areas and landscapes, the loss of land and maritime resources, disruption of biodiversity and ecosystems and contamination of the

[4] SEEFCCA (2012) Regional climate vulnerability assessment - Synthesis report Croatia, FYR Macedonia, Montenegro, Serbia.

environment. The state of the coastal and maritime area reflects the sustainability of the way in which it is being used, and its resistance to natural and anthropogenic impacts. The development potential of the area is mostly derived from the natural characteristics of the area, which is an additional reason for careful and balanced use and protection of the space. Economic development of the area is primarily related to tourism and recreation, agriculture relying on local cultures, maritime activities – fishery, aquaculture, sea salt production and exploitation of underwater energy and mining resources, and the coastal industry and harbours. The natural vulnerability of the area is conditioned by the geomorphological characteristics of the karst, the proximity to the sea and seismic activities, while the increased risk of anthropogenic impacts is related to climate change, contamination of the environment and physical devastation of natural values and landscape. It's important to note urban areas and their adjacent rural and periurban areas in littoral zones, as they are a subject to high pressures from urbanisation due to tourism, energy and industry sector. As the pressures grow and urbanisation spreads in these areas, the more vulnerable the areas become towards climate change and less valuable in terms of environmental factors and their elements. Because of the stated, focusing on adapting and improving already built areas with high vulnerability and degradation level should be encouraged with the goal of lessening or stopping negative environmental trends.

As stated above, coastal parts of the Programme area represent those of highest environmental value and also highest vulnerability and are facing big challenges not only regarding climate change, but also regeneration of decades of inappropriate development and management of space and natural resources, while maintaining good economic standards. The littoral part of the Programme territory geomorphologically and territorially belongs mostly to the Croatian and somewhat Montenegrin parts of the Programme.

In conclusion, the most likely area to be impacted by the Programme is the coastline of the Programme area, which mostly refers to Croatia because of the good basis for implementing the outline and main goals of the Interreg Programme and its objectives and its planned actions. Most of the impact is expected from objectives and actions that are focused on developing the tourism sector and R&D. Because of the high impact of tourism on the environment in the area, positive new solutions and transition to sustainability would be of high significance since tourism and all of the branches linked to it generate and have generated the most pressure on the Programme area environment. R&D is highly applicable in the stated areas, since not only the area represents an important resource as a tourist destination, but it is also consisted of highly valuable areas of biodiversity, ecosystems, heritage and landscapes, urban areas, etc., therefore it makes a good basis for R&D, especially for energy efficiency, sustainable solutions and others.

6. EXISTING ENVIRONMENTAL PROBLEMS RELEVANT TO THE PROGRAMME

Based on the analysis carries out in chapter CURRENT STATE OF THE ENVIRONMENT IN THE PROGRAMME TERRITORY AND LIKELY EVOLUTION OF THE ENVIRONMENT WITHOUT IMPLEMENTATION OF THE PROGRAMME the following environmental problems and conflicts have been identified (**Table 14**).

Table 14. Existing environmental problems in the Programme area

Environmental topic	Environmental problem
Air and climate	Air pollution by particulate matter, as a result of heating practices and industries, especially in winter (microclimate characteristics)
Climate changes	Sea level rise – floodings in coastal area
	Increase in total average temperature and more extreme temperature days
	Risk increases as longer droughts and higher extreme temperatures become more common and causes wild forest fires
	Risk of flash floods
	Natural disasters – very frequent hail and extreme changes in meteorological conditions
Water status	Insufficient protection of water sources
	Pollution in Adriatic River Basin District from agriculture nonpoint discharges along the coast and the main rivers in the Adriatic basin
	Chemical and oil discharges from point sources such as industry and port wastes
	Solid waste pollution in coastal area which has transporting via rivers into sea
	Extremely mass bathing tourism
	Littoralization
	Insufficient drinking water quality
	Overexploitation of groundwater
	Uncontrolled discharge of municipal waste-water without connection to public sewer system
	Industry lacking appropriate sewerage and waste-water treatment
Biodiversity	Destruction of seminatural and natural habitats as a result of land reclamation schemes
	Habitat fragmentation due to the construction of transport infrastructure
	Changes in freshwater ecosystems due to the construction of hydroelectric power plants, hydro reservoirs, watercourse regulation and construction of drainage channels for irrigation

Environmental topic	Environmental problem
	Pollution of watercourses
	Abandonment of extensive agriculture
	Loss, fragmentation and degradation of seminatural and natural habitats due to the land use change
	Illegal landfills are a major environmental problem that most affects forests and speleological objects
	Spread of Invasive Alien Species (IAS)
	Loss of biodiversity due effects of climate change
Cultural heritage and landscape	Degradation of rural landscapes due to urbanisation and linear structure development, deruralisation and deagrarisation
	High pressures from tourist sector leading to loss of fundamental heritage and identity values from inappropriate construction Littoralisation and urbanisation on the coastline, inappropriate construction due to high tourism demand, loss of natural and landscape characteristics of specific coastline elements, degradation of visual and ambiental values
	Lack of knowledge and education about landscapes in professional and civil areas Lack of sustainable use of cultural heritage and landscapes as a resource
	Lack of implementation of key goals of European Landscape Convention in praxis from top to bottom
	Loss of historical rural and urban landscapes due to inappropriate construction
Human health	Insufficient connection of the population to the public water supply system
	Light pollution as a result of proximity to urbanized areas
	Elevated noise emissions due to transport
	Negative impact on air quality and noise emissions due to intense traffic
	Risk of earthquakes hazards
	Recycling rates remain at a low level

Environmental topic	**Environmental problem**
Waste Management	Poor management of hazardous wastes
	Lack of statistical information on special types of waste
	Lacking waste management infrastructure

7. SEA OBJECTIVES

SEA objectives have been established in order to assess environmental impacts, taking into consideration the requirements and objectives of relevant strategic documents and international treaties and agreements ratified by the participating countries, analysed in chapter RELATIONSHIP OF THE PROGRAMME WITH OTHER RELEVANT STRATEGIES PLANS AND PROGRAMMES. The selection of objectives was carried out on the basis of programme area, environmental baseline and current trends, and the effects the proposed actions of the programme are likely to have on the environment, as established by preliminary analysis performed during scoping.

Due to interconnectedness of the overall environment, the objectives were not formed per each environmental factor separately, rather an objective covers a group of environmental aspects. Every environmental protection objective is supported by several sub-objectives, based on the established environmental conflicts and registered problems acting as assessment criteria. The impact of the programme may be monitored through indicators, which because of the strategic nature of the programme are qualitative, rather than quantitative.

In addition to the above stated, as a contribution to assessment of compliance of the Programme actions with the DNSH principle, SEA objectives were formed having in mind the possibility to link Strategic Environmental Assessment and requirements of the Taxonomy Regulation, that is, in a way as to maximise the potential to identify the compliance of the Programme actions with the criteria in assessing the significant harm.

Table 15. Environmental protection objectives

Environmental protection objectives	Subobjectives	Environmental factors	Indicator
Improving water quality and reducing water and sea pollution	-Improvement of physical and chemical properties of water bodies -Increase in share of treated waste-water -Sustainable use of surface and groundwater -Protection of aquatic and water-dependent ecosystems -Reducing marine waste	Inland and coastal water Human health Biodiversity	-Status of surface and groundwater bodies -Bathing sea quality ratings -Connection on public sewerage systems -Number of newly constructed WWTPs -Water exploitation
Protection of biodiversity, ecosystems and wildlife	-reduction of environmental pollution -reducing impacts on climate -battling climate changes -awareness raising on importance of biodiversity	Biodiversity Soil Inland and coastal water Climate and climate changes Landscape	- preserved favourable condition of protected species and habitats -involvement of the local community in protection and

Environmental protection objectives	Subobjectives	Environmental factors	Indicator
	- reducing impacts on marine species and habitats -prevention of invasive species spreading		conservation activities
Sustainable management of natural resources	-development of sustainable tourism -rational use of land and resources - increasing the use of energy derived from renewable energy - reducing pressure on natural resources by promoting circular economy	Biodiversity Soil Water Landscape Material assets Waste management	-tourist infrastructure in protected areas -number of energy-efficiency projects implemented -production of energy from RES -number of brownfield areas activated - biomass consumption
Protection of cultural heritage and landscape values	-preservation of cultural assets and archaeological localities -ensuring sustainable landscape management, protection and preservation	Cultural heritage Landscape	- number of plans or pilot projects involving cultural assets - number of implemented landscape character assessments - number of visitors in new tourist destinations - number of sustainable tourist projects and products in rural tourism with implementation of landscape and cultural heritage preservation
Reducing impacts on air and climate	-Reduction of green-house gasses from energy sector -Improvement of energy efficiency -Development of RES projects	Air Climate Human-health	- development of green infrastructure projects

Environmental protection objectives	Subobjectives	Environmental factors	Indicator
	-Improvement of air quality		- emissions and carbon dioxide sink – CO_2 -SECAPs developed -Days of exceedance of air quality limits for PM particles
Strengthening resilience and disaster risk reduction	-Implementation of climate change adaptation measures in plans and projects -Protection and adaptation of infrastructure and population against extreme events (floods and fires)	Human health Material assets	- development of green infrastructure projects -SECAPs developed -number of developed fire alarm systems
Protection of human health and well-being	-increased connections to water utility services - reduced exposure to harmful emissions - reduced risk of flooding	Human health Water Air and Climate	- connections of households to the public water supply system -number projects developed according to BATs -noise protection measures integrated in strategies and physical plans -bathing water quality
Sustainable management of waste	-Use of waste in circular economy -Improving waste management infrastructure -Rehabilitation and closure of illegal landfills	Waste management Biodiversity Air and Climate Human health Soil Water Landscape Material assets	-consumption of biomass as raw material -number of illegal landfills closed -waste statistics

8. ASSESSMENT OF ALTERNATIVES

The focus of the EU cohesion policy in 2021 - 2027 is the promotion of economic, social and territorial convergence, through sustainable competitiveness, research and innovation, digital transition, the European Green Deal objectives as well as the promotion of the European Pillar of Social Rights.

In terms of the key objectives and thematic concentration that are of the most relevance for a competitive and resilient Europe, the EU cohesion policy has set 5 policy objectives supporting growth for the period 2021 - 2027:

1. A more competitive and **smarter Europe** by promoting innovative and smart economic transformation and regional ICT connectivity;
2. A **greener**, low-carbon transitioning towards a net zero carbon economy and resilient **Europe** by promoting clean and fair energy transition, green and blue investment, the circular economy, climate change mitigation and adaptation, risk prevention and management, and sustainable urban mobility;
3. A more **connected Europe** by enhancing mobility;
4. A more **social and inclusive Europe** implementing the European Pillar of Social Rights;
5. A **Europe closer to citizens** by fostering the sustainable and integrated development of all types of territories and local initiatives.

The Territorial Analysis conducted as a part of the preparation of the programming process encompassed policy objectives and specific objectives set out in out in Article 5(1) of Regulation (EU) 2021/1060, and in Article 14 (4) and (5) of Regulation (EU) 2021/1059 and established Interreg-specific objectives that could be supported in the financial period 2021 - 2027 as:

- *better cooperation governance;*
- *a safer and more secure Europe*.

In terms of selection of the policy objectives and related specific objectives, the Territorial Analysis showed the following:

PO 1 - Smarter Europe - related to the policy objective "Smarter Europe", the programme area is insufficiently developed compared to the EU countries and unevenly developed even among three participating countries.

Key strengths recognized within this policy objectives:

- High share of SMEs in regard to job creation and employment and high level of use of Internet in all three participating countries, involvement of SMEs from Croatia and Bosnia and Herzegovina in the Horizon 2020 programme;
- Significant number of entrepreneurial and development supporting institutions in the programme area;
- Significant number of higher education institutions in the programme area.

Potential obstacles for a successful implementation of projects in the programme territory include lower share of research and development (R&D) investments than the EU average, insufficiently effective VET training and a mismatch between education and labour market, and specifically in Bosnia and Herzegovina, a lack of strategic framework in particular for S3 and research and innovation (R&I) infrastructure and a high brain drain.

The policy objective is relevant in the context of developing the programme area. There is an opportunity for the development of projects related to Research and Innovation (1) and SME Competitiveness (2) - both equally relevant:

1. The main focus within research and innovation should be on inciting the cooperation between education and research institutions and SMEs in regard to knowledge transfer for product and service development and skills that are aligned with S3 areas, identified as key for the regional development (in Bosnia and Herzegovina, the basis for the projects of R&D should be guided with the Strategy of Science Development in Bosnia and Herzegovina (2017-2022)).
2. SME support infrastructure should be more connected cross-border, serving as a facilitator for new partnerships across industries that encourage modernization and sustainability.

Regarding the feasibility of successful implementation of future projects in the policy objective "Smarter Europe", the capacities are sufficient in terms of the number of high education institutions, SMEs, and entrepreneurial support infrastructure. However, funds regarding digitisation, have been mostly targeting public sector and relevant institutions at state level. Since the usage of digital platforms has been taken up by citizens, within the funding opportunities, SMEs also should be included to support their digital transformation processes.

The following specific objectives are most likely to be relevant in the upcoming period:

- SO 1.1 - Developing and enhancing research and innovation capacities and the uptake of advanced technologies;
- SO 1.3 - Enhancing sustainable growth and competitiveness of SMEs and job creation in SMEs, including by productive investments.

PO2 - Greener Europe - all three participating countries have developed strategic documents with the goal of controlled energy development and environment protection. The key strength, among other things, is a significant potential for the use of renewable energy sources in all three countries that need to be exploited. The rich resources of clean and drinking water that need to be preserved, a need for the implementation of water saving methods, prevention of source pollution and wastewater treatment mechanisms are also highlighted. A great advantage is the geographical position of all countries with great tourism and cultural potential based on the natural resources and biodiversity that needs to be preserved.

The recognized obstacles for the successful implementation of projects in the upcoming period are the size and scope of projects in "Greener Europe", as well as different focuses and development aims of the participating countries. A common problem in all three countries is non-diversity of used energy resources and insufficient usage of renewable energy sources (RES). All three countries have different

approaches in current usage of RES and in their plans for future usage due to each countries' specific water potential.

The policy objective, especially some of its specific objectives are considered to be relevant in the context of developing the programme area. There is a clear opportunity for the development of projects that would be aimed at specific goals: promoting energy efficiency and reducing greenhouse gas emissions; promoting renewable energy; promoting climate change adaptation and disaster risk prevention, resilience, taking into account ecosystem based approaches; promoting access to water and sustainable water management; promoting the transition to a circular and resource efficient economy; and enhancing protection and preservation of nature, biodiversity and green infrastructure, including in urban areas, and reducing all forms of pollution.

- Considering increasing energy demands and increasingly limited resources, the development of energy saving and energy efficiency enhancement methods needs to be a priority. Increasing energy efficiency will bring environmental benefits, reduce greenhouse gas emissions, enhance energy security, reduce the costs of energy and energy poverty.

- RESs already have a significant share in the total production of energy in some parts of the programme area, but the main source is hydro energy, while the use of other renewable sources (such as wind and solar energy) hasn't yet become as frequent. The possibilities in using RES are numerous and very profitable in the long run, but they require a significant number of financial means, as well as an extensive legal framework so they are mostly regulated on a national level.

- All three countries face similar problems whose roots can be found in global warming, melting snow and ice, temperature extremes and other consequences of climate change whose further spread needs to be prevented. This includes improving flood defence systems, strengthening firefighting services, which is underdeveloped in many parts of programme area, and renovating buildings (also mentioned in the context of energy efficiency) to be more resistant to ground vibrations. Strengthening efforts on climate protection, resilience building, prevention and preparedness in the region is therefore crucial.

- Interregional cooperation is particularly important for border areas, and there is a need to develop regional water supply systems to relieve local resources and reduce the risk of them drying out.

- The transition to a circular economy is necessary if greenhouse gas emissions are to be completely reduced, as half of the emissions come from resource extraction and processing. It is necessary to develop awareness of the need for a sustainable lifestyle, encourage small and medium-sized enterprises (SMEs) to develop innovative and more efficient production methods (and point out the benefits it brings) and encourage research and innovation.

- The programme area shows great interest in developing tourist aimed projects, and the opportunity is to link the tourism industry to the circular economy concept, apply the circular economy as a new conceptual framework for guiding a sustainable, resilient and future proof recovery of the travel and tourism industry.

- Cooperation of whole programme area on the issue of nature protection and biodiversity is crucial. It is necessary to approach the issue strategically and work on raising the awareness of the local population about the need for ecological connectivity, maintaining biodiversity, maintaining the ecological quality of water surfaces, warning of invasive species and the danger of soil and water pollution.

Regarding the feasibility of successful implementation of future projects in the policy objective "Greener Europe", the capacities are considered to be favourable (public institutions which conduct energy renovation, development agencies and tourist boards that participate in nature protection projects). Nevertheless, in order to achieve better energy efficiency, reduction of pollution caused by the excessive usage of fossil fuels in transport and heating and better environment protection in general, further steps are required. This includes construction of new capacities of RES and further development and diversification of existing energy sources. The following specific objectives are most likely to be relevant in the upcoming period:

- SO 2.1 - Promoting energy efficiency and reducing greenhouse gas emissions;
- SO 2.4 - Promoting climate change adaptation and disaster risk prevention, resilience, taking into account ecosystem based approaches;
- SO 2.6 - Promoting the transition to a circular and resource efficient economy;
- SO 2.7 - Enhancing protection and preservation of nature, biodiversity and green infrastructure; including in urban areas, and reducing all forms of pollution.

PO3 - Connected Europe - the key strengths of the development of the programme area are manifested through the potential for the production of alternative fuels from domestic materials already used in other sectors, well-developed road transport in Croatia that needs regular maintenance and monitoring and the potential for better integration of the railway system into existing public transport systems. The diversity of possibilities in terms of forms of transport, given the geographical location (maritime, air, road, rail) can create more opportunities for the integration of multiple forms of transport. The suitable terrain and temperate climate are favourable conditions for the development of active walking and cycling and encouraging sustainable mobility.

In all programme countries, the biggest problem is the underdevelopment of railway transport, as well as its poor integration with other forms of transport. Given the limited financial resources of the programme countries and the low level of awareness and knowledge about sustainable modes of transport, it is reasonable that the use of alternative, renewable energy sources in all three countries has not yet taken root. Developing awareness and educating the population about the cost-effectiveness of sustainable transport is the first step that needs to be taken.

Following the analysis, the policy objective "Connected Europe" does not seem to be relevant enough for the programme area and should not be considered for financing in the upcoming period.

PO 4 - Social Europe - the current situation in the programme area is seen as mostly under-managed in terms of sustainability of health and social care systems which show a decrease in medical staff, while the aging of population is increasing.

Key development opportunities are found within the recognized need for deinstitutionalization in health and social care, well-developed labour market infrastructure in the programme area and continuous increase in tourism demand. The health system has a well-placed infrastructure that can be modernised to be more efficient. There are wide opportunities in terms of natural and cultural heritage and diversification of tourism needs and use of new technologies in planning tourism development.

Obstacles for the successful implementation of projects in the upcoming period are recognized as: mismatch between education institutions and labour market needs, demographic trends and an increase in aging population and brain drain, higher risks in poverty within elderly, people with disabilities, minorities and low sustainability of cross-border projects in tourism related to lack of clear management of jointly developed products.

The policy objective, especially some of its specific objectives are considered to be relevant in the context of developing the programme area and there is an opportunity for the development of projects that would be aimed at labour market infrastructure, access to health and tourism and culture, in particularly:

1. Labour market support institutions that should work towards bringing closer the academic and the business sector, developing programmes that ensure a better match between education and business and guiding the lifelong learning programmes, especially for youth, minorities and people with disabilities;
2. Access to health is perceived as a potential in terms of the possibilities for deinstitutionalization of services, cross-border cooperation with key enabling technology that would ensure the high standards of the services and staff but also health tourism;
3. Using new technology and social innovation to develop products and services in tourism, based on user experience and data driven decision making in order to guarantee sustainability of the sector.

Following the analysis, the policy objective “Social Europe” is relevant for the programme area and should be considered for financing in the upcoming period, since possibility for relevant cross-border partnership in this policy objective is considered to be highly likely, specifically for:

- SO 4.2 - Improving equal access to inclusive and quality services in education, training and lifelong learning through developing accessible infrastructure, including by fostering resilience for distance and on-line education and training;
- SO 4.5 - 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;
- SO 4.6 - Enhancing the role of culture and sustainable tourism in economic development, social inclusion and social innovation.

PO 5 - Europe closer to citizens - the current situation is promising, but in need of improvement. Key strengths are recent uptake in the number of strategic documents in programme countries as well as the growing role that regional development agencies play in sustainable development. The main obstacle for the successful implementation of projects in the upcoming period is certainly a lack of strategic documents related to the international programme area and the inability to produce them. Other obstacles are recognized as underdeveloped rural areas, poor demographic conditions in both urban and other areas and the underdevelopment of CSOs.

The policy objective, especially some of its specific objectives are considered to be relevant in the context of developing the programme area, specifically: fostering culture, natural heritage, sustainable tourism in both urban and rural areas. Additionally, there is a clear opportunity for the development of projects that would be aimed at developing rural tourism capacities in the programme area. Additional capacity is represented by a large number of LAGs and local development agencies that have the common goal of increasing the attractiveness of the development structure of the programme area, encouraging entrepreneurship, employment, and raising the competitiveness of rural and urban areas. Following the analysis, the policy objective "Europe closer to citizens" does not seem to be relevant enough for the programme area and should not be considered for financing in the upcoming period. The reason for this is the absence of strategic documents that influence all three programme countries, which are supposed to be the primary prerequisite for financing and implementing projects in the programme area.

Regarding the feasibility of successful implementation of future projects in the policy objective "Europe closer to citizens", the capacities, although growing, are considered to be insufficient. In the previous cross-border programme, similar projects have not been financed and a possibility for relevant cross-border partnership in this policy objective is unlikely to be fostered.

ISO 1 - A better cooperation governance

In the Interreg specific objective "A better cooperation governance", the current situation is seen unsatisfactory, especially in regard to civil society development, good governance and transparency, but also in regards to public administration capacities. Key strengths that are recognized are the registries of civil society organisations and a relatively great number of organisations and good practice examples for cooperation between administration and funding possibilities for public administration capacity building on EU level. An increase in governance transparency, especially related to budget planning is noticeable.

Obstacles for the successful implementation of projects in the upcoming period are recognized as low achievements regarding political participation, political culture and civil liberties across countries, with Croatia showing the best results between all three countries. What has also been recognized as an obstacle are low financial capacities of certain municipalities and fragmentation of governance.

This specific objective is considered relevant in terms of the overall development of the area and empowerment of the dialogue and interdisciplinarity of governing approach which can have a multiplier effect on other policy areas in need of further democratization. Further democratization can

provide better knowledge of the needs in a specific sector and thus better policy. However, in relation to other policy objectives recommended for funding, this one is proposed as optional if in the programming phase there will be space for financing, and if not, it is recommended to integrate the principle of participatory and greater sectoral dialogue in public policy through other projects as much as possible.

Possibility for relevant cross-border partnership in this Interreg specific objective is considered to be likely, especially for enhancing sustainable democracy and by supporting civil society actors and their role in reforming processes and democratic transitions.

ISO 2- A safer and more secure Europe

In the Interreg specific objective "A safer and more secure Europe", the current situation is promising, but in need of improvement. The issue of security has undergone a transformation in the programme area, but also in the whole of Europe in recent years. This happened with the outbreak of the migrant crisis, which requires increased border control and increased cooperation of all European countries. The programme area is of great importance because it represents the link between Greece and Turkey, where the largest number of migrants from the Middle East come from, and the rest of Europe, which is mostly their ultimate destination. This issue requires a large degree of interregional cooperation between the three programme countries. Croatia with its external border represents the link between the region (in this case Bosnia and Herzegovina and Montenegro) and the EU.

The key strength, among other things, is an important strategic position of the region, which can serve as an incentive for extra funds from the European Union. This can also encourage further cooperation with Frontex and other European border protection organizations. Developed readmission agreements represent another advantage that the programme area has. Obstacles for the successful implementation of projects in the upcoming period are recognized as the lack of border police officers in Bosnia and Herzegovina, problem of illegal immigration and low number of international protection applicants out of total number of immigrants. There is also an issue of the increasing number of illegal immigrants in all three countries, as well as underdeveloped administration capacities to process international protection requests (especially in Bosnia and Herzegovina).

Following the analysis, the Interreg specific objective "A safer and more secure Europe" does not seem to be relevant enough for the programme area and should not be considered for financing in the upcoming period. Regarding the feasibility of successful implementation of future projects in the Interreg specific objective "A safer and more secure Europe", the capacities, although growing, are considered to be insufficient. In the previous cross-border programme, similar projects have not been financed and a possibility for relevant cross-border partnership in this policy objective is unlikely to be fostered.

In order to get the best possible information from the potential beneficiaries of the future programme and to ensure that all relevant stakeholders have an opportunity to express their opinion, a wide consultation process was organised. The stakeholder consultations were conducted in the period 17

May - 30 June 2021, through a series of targeted consultations methods - online survey, interviews, workshops. National Authorities of the participating countries identified the stakeholders to be involved in the consultation process.

The consultations targeted the following groups of stakeholders: public administration bodies, chambers, development agencies, science/technology parks, centres for entrepreneurship, local/regional government units, public institutions, LAGs, utility companies, educational/scientific institutions, public hospitals, health centres, CSOs, tourist boards, SMEs.

Based on the further prioritization of policy and specific objectives made by the Programming Task Force (PTF), selected SOs were the subject of the second round of consultations - workshops with the stakeholders from the participating countries, with the purpose of further thematic concentration.

In the PO Smarter Europe, both SOs were seen as important. It was noted that SMEs should be seen as direct beneficiaries of programme grants (in SO 1.3.) and target groups of research activities (in SO 1.1.). Regarding supporting SMEs as beneficiaries (in SO 1.3.), it is best done directly, not through business support organisations. Also, in the frame of SO 1.3, there is a proposal for a strategic project to provide SMEs with project grants or a Small Project Fund scheme.

The policy objective Greener Europe has been stressed as very important - all three specific objectives have their reasons for being included in the programme. Energy efficiency has been seen as very important in the context of the Green Deal, but stakeholders are of consideration that this should be tied together with the usage of renewable energy, and major investments in energy renovation of buildings should be avoided, and give place to pilot projects, concrete measuring processes, smaller investments in public lighting and strategic planning - SECAP. These plans have been stressed also in the SO dealing with climate change adaptation. It is agreed that knowledge and capacities about the impact of climate change, vulnerability and the ability to adapt to it are limited. There is a need for solving the problem of climate change through supporting the activities of "cooling" urban areas, strengthening the institutional capacity of the national and local level and raising awareness of decision makers to integrate climate change into their plans at the local level. Circular economy concept should be widely promoted and connected to the improvement of the public infrastructure related to sustainable waste management. There is a need for continuous campaigns and education to raise awareness and change behaviour of citizens to undertake concrete actions that will improve circular use of resources in the programme area.

PO4 Social Europe, based on the whole process, can be seen as a third priority, although this is not completely clear when talking about specific objectives. When it comes to education, there is a problem with national curricula that are difficult to influence and harmonize. Cross-border cooperation aims to avoid mirror activities and it is necessary to think carefully about which of the activities are necessary to improve education in all three countries. There is a need for cross-border cooperation on joint activities such as inclusion and other soft activities.

There is a great need for the improvement of health care/social care infrastructure, and introduction of new technologies in the whole system. There is a lack of new approaches to the provision of health

care/social care services, so additional education and promotion of community-based services is necessary.

Tourism and culture have not been marked as the most important ones (in the interviews and questionnaires), but their impact on the region and possibility of creating long lasting joint cross-border projects of less developed regions is something that should be taken into account. Revitalizing the offer of cultural and tourist destinations in less developed areas by creating a common cultural and tourist product and thus contributing to socio-economic problems can be key for the success of the programme.

To conclude, the process of stakeholder consultations, although very informative, was not able to clearly select certain areas that are more important than others. This decision is clearly a strategic one that should be made by decision makers appointed and brought together in the Programming Task Force. The process showed that all areas and specific objectives are important to some extent and quality projects will be submitted for either of them - the need for addressing problems in the programme area is present and capacity for project implementation is also visible. This is also important because it shows that no decision on programme priorities can be completely inaccurate.

So far, 8 Programming Task Force meetings have been held from December 2019 to March 2022.

9. ASSESSMENT OF LIKELY SIGNIFICANT IMPACTS ON THE ENVIRONMENT

Interreg has established specific objectives to support in the 2021 - 2027 financial period in terms of better cooperation governance and a safer and more secure Europe. Among the policy objectives to be considered taking into consideration territorial analysis results, are PO1 Smarter Europe, PO2 Greener Europe and PO4 More Social Europe. Selected Policy objectives will be achieved through selected specific objectives within priority axes, each specific objective supported by a series of actions. Result indicators are identified for every specific objective, for which reason the assessment will focus on specific objectives as the most specific factors of development direction, but analysing every planned activity in terms of its location, scope, impact and intensity, if possible. Indicators will be used as parameters of activity intensity in that context.

The assessment will be assisted by analytical matrix which allows to directly connect the impacts of an activity with an environmental factor/objective, to establish relationships between the elements analysed and to determine the scope and cumulative nature of impacts.

9.1 Framework methodology for the assessment of likely significant impacts

The assessment of likely significant effects of the Programme implementation shall be conducted in conformity with the best practice methodology[5]. The applied methodology is generally accepted and is based on identification of impacts through analytical matrix, then comparing the actions of the Programme (in rows) to the previously established environmental protection objectives (in columns).

Environmental protection objectives indicate the desired direction of change of state and are formed for environmental factors in relation to local specificities and issues. They present the basis for testing the effects of the Programme on the environment, that is, it is to be concluded whether the objectives of the Programme contribute to achieving the selected environmental protection objectives or not. The objectives defined for strategic environmental assessment are derived from environmental protection documents adopted on the international level, European Union level, national and regional level, and from the overview of the environmental baseline and the environmental problems established by the experts preparing the Environmental Report. The objectives are accompanied by environmental protection indicators, that is the criteria used for monitoring the achievement of objectives and impact of the plan on the development of the environment.

---

[5] United Nations Economic Commission for Europe (2012.). Resource Manual to Support Application of the Protocol on Strategic Environmental Assessment. UNITED NATIONS New York and Geneva

The Regional Environmental Center for Central and Eastern Europe (2001.). International Workshop on Public Participation and Health Aspects in Strategic Environmental Assessment. Szentendre, Hungary.

Strategic Environmental Assessment. - Practice-Orientated Training for Policy Makers, Administration Officials, Consultants and NGO Representatives

Implementation of Directive 2001/42 on the Assessment of the Effects of Certain Plans and Programmes on the Environment". European Commission DG Environment. Undated.

Andreas Sommer (2005.). Strategic environmental assessment: From scoping to monitoring. Content requirements and proposals for practical work. Hallein.

Guidance on Integrating Climate Change and Biodiversity into Strategic Environmental Assessment, 2013.

The assessment of impacts consider the type and scope of the planned interventions and actions in relation to the planned location of their implementation if the location can be established. Because of the strategic nature of the programme, environmental baseline shall be used to define sensitivity of the area in general, and the description of the likely development of the environment without the implementation of the Programme, that actually represents the zero alternative, shall be used as a reference point for the assessment. The significance of the impacts shall be determined by expert opinion, based on the sensitivity of the area in dependence of the nature of the planned activities, that is, pressures, and the magnitude of change. The said process takes into account the duration, spatial scope and the intensity of the impact, where possible. The selected tool for the presentation of impacts is analytical matrix which identifies the interventions of the Programme with likely negative impacts on the environment.

Sensitivity of the receptor is a characteristic defined through 1) existing regulations and guidelines, 2) societal value (economic, social and environmental) and 3) vulnerability for the changes. It is assessed in its current state before the occurrence of any changes arising from the Programme implementation. The overall sensitivity of the receptor is established so that the highest protection and societal values are considered, which are then adapted according to the vulnerability. The **Table 16** describes the sensitivity categories to be used in assessment.

Table 16. Receptor sensitivity categories

Very high	The receptor is protected by law and is very valuable for the society and it is very likely it shall be endangered even by lesser impacts of the proposed development.
Moderate	Regulation sets recommendations or reference values for an object in the impact area, or the project may impact an area conserved by a national or an international program. The receptor has a high societal value or is protected by law, but has low vulnerability to change.
Low	Few or no recommendations which add to the conservation value of the impact area, and no regulations restricting use of the area (e.g. zoning plans).

Magnitude of change describes the characteristics of the changes likely to be caused by the Programme. Magnitude of change is a combination of 1) intensity (expressed by unit of measurement and compared to reference value) and direction of change, which may be positive (green) or negative (red), 2) spatial extent (where applicable) and 3) duration of the impact, including reversibility of change. Magnitude of change is assessed irreverently of the sensitivity of the receptor to proposed changes. In the assessment of magnitude of change, intensity should be taken as a starting point, and then adapted based on the spatial extent and duration to obtain an overall estimate. The **Table 17** describes the magnitude of change to be used in assessment.

Table 17. Magnitude of change

High	The proposal has beneficial effects of high intensity and the extent and the duration of the effects are high.
Low	An effect is positive and observable, but the change to environmental conditions or on people is small.
No impact	No change is noticeable in practice. Any benefit or harm is negligible.
Low	An effect is negative and observable, but the change to environmental conditions or on people is small.
High	The proposal has harmful effects of high intensity and the extent and the duration of the effects are high.

The **Table 18** is used in the assessment of significance, with the positive effects marked in green, and the negative in red. Since the most relevant dimensions for characterization of impacts depend on the type of impact, discretion from the expert is required, so the decisions are accompanied with respective explanations.

Table 18. Overall significance of the impact

Impact significance		**Magnitude of change**				
		High	Low	No change	Low	High
Sensitivity of the receptor	Low	Low	Low	No impact	Low	Low
	Moderate	High	Low	No impact	Low	High
	High	High	High	No impact	High	High

Apart for the magnitude of impacts, impacts are also assessed based on their pathway and interaction, as well as cumulative impacts. Taking into consideration the abstract nature of the programme, the pathway of the effects were sometimes difficult to assess.

Regarding the likely transboundary impact of the Programme implementation, the document is cross-border in both nature and scope, its aim being to have cross-border impacts. Therefore, the impacts of the actions/objectives in the SEA Report will be considered as transboundary by default, and consultations will be held in both participating countries. The SEA Report will also analyse the likely transboundary impacts on the territories not included in the Programme – so far there is no reason to assume that there will be cross-border impacts on Hungary, Bosnia and Herzegovina or Romania.

Pursuant to the *Environmental Protection Act* (OG 80/13, 15/18, 14/19, 127/19) of the Republic of Croatia, Appropriate Assessment is carried out for strategies, plans and programmes which individually or together

with other strategies, plans and programmes have a likely negative impact on conservation objectives and integrity of the ecological site area. Pursuant to the *Nature Protection Act* (OG 80/13, 15/18, 14/19 and 127/19) and the *Environmental Protection Act* (OG 80/13, 15/18, 14/19, 127/19), at the request of the Managing Authority, the Ministry of Economy and Sustainable Development brings a Decision whether the Main Assessment of the Programme is to be conducted. Following the results of the preliminary assessment on ecological network, the Decision was brought (CLASS: UP/I 612-07/21-37/259; File No.: 517-10-2-3-21-3) of 22 October 2021 that the Programme is acceptable for NATURA 2000 ecological network and the Main Assessment on ecological network needs not be carried out.

9.2 Results of the assessment of the impact of the implementation of the Development Programme on environmental objectives

The result of the assessment of the impact of the implementation of the Programme on environmental objectives is presented through the analytical matrix (**Table 19**). As mentioned in the previous chapter, the analytical matrix presents the impacts by contrasting the Programme's actions with the established environmental objectives of the strategic assessment.

Table 19. Analysis of the impact of Programme implementation on SEA objectives

DRAFT INTERREG PROGRAMME								
Programme Actions	**SEA OBJECTIVES**							
Impact assessment	Improving water quality and reducing water and sea pollution	Protection of biodiversity, ecosystems and wildlife	Sustainable management of natural resources	Protection of cultural heritage and landscape values	Reducing impacts on air and climate	Strengthening resilience and disaster risk reduction	Protection of human health and well-being	Sustainable management of waste
PA1 - Smart investments in research, innovation and competitive entrepreneurship The level of investment in research and technological development in the participating countries is still low. Private sector research and development is very limited, and cooperation between universities and industry is insufficient, resulting in low technology transfer. Also, there is a lack of practical research applicable in the private sector, exchange of experiences and positive practices within the private sector, and cross-sectoral cooperation on the development of new technologies, products, etc. The number of patents is low in all countries. Therefore, the main challenges of the programme area are increasing innovation and research capacity, strengthening knowledge transfer, adding value to existing economic activities and creating new jobs. Although the SME sector represents an important opportunity for local economies, it faces many challenges such as fragmentation, limited financial and managerial capacity of entrepreneurs, low turnover, lack of innovation, limited product range, and low export capacity. Participating countries lag behind in competitiveness compared to other EU Member States. The level of skills and experience needed for adding values to products and marketing them, especially internationally, is relatively low. The area lacks a skilled labour force, so it is necessary to invest in human capacity building for the implementation of new technologies and smart business solutions.								
SO 1.1 - Developing and enhancing research and innovation capacities and the uptake of advanced technologies								
1. Supporting cross-border innovation and technology based on smart specialization approach and improving cooperation between research institutions, SMEs, public sector, and business support organisations								

DRAFT INTERREG PROGRAMME								
Programme Actions	**SEA OBJECTIVES**							
Impact assessment	Improving water quality and reducing water and sea pollution	Protection of biodiversity, ecosystems and wildlife	Sustainable management of natural resources	Protection of cultural heritage and landscape values	Reducing impacts on air and climate	Strengthening resilience and disaster risk reduction	Protection of human health and well-being	Sustainable management of waste
The action covers cooperation between public, research, education institutions, SMEs and business centres and hubs with the objective to enhance joint innovation and technological solutions, which has no significant impacts on SEA objectives. Therefore, no mitigation measures are proposed for this activity.								
2. Strengthening and modernising business support services (including small scale infrastructure, preferring nature-based solutions) that could help with: trainings, marketing, developing and or implementing new services/products, using ICT and new technologies, implementing innovative solutions in business organisation and processes (blockchain, big data, cloud computing, Internet of Things, advanced manufacturing, robotics, artificial intelligence, cybersecurity, etc.)								
The action covers strengthening and modernising business support services like marketing, ICT technologies or implementing innovative solutions in business organisation and processes data, which has no significant impacts on SEA objectives so no mitigation measures are proposed for this action.								
3. Accelerating innovation and technology transfer (e.g. blue and green economy, circular economy, agriculture, food production, fisheries and aquaculture, climate change, renewable resources, smart manufacturing, biodiversity, skills development for smart specialization).								

DRAFT INTERREG PROGRAMME								
Programme Actions	**SEA OBJECTIVES**							
Impact assessment	Improving water quality and reducing water and sea pollution	Protection of biodiversity, ecosystems and wildlife	Sustainable management of natural resources	Protection of cultural heritage and landscape values	Reducing impacts on air and climate	Strengthening resilience and disaster risk reduction	Protection of human health and well-being	Sustainable management of waste
The action is non-structural and is focused on increasing speed and reducing risk in innovation development and technology transfer with focus on blue and green economy, circular economy, food protection, climate change, renewable resources etc. The action should also emphasise bridging over research and commercialisation of the final product. This action has no significant or direct impact on SEA objectives but moderate positive impacts are possible to sustainable management of natural resources through support of blue and green economy, and sustainable management of waste in view of introduction of circular economy principles. Since there are no negative impacts identified, no mitigation measures are proposed.								
4. Supporting pilot lines, early product validation, certification, advanced manufacturing capabilities including via science – business collaboration								
This action supports precommercial new-technology based products which have a confirmed position in the market. It has no direct effects on the SEA objectives, but is intended to benefit the environment in the long-term through the application of new technology and innovative solutions, in particular air and climate, sustainable management of natural resources and sustainable management of waste, but effects are not expected to be significant within the programming period.								
5. Pilot actions aimed at transferring good practices on green economy trends and standards								
Pilot actions planned may be test procedures, new instruments, tools, experiments or transfer of practices. In total 10 pilot actions are foreseen to be carried out within projects. No direct or significant impacts on SEA objectives are identified by this action, for which reason no mitigation measures are proposed.								
6. Enhancing support services for SMEs and entrepreneurs to improve their access to research and technological innovations								
Support services may include any kind of financial or non-financial help provided to SMEs, all of which are non-structural and have no direct or significant impacts on SEA objectives and therefore require no mitigation measures.								
7. Enhancing transfer and upscaling of proven green solutions to reduce the environmental footprint of production processes and open up green business opportunities								

DRAFT INTERREG PROGRAMME								
Programme Actions	**SEA OBJECTIVES**							
Impact assessment	Improving water quality and reducing water and sea pollution	Protection of biodiversity, ecosystems and wildlife	Sustainable management of natural resources	Protection of cultural heritage and landscape values	Reducing impacts on air and climate	Strengthening resilience and disaster risk reduction	Protection of human health and well-being	Sustainable management of waste
The action will encourage the use of green or sustainable solutions in manufacturing sector, which will certainly positively affect the environment, as in the reduction hazardous emissions. The action will have long-lasting positive impacts on the goal of Sustainable management of natural resources in particular land use, Protection of biodiversity, ecosystems and wildlife and Reducing impact on air and climate through reducing emissions into the air, soil and water, and consequently also Protection of human health and well-being.								
8. Improving capacities and integration of innovative solutions using ICT for public sector needs								
The action aims at building capacities in the public sector for use and integration of innovative solutions using ICT. Digitalisation is a key factor in reducing human errors and increasing safety, security and efficiency. In the programme territory, digitalisation is present in the public sector, and its use has been steadily growing in Croatia, but it is still underdeveloped in Bosnia and Herzegovina and Montenegro. Therefore, apart from building capacities, it is necessary also to include information, education and support to the public in use of e-services of public administration. This need is even more evident in rural areas, with low connectivity to the Internet, for which reason preconditions have to be fulfilled before concrete results can be expected. Even though the activity contributes to digital strategy objectives there are no impacts on SEA objectives for which reason no mitigation measures are proposed.								
9. Supporting the establishment of Living Labs, test-beds and ecosystems to promote the development and actual use of innovative solutions								
The action supports establishment of experimental approach to research and marketing through collaboration and share of experiences, knowledge and information between the stakeholders and partners in real-life settings in a wide range of sectors. Living labs are already present in all three countries, and may be used as preliminary platform for implementation of the action. As the facilities are intended to be “practice grounds” for testing the solutions, and boosting cooperation, and as only the positive results will be exploited in the future, it is assessed that the action will generate no significant impacts within this programming period.								
10. Supporting cooperation of public authorities in development, implementation and monitoring of smart specialisation strategies and other policy tools for development of innovative economy								
Given the lack of broadband strategy in Bosnia and Herzegovina, and insufficient level of preparedness for information society in all three countries, this action is a prerequisite for further growth of digital society and economy. The action itself however has no direct or significant impact on SEA objectives for which reason no mitigation measures are proposed.								

DRAFT INTERREG PROGRAMME								
Programme Actions	**SEA OBJECTIVES**							
Impact assessment	Improving water quality and reducing water and sea pollution	Protection of biodiversity, ecosystems and wildlife	Sustainable management of natural resources	Protection of cultural heritage and landscape values	Reducing impacts on air and climate	Strengthening resilience and disaster risk reduction	Protection of human health and well-being	Sustainable management of waste
11. Establishing connections and long-term cooperation between research institution especially in joint capacity building for innovation and technology transfer to businesses								
The action aims at 22 organisations cooperating cross-border or 23 organizations cooperating across borders after project completion. As the action is directed to cooperation and research, it has no direct or significant impacts on SEA objectives, for which reason no mitigation measures are proposed.								
SO 1.3 - Enhancing sustainable growth and competitiveness of SMEs and job creation in SMEs, including by productive investments								
1. Supporting local SMEs to face challenges related to their size, limited resources (such as skills and finance) or industry and market conditions								
Transition and developing countries face great challenges in face of globalisation, especially in terms of taking advantage of investment opportunities due to lack of capacities, information and resources. However, SMEs are the major source of domestic and export revenues and budget, especially given the high employment rate in the public sector. The action should therefore include simplification of legal and regulatory framework, accessible and easy finance, ensuring adequate infrastructure and education, and business support services. The action will surely boost economy, but will have no direct impacts on environmental objectives.								
2. Improving the capacity of micro and small entrepreneurs such as family farms regarding marketing, branding, e-business, competitiveness including education and training in entrepreneurship skills								
Family farms are a typical and well adopted small-scale agricultural system benefiting one family/owner. With the lack of specialized large farmers and rural cooperatives, family farms are very supported in Croatia and they are easily eligible for ecological and organic agriculture and innovative local product certification. However, with deruralisation trends in the programme area, labour								

DRAFT INTERREG PROGRAMME								
Programme Actions	**SEA OBJECTIVES**							
Impact assessment	Improving water quality and reducing water and sea pollution	Protection of biodiversity, ecosystems and wildlife	Sustainable management of natural resources	Protection of cultural heritage and landscape values	Reducing impacts on air and climate	Strengthening resilience and disaster risk reduction	Protection of human health and well-being	Sustainable management of waste
force in the countryside is in deficit. In more isolated areas, such as in the hinterland or the islands, only traditional management mode persists. The action should therefore reach out to the underperforming in addition to supporting the already established enterprises. Although in the long-term the action will build agricultural practices, they will be in line with environmental guidelines and no negative impacts to SEA objectives are expected from this action.								
3. Developing and supporting existing business clusters and networks of SMEs in applying ICT, innovation and new technologies to develop and promote common products for local cross-border and international market								
The action is aimed at boosting cooperation, especially cross-border in promotion of local products. It is fully non-structural and no negative impacts to SEA objectives are expected from this action.								
4. Implementing joint pilot actions to introduce product and/or process innovations								
The action provides opportunity for cross-border innovative product sharing, with expected 13 pilot actions by the end of programming period. As the action regards production process, it will be implemented in the existing facilities and will therefore bring about no new impacts to the environment in relation to the existing state.								
5. Supporting actions related to development of innovative products and services (e.g. patents, industrial design, trademark and innovation etc.)								
The action provides opportunity for cross-border innovative product sharing, with expected 13 pilot actions by the end of programming period. As the action regards production process, it will be implemented in the existing facilities and will therefore bring about no new impacts to the environment in relation to the existing state.								

DRAFT INTERREG PROGRAMME								
Programme Actions	**SEA OBJECTIVES**							
Impact assessment	Improving water quality and reducing water and sea pollution	Protection of biodiversity, ecosystems and wildlife	Sustainable management of natural resources	Protection of cultural heritage and landscape values	Reducing impacts on air and climate	Strengthening resilience and disaster risk reduction	Protection of human health and well-being	Sustainable management of waste
6. Promoting and introducing (international) certifications and standards of existing and new products and services								
This is a soft action which regards information to the business in order to ensure compliance with the international standards and provide opportunities for manufacturers to make their products more sustainable. It is fully non-structural and no negative impacts to SEA objectives are expected from this action.								
7. Cross-border development, adaptation and exchange of best practices in digitisation and application of new technologies, processes, products or services to be directly used by the enterprises								
Digitalisation today is essential for business success, especially in providing new revenue and values. It improves the efficiency of operations, reducing human errors and operational costs. Digitalisation of business may be considered from two perspectives: businesses and their users/consumers, both in the need for use and information and education. Apart from visibility, companies may want to take advantage of better communication channels through mobile applications and social media. Digital transformation should therefore open to innovations and requirements of the moment. The action is fully non-structural and no negative impacts to SEA objectives are expected from this action. Positive impacts to reduction of emissions, rational management of natural resources, waste management and energy efficiency may be expected in the long-term, but not of strategic significance within the programming period.								

DRAFT INTERREG PROGRAMME								
Programme Actions	**SEA OBJECTIVES**							
Impact assessment	Improving water quality and reducing water and sea pollution	Protection of biodiversity, ecosystems and wildlife	Sustainable management of natural resources	Protection of cultural heritage and landscape values	Reducing impacts on air and climate	Strengthening resilience and disaster risk reduction	Protection of human health and well-being	Sustainable management of waste
PA2 - Green investments in environmental protection and efficient risk management Policy Objective "Greener Europe" is extremely important for the development of the programme area due to the common problem of all three countries. Diversity in the use of energy resources and insufficient use of RES are among the main challenges. In the programme area, there is significant potential for the use of RES, but the use of Res in the programme area outside Croatia is low. However, further steps are needed to achieve better energy efficiency, reduce pollution caused by the excessive use of fossil fuels in transport and heating, and better environmental protection in general. Environmental risks and disasters associated with climate change, such as floods or fires, are an increasingly common issue in the programme area. The programme area divides watercourses and natural ecosystems, so common problems (special attention should be paid to the fact that the Mediterranean is a hotspot of climate change) and potential risks transcend borders of the cross-border area. The principles of circular economy are poorly implemented in the programme area.								
SO 2.1 - Promoting energy efficiency and reducing greenhouse gas emissions								
1. Developing and implementing joint pilot and demonstration actions on innovative technologies, measures and solutions in the field of energy management (collection of integrated data and the interoperability of data through digital technologies,) and reducing greenhouse gas emissions (e.g. monitoring of air quality and other parameters in public buildings on a larger scale)								

DRAFT INTERREG PROGRAMME								
Programme Actions	**SEA OBJECTIVES**							
Impact assessment	Improving water quality and reducing water and sea pollution	Protection of biodiversity, ecosystems and wildlife	Sustainable management of natural resources	Protection of cultural heritage and landscape values	Reducing impacts on air and climate	Strengthening resilience and disaster risk reduction	Protection of human health and well-being	Sustainable management of waste
and use of RES (e.g. demo centres/plants)								
The action includes developing and implementing joint pilot actions on energy management and energy efficiency technology solutions through data collection and monitoring of air quality through digital technologies with the objective of reducing GHG emissions. The action is place based but will generate results which may be used in further development and strategic documents and assessments, especially those in urban areas as the sites under pressure from industry and traffic. Apart from development, introduction and increase of technological data collection or air quality monitoring, the proposed practices have the chance to improve the quality of life in urban areas. Carrying out this action would ensure a contribution to reducing greenhouse gas emissions and, accordingly, a direct positive impact on Reducing impacts on air and climate and indirect positive impact on Sustainable management of natural resources and consequently Protection of human health and well-being.								
2. Investments in measures and actions that increase energy efficiency and improve the integration of sustainable energy sources in different sectors including small scale infrastructure preferring nature-based solutions								
The objective of the action is to promote and support reduction of energy consumption and support of introduction of sustainable energy in order to reduce consumption of fossil fuels. Such solutions may be implemented in buildings and households, but also transport sector. The integration of the energy and transport sectors is possible with a focus on electrification of the transport sector, both in terms of used energy, but also improved and optimized transport management. Increasing energy efficiency and integrating sustainable energy sources into the waste management process, optimization of transport needs and increased use of secondary resources and materials will ensure contribution to circular economy. These possible activities within the action will achieve long-term and positive impacts on environmental objectives of Sustainable management of natural resources, Reducing impacts on air and climate, Protection of human health and well-being and Sustainable management of waste.								
3. Promoting pilot actions in the public buildings sector which are in line with the Renovation Wave and the EU Green								

DRAFT INTERREG PROGRAMME								
Programme Actions	**SEA OBJECTIVES**							
Impact assessment	Improving water quality and reducing water and sea pollution	Protection of biodiversity, ecosystems and wildlife	Sustainable management of natural resources	Protection of cultural heritage and landscape values	Reducing impacts on air and climate	Strengthening resilience and disaster risk reduction	Protection of human health and well-being	Sustainable management of waste
Deal. Cross-sectoral nexus approach should be emphasized by integrating buildings energy and seismic retrofit								
In order to achieve energy gains, economic growth and boost renovation in the EU, the Commission published the strategy A Renovation Wave for Europe – Greening out buildings, creating jobs, improving lives. The strategy focuses on 3 areas: tackling poverty and worst-performing buildings, public buildings and social infrastructure and decarbonising heating and cooling. The principal objective is to support climate neutrality and recovery through energy-efficiency in building sector. Renovation is not regularly practiced in the programme territory, but may open possibilities for reaching both social, environmental and economic benefits. With only one intervention, buildings may become energy-efficient, reduce costs for inhabitants, and be more accessible, resilient and equipped with recharging or bike parking. Taking into consideration with high-seismicity of part of the programme territory, apart from emission cuts, the action should also include better resistance of structures to earthquake hazards. Improving energy efficiency and introducing renewable energy sources into buildings will be reflected in the saving of other forms of energy (fossil fuels) and consequently the reduction of greenhouse gas emissions. The pilot actions planned are 8, and should be developed jointly and implemented in supported projects. Jointly developed pilot actions may be test procedures, new instruments, tools experimentation or transfer of practices, for which reason, even though the impacts of the action are positive, they are low in intensity. The positive impacts are expected on the SEA objectives of Sustainable management of natural resources, Reducing impacts on air and climate, Strengthening resilience and disaster risk reduction and Protection of human health and well-being. At project level, it shall be ensured that experts and skilled operatives are selected for work on traditional buildings/cultural heritage and are included in both project development and implementation phase.								
4. Joint incentives and pilot projects to encourage and ensure a strategic approach to energy efficiency (e.g. developing SECAP)								

DRAFT INTERREG PROGRAMME								
Programme Actions	**SEA OBJECTIVES**							
Impact assessment	Improving water quality and reducing water and sea pollution	Protection of biodiversity, ecosystems and wildlife	Sustainable management of natural resources	Protection of cultural heritage and landscape values	Reducing impacts on air and climate	Strengthening resilience and disaster risk reduction	Protection of human health and well-being	Sustainable management of waste
All three countries have developed energy efficiency policies SECAP as an action plan for energy and climate sustainable development can serve as an effective tool for planning climate change mitigation and adaptation measures. That is, as a complement to existing documents, it includes vulnerability analysis and answers which sectors are vulnerable and what measures should be planned. The implementation of this action through the encouragement of pilot projects related to ensuring a strategic approach to energy efficiency, which will ensure better preparedness of funding measures and timely implementation and greater resilience of the local community to the risks and threats of climate change. Due to the above, this action can have positive impacts on SEA objectives, Reducing impacts on air and climate, Strengthening resilience and disaster risk reduction and consequently Protection of human health and well-being. Strategic approach may wish to consider an energy hierarchy such as reduction of energy demand, ensuring efficient use of energy, generating energy needs from renewable sources. Strategic approach to energy efficiency should include both mitigation and adaptation measures in the building sector (residential and public) transport and traffic, public lighting, energy, water management, services sector, agriculture and forestry, biodiversity, health, economy and tourism, as well as specially designed measures for the coastal belt, including emergency situations.								
5. Strengthening the cross-border cooperation and transfer of knowledge in the region through exchange of experience, information (awareness raising) and capacity building through online and in-situ trainings to improve skills in the field of energy efficiency								
The main focus of this action is to strengthen cross-border cooperation and knowledge transfer in the field of energy efficiency. It is an organizational soft action and will not have significant or direct environmental impacts on the SEA objectives.								
6. Implementing pilot actions to test innovative and climate-neutral solutions through e.g. taking up and exploiting R&D results for the energy efficient renovation and heating and cooling of buildings (including cultural heritage buildings)								
Energy renovation includes increasing heat retention of the external building envelope, replacement of outer windows and frames and upgrading of heating system. Use of RES and adjustment of lighting, as well as installation of a central HVAC system. Energy efficient housing provides higher standard of living, reduces costs through reduced energy consumption and eventually emission								

DRAFT INTERREG PROGRAMME								
Programme Actions	**SEA OBJECTIVES**							
Impact assessment	Improving water quality and reducing water and sea pollution	Protection of biodiversity, ecosystems and wildlife	Sustainable management of natural resources	Protection of cultural heritage and landscape values	Reducing impacts on air and climate	Strengthening resilience and disaster risk reduction	Protection of human health and well-being	Sustainable management of waste
cuts. 8 pilot actions are planned within the programming period, accounting for low or no environmental impacts. However, as the action allows for implementation of solutions on cultural heritage buildings, it has to be taken into account that any designs have to be approved by the authority competent for cultural heritage so as to ensure that no negative impacts be incurred on cultural assets. At project level, it shall be ensured that skilled operatives are selected for work on traditional buildings/cultural heritage and that adequate specialists are included in the development and supervision of the project.								
7. Improving energy demand management and fostering behavioural changes of consumers for reducing energy consumption and a resource-efficient and sustainable use of energy								
Energy demand management benefits include energy savings and loss reduction, and is derived from the change of energy consumption by users or user behaviour through incentives or information. Through reduction of energy use and new opportunities to use RES as energy sources, it is expected that there will be indirect positive impacts on Sustainable management of natural resources and Reducing Impacts on air and climate. The stated action will have an indirect lesser positive impact on the said SEA objectives as change of behaviour is a long-term process and also depends on financial possibilities of the consumers.								
Promoting the production and use of advanced biofuels (produced from non-food crops, such as cellulosic biofuels and waste biomass) as well as other renewable energy sources (solar, geothermal energy, wind, etc.).								
The action will encourage the exploitation of renewable energy sources and thus the transition from non-renewable sources, so it will strongly contribute to the objective of climate mitigation. Biomass from waste, as well as other sources (biomass wood, agricultural residues, animal waste) can be used in various technologies for conversion into electricity or heat energy or processed into commercially suitable forms of energy. Various types of biodegradable waste such as livestock production waste, agricultural and food industries and slaughterhouse waste can be used as raw materials for biogas production through anaerobic decomposition in biogas plants.								

DRAFT INTERREG PROGRAMME								
Programme Actions	**SEA OBJECTIVES**							
Impact assessment	Improving water quality and reducing water and sea pollution	Protection of biodiversity, ecosystems and wildlife	Sustainable management of natural resources	Protection of cultural heritage and landscape values	Reducing impacts on air and climate	Strengthening resilience and disaster risk reduction	Protection of human health and well-being	Sustainable management of waste
Even though the use of biomass is mostly related to a specific location where biomass is produced, thus avoiding transportation costs, generally speaking, growing energy crops may have negative impacts on water through increased exploitation (thus reducing available reserves for human consumption) and indirect contamination from agricultural sources, biodiversity through change of habitats, by taking up new land, cutting of lower-value wood mass which is important for functioning of the ecosystems, or use of agricultural land for non-food crops. It should therefore be stressed that in case of use of biomass from non-food crops, low-value agricultural land should be used, or already degraded locations and that waste biomass be prioritised over biomass production. Likewise, bioenergy plants may reduce visual values of landscape, so they should be directed towards locations with lower visual impacts. However, it's crucial to implement these solutions with significant precaution measures and assess the possible impact of individual activities and projects of this action. In order to enhance efficiency of the action, sustainable waste management should be promoted through separate collection of all kinds of waste in order to increase biomass resources, and at the same time to support circular economy principles. The potential negative environmental impacts associated with solar power include land use and habitat loss and degradation or fragmentation (which may consequently mean the loss of suitable habitats for endangered species), Apart from habitat loss and habitat fragmentation, solar parks can also have direct mortality impacts on wildlife and insects due collision and disturbance. Also, there are possible negative environmental impacts from degradation of landscape values and use of hazardous materials in manufacturing. Possible impacts vary depending on the size, location and the technology applied. Integrated solar power plants such as small rooftop systems are strongly supported, as a part of climate mitigation objective and they also contribute to sustainable management of natural resources. Large utility PV plants have more pronounced impacts. Large PV arrays may be clustered together due to limitations of location choices in terms of climate, topography, access, existing land uses, etc. While each solar farm may be of little risk to wildlife individually, this clustering could potentially give rise to significant cumulative environmental impacts. This risk might increase given the continuously growing number of applications for solar energy production and expected increase in capacity over the coming years. Unlike other sources, there is less opportunity for large PV plants to share land use with other activities such as agriculture. Such impacts however, may be mitigated by planning them on locations of degraded qualities such as brownfields, abandoned quarries, or locations along or within existing transportation or transmission corridors. While solar energy has potential for use throughout the programme territory, wind energy is mostly exploited in the Dalmatian hinterland due to favourable wind characteristics. Effects of wind farms typically include the following: direct loss of habitat coverage as a result of physical destruction during build (loss of breeding, foraging, resting areas for species), habitat degradation (deterioration of breeding, foraging, resting areas for species), habitat fragmentation (an alteration of distribution patches of relevant habitats and species), disturbance of species (a change in the environmental conditions which may cause displacement of species individuals), changes in species behaviour, mortality risk, an indirect change to the quality of the environment (including hydrology). For wind energy developments, typical additional types of effects are the barrier effect and the collision risk (for birds and bats).							

DRAFT INTERREG PROGRAMME								
Programme Actions	**SEA OBJECTIVES**							
Impact assessment	Improving water quality and reducing water and sea pollution	Protection of biodiversity, ecosystems and wildlife	Sustainable management of natural resources	Protection of cultural heritage and landscape values	Reducing impacts on air and climate	Strengthening resilience and disaster risk reduction	Protection of human health and well-being	Sustainable management of waste
High negative impacts on landscapes and ambiental spatial values are also to be expected, since wind power plants in most cases become the spatial dominant due to their dimensions and with road infrastructure built for the purposes of the power plant, significant loss of existing landscape characteristics is to be expected. When implementing and developing actions and specific projects regarding wind power plants, the dimensions and layout of wind turbines must be adapted to specific location context and values, with a viewshed analysis and with a goal to minimise the impact on landscape and heritage values. Modifying wind power plants for landscape context should be done as seen in good global practices and R&D and assessed within the adequate environmental protection procedures. Apart from degradation of visual qualities of landscape, wind turbines may have negative impacts on population through noise and vibration issues, as well as shadow flicker. Most of the impacts may be mitigated through siting (selection of location), and protection measures proscribed at the project level in environmental impact assessment procedures. Croatia has greater geothermal potential in the Pannonian basin. Geothermal power plants are environmentally friendly in that they present a renewable energy source, which isn't dependant on weather conditions such as insolation or current winds in the area. Geothermal power plants have low emission values, occupy less land compared to other RES, and any potential impacts such as generation and disposal of waste may be mitigated at the project level. In order to support sustainable management of natural resources objective, it is proposed that former hydrocarbon drillholes are used for survey and geothermal energy exploitation purposes. While hydropower is very represented in the Programme territory, new environmental concerns about construction and hydropower use hinder development of new projects, even small HPPs. The range of effects a hydropower facility can have on species and habitat types will vary considerably from one site to another. It will depend on the individual characteristics of the river, its physical and ecological state as well as on the type and scale of hydropower facilities. The effects can result in the loss, degradation and fragmentation of natural habitats and populations of species that depend on these habitats for their existence. HPPs require a lot of land area and they irreversibly change the environment through interruption of longitudinal continuity of watercourses, creation of reservoirs, degradation of forests, wildlife habitats, agricultural land and landscape values. The potential negative environmental impacts on biodiversity associated with hydropower facilities are: changes in river morphology and riverine habitats, barriers to migration and dispersal of protected species, disruption of sediment dynamics, changes of the ecological flow regime, changes of the flow regime by peaking hydropower plants, changes in seasonal flood cycles, water chemical and temperature changes and injuries and killing of individual animals. The significance of loss depends on the scale of the effects as well as on the rarity and vulnerability of the habitats and species affected. Special consideration must be given to potential cumulative effects of any new activities, including those for hydropower plants on rivers, especially on near natural rivers (particularly small rivers) that are vulnerable to any changes in their hydromorphology.								

DRAFT INTERREG PROGRAMME								
Programme Actions	**SEA OBJECTIVES**							
Impact assessment	Improving water quality and reducing water and sea pollution	Protection of biodiversity, ecosystems and wildlife	Sustainable management of natural resources	Protection of cultural heritage and landscape values	Reducing impacts on air and climate	Strengthening resilience and disaster risk reduction	Protection of human health and well-being	Sustainable management of waste
Therefore, the future projects will likely involve change of technology, renovation and enhancement of the existing systems, while exploitation of hydropower is not supported by this Programme.								
SO 2.4 - Promoting climate change adaptation and disaster risk prevention, resilience, taking into account eco-system based approaches								
1. Development and introduction of joint climate change adaptation, disaster prevention and first response plans, as well as solutions and systems for monitoring, prevention and management of potential risks (e.g. floods, wildfires, landslides, droughts, sea pollution, earthquakes, invasive alien species etc.)								
The action would contribute to strengthening professional capacities for the prevention of risks of negative impacts of climate change and adaptation to climate change, construction, reconstruction and upgrading of existing systems to protect against the harmful effects of water (floods). The flood risk management objectives are set through River Basin District Management Plans as avoidance of new risks, reduction of existing risks, strengthening resilience, raising awareness and solidarity principle. These objectives focus on the reduction of potential adverse consequences of flooding for human health, the environment, cultural heritage and economic activity and address all aspects of flood risk management. The Mediterranean is one of the most vulnerable areas. The conditions conducive to fires in the Programme territory and their spread are strong winds with possible strong gusts and seasonal high air temperatures and an increase in the number of dry days, which completely dry the vegetation, however, around 95% of fires are anthropogenic, that is caused by the people themselves. Given the ongoing climate changes and prolonged droughts, occurrence of wildfires is expected in the coastal part of the programme territory, especially in summer months. In the event of prolonged droughts as a result of climate change, more intense and frequent forest fires are possible, so the action would have a positive impact on strengthening firefighting protection capacities, but also inclusion of adaptation measures. Given the cause of wildfires, activities planned within this action have to include education of the public, and regulation of behaviour, especially in the most affected areas and periods. Given that forest fires are the most common natural disaster that is very difficult to contain and repair, especially in the southern part of the Program Area (Mediterranean), the action could stain both development and deployment adapted as solutions and systems related to the early fire detection system, on which the timely organization of the firefighting forces depends, it is also possible								

DRAFT INTERREG PROGRAMME								
Programme Actions	**SEA OBJECTIVES**							
Impact assessment	Improving water quality and reducing water and sea pollution	Protection of biodiversity, ecosystems and wildlife	Sustainable management of natural resources	Protection of cultural heritage and landscape values	Reducing impacts on air and climate	Strengthening resilience and disaster risk reduction	Protection of human health and well-being	Sustainable management of waste
to invest in forest transport infrastructure for faster and easier access to the extinguishing site. What is also necessary is the conduct of informative and educational activities of citizens and tourists for the reason that most fires I are created by human activity. Therefore, the action will benefit the SEA objectives of Strengthening resilience and disaster risk reduction, and consequently Protection of human health and well-being. Extreme weather events and floods will increase introduction of waste material and pollutants into the marine environment, especially taking into account that most of the marine waste is coastal-borne. Industrial facilities located on the coastline may also be vulnerable when exposed to extreme events, especially flooding, leading to potential emergency situations. However, such facilities and ports have in place operating protocols which will be implemented so as to minimise the impacts. Irrespective of the significant positive impacts of the introduction of common adaptations to climate change as well as improvements to disaster prevention systems, possible negative impacts should also be seen on SEA objective, protection of biodiversity, ecosystems and wildlife. For example, hydrotechnical systems (dams, constitutions, retentions) can cause changes in river morphology and riverine habitats or represent barriers to migration and dispersal of protected species. Interactions between biodiversity, climate change and other pressures such as land use change and invasive species are complex and often not well understood. There is a need for robust evidence and careful planning to ensure that actions taken to adapt to climate change are effective, efficient and do not result in increased vulnerability in the long run or lead to other unintended negative outcomes. Adaptation solutions that use natural processes to build resilience to climate change should be used. Any spatial developments have to be in compliance with physical planning documents in force, for which reason it is proposed that more emphasis be given to integration of adaptation principles in physical planning documents of participating countries. Also, any potential negative impacts will be assessed through impact assessment procedures carried out at the project level.								
2. Encouraging intersectoral/interstate cooperation in risk prevention and rapid response management through development and implementation of joint protocols, procedures, approaches and measures, small scale infrastructure preferring nature-based solutions, response vehicles, equipment, shelters, etc								
The Programme territory is in area where earthquakes can be in 6 to 9° of MCS scale, which are considered to be earthquakes of very strong and devastating scale. According to data from the European Seismic Hazard Map the Programme territory is in high risk of strong earthquakes, especially Dalmatian region in Croatia and Montenegro.								

DRAFT INTERREG PROGRAMME								
Programme Actions	**SEA OBJECTIVES**							
Impact assessment	Improving water quality and reducing water and sea pollution	Protection of biodiversity, ecosystems and wildlife	Sustainable management of natural resources	Protection of cultural heritage and landscape values	Reducing impacts on air and climate	Strengthening resilience and disaster risk reduction	Protection of human health and well-being	Sustainable management of waste
Parts of the Programme area are at high risk of flooding or potential adverse consequences of floods on human health and the environment. In order to limit or prevent negative impacts on the environment and human health, it is necessary to improve risk resistance through actions aimed at acting quickly. Encouraging and developing interstate cooperation would achieve more adequate action in the event of floods, earthquakes or other natural hazards. The action would accelerate joint procedures, approaches and measures related to infrastructure renovation, vehicle procurement and equipment and the construction of shelters. As a result, the action in question will have positive impacts on SEA objectives Strengthening resilience and disaster risk reduction and Protection of human health and well-being.								
3. Strengthening of institutional and expert capacities and raising awareness to address environmental issues, climate change and disaster risks reduction (e.g. workshops, methodologies, protocols, educational materials, joint training for civil protection units)								
This action is organizational and organisational in character, because of which there will be no possible direct and significant impacts on SEA objectives. Activities related to this action can create prerequisites for positive impacts in the future.								
4. Establishment of joint emergency centres, including small-scale infrastructure preferring nature-based solutions								
Parts of the Programme area are at high risk of flooding or potential adverse consequences of floods on human health and the environment. River floods are more common in northern part of Programme area, in Sava basin, especially in spring. In the south part of Programme area (coastal part of Croatia, BiH and Montenegro) there are floods related to sea level rise. According to data from the European Seismic Hazard Map the Programme are is in high risk of strong earthquakes, especially Dalmatia region in Croatia and almost whole Montenegro. The action will affect the SEA objective Strengthening resilience and disaster risk education and Protection of human health and wellbeing, as it will achieve a more organized and adequate response of professional services in case of natural hazards such as floods, earthquakes, droughts/fires, landslides, etc., with the view that the action will encourage the construction of joint emergency centres. The action will strengthen the capacities of the protection system of all operational forces as a fundamental force in response to existing and possible risks, i.e. natural hazards and disasters. Any construction will be small-scale and of local character, and as it will be executed under the applicable regulations and physical planning documents, it is not expected to have any negative effects on the SEA objectives.								

DRAFT INTERREG PROGRAMME								
Programme Actions	**SEA OBJECTIVES**							
Impact assessment	Improving water quality and reducing water and sea pollution	Protection of biodiversity, ecosystems and wildlife	Sustainable management of natural resources	Protection of cultural heritage and landscape values	Reducing impacts on air and climate	Strengthening resilience and disaster risk reduction	Protection of human health and well-being	Sustainable management of waste
5. Development of cross-border risk assessment and disaster risk strategies for cross-border hazards such as forest fires, landslides, floods and relative sea-level change, invasive alien species directly threatening biodiversity and ecosystems								
The programme area includes areas with mutual interest in flood protection, in addition to coastal areas subject to flooding. In line with the Danube River Basin Flood Risk Management Plan, reduction of existing risks should be developed on flood risk maps aiming at reduction of adverse consequences for human health, the environment, cultural heritage and economic activities. Proposed strategies should also include disaster prevention strategies as a way to minimise impact on climate change. Strategies should also focus on good standards and practices and implement them, e.g. green infrastructure. The action does not foresee construction of infrastructure which might induce negative impacts on environmental factors, but refers to development of strategies, plans, transfer of knowledge etc. of which the intensity of the impact cannot be measured, but it is expected to have overall positive impacts in the long-term.								
6. Exchanging knowledge and good practices on eco-system based climate change adaptation measures and implementing pilot actions for protection and restoration towards resilient eco-systems, e.g. rivers, wetlands and sea, cross-border connectivity of habitats, agro-forestry, biodiversity, landscapes, climate proofing, modelling and forecasting								
Ecosystem-based Adaptation involves a wide range of ecosystem management activities to increase resilience and reduce vulnerability of people and the environment to climate change. Ecosystem-based approach focuses on the benefits derived from biodiversity and ecosystem services and involves conservation, sustainable management and restoration of ecosystems to help adapt to climate change.								

DRAFT INTERREG PROGRAMME								
Programme Actions	**SEA OBJECTIVES**							
Impact assessment	Improving water quality and reducing water and sea pollution	Protection of biodiversity, ecosystems and wildlife	Sustainable management of natural resources	Protection of cultural heritage and landscape values	Reducing impacts on air and climate	Strengthening resilience and disaster risk reduction	Protection of human health and well-being	Sustainable management of waste
This action is a strong contribution to biodiversity preservation and strengthening resilience to climate change. Developing and supporting practices that have a positive impact on the environment and act in the direction of replacing harmful (traditional) practices and infrastructure will have a large positive indirect impact on the environment, especially when it comes to implementing quality pilot projects based on expertise, place-based and nature-based solutions. Even though such impacts may be observed in the long-term, they will be assessed positively as they provide preconditions for establishing good practices. It's proposed that green infrastructure is included in stated pilot actions as an important part of urban ecosystems, but also on a larger scale as a tool to combat urban sprawl.								
7. Testing integrated climate-adaptation solutions in pilot actions, which combine technological, ecological, social, cultural, governance and financial aspects taking into account good practices available at local, regional, national or European level								
The action plans for development of an integrated, multi-sectoral approach to climate adaptation, linking activities at local, national and programme level. 7 pilot actions are planned to be implemented within the programming period, which may be used to raise awareness and educate various stakeholders and establish good practice criteria in the sector.								
8. Increasing climate resilience of critical infrastructures and cultural/natural heritage sites through improved risk preparedness and risk management plans								
Possible risks/threats observed in the programme territory involve both natural hazards (weather conditions, fire) and human-induced hazards (mass tourism, pollution, deforestation practices). It should be taken into consideration that risk preparedness and management plans take into account the human induced hazards as well, especially in the area facing similar issues. Cultural and natural assets are increasingly affected by events related to the occurrence of natural disasters and climate change- growing losses of goods due to floods, landslides, fires, earthquakes and other hazards. Also, the dangers of climate change could alter the natural balance of ecosystems or some natural good that would cause disease, pollution or species migration. The action will raise awareness and build the capacity of national and regional heritage experts in the field of cultural heritage sustainability and their recommendations will contribute to climate change planning at programme level.								

DRAFT INTERREG PROGRAMME								
Programme Actions	**SEA OBJECTIVES**							
Impact assessment	Improving water quality and reducing water and sea pollution	Protection of biodiversity, ecosystems and wildlife	Sustainable management of natural resources	Protection of cultural heritage and landscape values	Reducing impacts on air and climate	Strengthening resilience and disaster risk reduction	Protection of human health and well-being	Sustainable management of waste
The action will have positive impacts on SEA objectives: Protection of biodiversity, ecosystems and wildlife, Protection of cultural heritage and landscape values and Strengthening resilience and disaster risk reduction. Any plans involving cultural heritage should be implemented with cooperation with experts/conservationists in order to ensure preservation, protection and maintenance of structures. Property occupants and users should be directly involved in development of emergency-response plans. It's proposed that the action ensures implementation of green infrastructure, green building principles and sustainable rainwater management, especially in urban areas.								
9. Integrating climate change aspects into water management strategies on local, regional and interregional level (considering e.g. water quality, flooding, rainwater management and water retention, water scarcity, drinking water supply including smart water pricing, ground water, forecasting)								
The programme territory is covered with river basin management plans which regulate two water management aspects: achieving good quality of water and reduce detrimental effects of water in terms of floods. The main expected impacts as a result of climate change that can lead to a high degree of vulnerability of water resources are, reducing water volumes in watercourses and springs, reducing water supplies underground and lowering subsite water levels, reducing water levels in lakes and other natural or built systems, rising sea levels, flapping coastal aquifers and aquatic systems, increase in water temperature accompanied by a decrease in the reception capacity of aquatic receivers, an increase in the frequency and intensity of flooding in vulnerable areas. Increasing sea levels and thus the likelihood of flooding on the mouths of watercourses, reducing the efficiency of coastal infrastructure and intensifying the salting of river mouths and coastal aquifers. The change in sea and ocean circulation is a direct consequence of climate change and conditions drastic changes, not only in the marine environment but also on the climate of surrounding areas, which can affect all sectors (Croatia, Montenegro). The program area is relatively rich in water but not with water supplies due to its geological structure and geomorphological characteristics, i.e. the predominant karst relief, and in this connection with the heterogeneity of runoff. Karst areas generally have little opportunity to accumulate water reserves for a long time. The deterioration of hydrological conditions due to the negative impacts of climate change is expected to more frequently result in dry spells and, on the other hand, the frequency and intensity of flood scenarios.								

DRAFT INTERREG PROGRAMME								
Programme Actions	**SEA OBJECTIVES**							
Impact assessment	Improving water quality and reducing water and sea pollution	Protection of biodiversity, ecosystems and wildlife	Sustainable management of natural resources	Protection of cultural heritage and landscape values	Reducing impacts on air and climate	Strengthening resilience and disaster risk reduction	Protection of human health and well-being	Sustainable management of waste
Urban areas are among the most vulnerable areas due to high density of built environment and the infrastructural requirements of urban areas. In the Programme territory, urban areas on the coastline require more focus when it comes to water management and climate change, mostly due to expected sea level rises. Therefore, it's proposed that the strategies developed within this action contain specific measures and guidelines for implementation of green infrastructure for sustainable water management or incorporate pilot projects for the stated.								
10. Sharing knowledge and developing solutions for climate proofing the agricultural and forestry sectors to increase their resilience towards e.g. droughts, outbreaks of pests, invasion of alien species								
While climate change may have positive impacts on agriculture by extending weather suitability in some areas, in warmer areas arable land will be drastically reduced due to lack of precipitation and temperature rise and the intensity and frequency of extreme weather conditions. It will also affect water demand and water availability, ad proliferation of weeds, pests and diseases. In order to select an adequate approach to climate proofing, vulnerability of the said sectors should first be assessed. Vulnerability assessments carried out for forests have to be included in forest management plans. In the southern part of the Programme Area, seasonal fires pose a high risk to forests, where the current trend in the number of fires in the Mediterranean area indicates an increase in the number of forest fires. All this could affect the productivity of forest ecosystems, which will consequently affect not only changes in habitat conditions but also the way forests are managed and the loss of generally beneficial forest functions. Potential adaptation options include engineering practices and non-engineering solutions. Engineering practices refer to drainage and irrigation, storage, and non-engineering regard water consumption, change of crops, land use planning etc.). Climate proofing should include reducing emissions from ongoing land/forest management practices. A precondition for implementation of this action is development of vulnerability assessments, and selecting adaptation targets (increased income, increased food security, ensuring sufficient water resources etc.).Climate adaptation solutions may also regard introduction of more resilient crops and species, which should undergo preliminary assessment and monitoring in case of unwanted spread into the environment and change of habitat conditions. The selected practice should include reducing carbon intensity of agriculture and avoid and prevent leakage into groundwater. Even tough livestock production is a significant source of GHG emissions, it also has a potential to mitigate climate change by implementation of good practices, which regard efficiency increase and management.								

DRAFT INTERREG PROGRAMME									
Programme Actions	**SEA OBJECTIVES**								
Impact assessment	Improving water quality and reducing water and sea pollution	Protection of biodiversity, ecosystems and wildlife	Sustainable management of natural resources	Protection of cultural heritage and landscape values	Reducing impacts on air and climate	Strengthening resilience and disaster risk reduction	Protection of human health and well-being	Sustainable management of waste
As a result of implementation of the action, depending on the target measures selected, increase in the reception capacity of the soil for water on agricultural land, the cultivation of climate-resistant varieties, irrigation of agricultural land, the construction of water reservoirs and the development of drought warning systems may be expected. Moreover, climate change adaptations are possible in the forestry sector in the form of strengthening climate-related research and management capacities with a view to establishing monitoring and cross-border reporting on the state of forest ecosystems, developing adaptation recommendations to the negative impact of harmful organisms and strengthening fire protection capacities. The action will have positive effect on Strengthening resilience and disaster risk reduction, but also Protection of human health and well-being through preservation of multiple forest services and securing the food production, as well as Protection of biodiversity, ecosystems and wildlife by adaptation of the forest sector to climate change.									
11. Developing solutions for strengthening eco-system services for human health and wellbeing to support social resilience and counteracting socio-economic impacts of climate change									
Ecosystem goods and services are the many life-sustaining benefits we receive from nature – clean air and water, fertile soil, pollination and flood control (U.S. EPA, 2014a). Many communities and ecosystems face high pollutant exposures. Habitat disturbance and destruction, and introduction of invasive species make the habitats more vulnerable to other stressors, especially in view of climate change and climate-related disasters such as wildfires and floods. The connection between ecosystem services and human well-being is not to be denied, but at this point it is frequently understudied and its width has not been fully explored. Recently, as a result of climate adaptation efforts, more natural areas and biodiversity is being included in the design and protection of urban areas. Such approach in order to have full effects should take into consideration urban, land-use and marine spatial planning and to include by a wide range of specialists from ecologists, public health scientists and urban planners. The impacts of this measure are not considered significant on the strategic level, but may more affect Strengthening resilience objective, as well as Protection of human health, rather than Protection of biodiversity, as it is focused on human well-being. It's proposed that the action includes green infrastructure projects and activities for urban areas, as it can significantly improve environmental services that benefit human health physically and psychologically.									
SO 2.6 - Promoting the transition to a circular and resource efficient economy									

DRAFT INTERREG PROGRAMME								
Programme Actions	**SEA OBJECTIVES**							
Impact assessment	Improving water quality and reducing water and sea pollution	Protection of biodiversity, ecosystems and wildlife	Sustainable management of natural resources	Protection of cultural heritage and landscape values	Reducing impacts on air and climate	Strengthening resilience and disaster risk reduction	Protection of human health and well-being	Sustainable management of waste
1. Developing and implementing approaches and solutions for limiting landfilling of all types of waste and retaining their value (as future resources) in the economic cycle								
All participating countries have waste management plans in force, which support EU waste management policies, although the sector is faced with challenged due to long term mismanagement, lack of adequate infrastructure, and non-existence of waste management centres which present the core of the integrated system. Landfilling in general can have hazardous effect on human health and on the environment through leaching water and generation of methane and other toxic substances. In order to develop preconditions for transition to circular economy, not only has the share of landfilled waste be cut down, but also waste suitable for recycling or recovery has to be prevented from landfilling (separately collected). The action supports sustainable management of waste objective.								
2. Increasing awareness of policy makers and stakeholders about environmental and economic opportunities of a circular economy and improving their capacity for the practical implementation of circular economy approaches in different sectors (such as electronics, construction and buildings, textiles, plastics, packaging, food, agriculture, forestry and wood industry)								
Fostering a circular economy requires policy support at European, national, regional and local level and the involvement of NGOs, business and consumer organisations, academic society, research institutions and other stakeholders. Circularity and sustainability must be included in all phases of the value chain in order to achieve a fully circular economy. With the EU Circular Economy Action Plan, the European Commission has identified key areas for achieving the circular economy that are also included in the action in question, related to increasing policy awareness and all stakeholders about the environmental and								

DRAFT INTERREG PROGRAMME								
Programme Actions	**SEA OBJECTIVES**							
Impact assessment	Improving water quality and reducing water and sea pollution	Protection of biodiversity, ecosystems and wildlife	Sustainable management of natural resources	Protection of cultural heritage and landscape values	Reducing impacts on air and climate	Strengthening resilience and disaster risk reduction	Protection of human health and well-being	Sustainable management of waste
economic capabilities of the circular economy and improving their capacities for practical application in electronics, construction, textiles, plastics, packaging, food and agriculture. Although the action is related to stimulating awareness, it will have a positive impact on the approach itself and the encouragement of circular management, which will consequently have a positive impact on SEA objective Sustainable management of waste. Circular economy business models are important levers in the transition to a circular economy. In order for this action to be practicable, the potential of the sector has to be researched, and barriers and limitations addressed. Some of these certainly include lack of transparency across supply chains, lack of use of circularity criteria in public tenders or any criteria other than the lowest price, as well as different policies in the participating countries. Awareness raising is one of the potential actions to facilitate circularity, but knowledge sharing platforms, business partnerships, R&D project grants, product labelling etc should also be considered.								
3. Developing and implementing joint pilot and demonstration actions that closely involve citizens (e.g. good practices in separate waste collection and waste re-use, pilot testing of repair, reuse and refurbish approaches etc.) in order to foster behavioural changes, higher acceptance of more sustainable products and resource-efficient consumption and production patterns								
The circular economy must be implemented in society primarily because of its contribution to the growth itself in the development and competitiveness of the economy, which would contribute to the reduction and reduction of harmful emissions and the exploitation of waste as a resource. For example, the reuse of some items where there is no need for major repairs but only for cleaning constitutes an activity that would prevent waste from occurring. This would extend the shelf life of some products and reduce environmental pressure caused by the production of new products and materials. The environmental benefits of extending the lifespan of products or parts thereof through reuse are significant and represent a great potential for reducing greenhouse gas emissions. Separate collection of waste reduces the amounts of waste provided for disposal and opens up the possibility of recycling, composting or exploiting the valuable properties of waste. Also, proper separation of waste at household level would save time and energy normally consumed to sort waste before disposal.								

DRAFT INTERREG PROGRAMME								
Programme Actions	**SEA OBJECTIVES**							
Impact assessment	Improving water quality and reducing water and sea pollution	Protection of biodiversity, ecosystems and wildlife	Sustainable management of natural resources	Protection of cultural heritage and landscape values	Reducing impacts on air and climate	Strengthening resilience and disaster risk reduction	Protection of human health and well-being	Sustainable management of waste
Although the action implies the development of pilot and demonstration activities that would involve citizenship in the circular economy through stimulating behavioural change, the use of sustainable products and the efficient use of resources, it will have an indirect significant impact on SEA objectives: Sustainable management of waste, Protection of human health and well-being and Reducing impacts on air and climate through reduced landfilling.								
4. Improving waste management policies and competences of the public sector, including the prevention, processing and recycling of communal (e.g. recovery of organic waste, including nutrients from municipal wastewater) and industrial waste								

All participating countries have waste management plans in force, which support EU waste management policies, although the sector is faced with challenged due to long term mismanagement, lack of adequate infrastructure, and non-existence of waste management centres which present the core of the integrated system. Landfilling in general can have hazardous effect on human health and on the environment through leaching water and generation of methane and other toxic substances.

The processing, reuse and recycling of municipal and industrial waste has positive environmental impacts. Energy from waste can be used to generate heat or electricity, which can then replace energy produced by coal or other fuels, thus energy recovery of waste can help reduce greenhouse plan emissions. Also, recycling can help reduce greenhouse gas and other emissions. When recycled materials replace new materials, the need to produce new materials is reduced. In the Programme area, it is likely that kitchen and garden waste accounts for the bulk of solid municipal waste in urban areas, while in rural areas such waste is mostly incinerated in own backyards. This type of waste if collected separately can be converted into an energy source or fertilizer. The anaerobic method produces biogas and residual material, which can then be used as fertilizer, such as compost.

The benefit of the action in question is great and can help facilitate the accession to a circular economy where nothing is wasted. Progress on waste disposal provides environmental gains, but includes efforts by all parties, i.e. consumers, producers, policymakers, local authorities, waste treatment facilities, etc.

Therefore, this action, through encouraging activities related to the establishment of municipal waste recycling, will have a positive impact on SEA objectives: Sustainable management of waste, Protection of human health and well-being, Reducing impacts on air and climate and Protection of biodiversity, ecosystems and wildlife.

DRAFT INTERREG PROGRAMME								
Programme Actions	**SEA OBJECTIVES**							
Impact assessment	Improving water quality and reducing water and sea pollution	Protection of biodiversity, ecosystems and wildlife	Sustainable management of natural resources	Protection of cultural heritage and landscape values	Reducing impacts on air and climate	Strengthening resilience and disaster risk reduction	Protection of human health and well-being	Sustainable management of waste
5. Developing and testing solutions that support the recovery and reuse of raw materials								
The action will contribute to reducing the waste intended for disposal and bring about new innovative products and solutions. Reuse of products or waste has positive environmental impacts in the form of preventing water, soil and air pollution, then reducing overuse of raw materials and energy. When extending the life cycle of a product, the use of energy necessary for the production of a new product is avoided and consequently the more harmful impact on the environment is reduced. Solution testing activities in the reuse system will provide direct advice and models for the establishment of reuse centres and provide guidance to all stakeholders in the basic models of collection of useful items. Certainly, the action in question will be activities that will consequently affect the prevention of waste. Although the impacts of the action will be limited, they will nevertheless be positive impacts especially on SEA objectives: Sustainable management of natural resources, Sustainable management of waste, Reducing impacts on air and climate.								
6. Fostering and testing digital solutions for the circular economy including applications and services (such as product passports, resource mapping, tracing systems and consumer information)								
Even though digitalization does not have a central role in circular economy innovations, it may be used to connect data, partners, devices and customers. Digital technologies may also encourage more sustainable consumption patterns, such as digital passport of a product, providing information about the materials and resources used in product production, along with its durability, reusability and recyclability. Digital Product Passport (DPP) will contain information about the makeup of goods. It is designed to provide consistent information about products "across the value chain and across borders, to business, customers and authorities. DPP will identify those bits of information that are killers in terms of ruining value, for example PVC prints on garments are a barrier to recyclability. Even though the action supports transition to circular economy, its impacts on SEA objectives will not be significant.								
PA3 - Accessible and resilient health services The right to timely access to affordable, quality preventive and curative care is one of the key principles of the European Pillar of Social Rights. The vulnerability of the health care systems across the area has been especially demonstrated during the covid crisis.								

DRAFT INTERREG PROGRAMME								
Programme Actions	**SEA OBJECTIVES**							
Impact assessment	Improving water quality and reducing water and sea pollution	Protection of biodiversity, ecosystems and wildlife	Sustainable management of natural resources	Protection of cultural heritage and landscape values	Reducing impacts on air and climate	Strengthening resilience and disaster risk reduction	Protection of human health and well-being	Sustainable management of waste
There is a need for further development and implementation of advanced medical technologies in the program area, especially through joint cross-border actions. Strengthening cooperation between healthcare providers could help them to function more effectively in the context of increasing mobility of patients and healthcare professionals.								
SO 4.5 - 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								
1. Development and implementation of ICT solutions and (pilot) actions to support digitalization in health care								
The main focus is implementation and supporting of ICT solutions and pilot actions in health and social care in the programme area which may support growth in health and social domain in the programme area but has no significant or direct impacts on the environment in general or SEA objectives in particular. Since there are no negative impacts identified, no mitigation measures are proposed.								
2. Improving health care and access to long-term care for vulnerable groups, with focus on elderly, children and disabled persons								
Implementation of this action may include small-scale investment in infrastructure, however, since such developments are regulated by applicable legislation and is generally implemented in already guilt areas, its impacts on the environment and SEA objectives will be insignificant.								
3. Improving the accessibility and effectiveness of cross-border public health care services by investing in telemedicine, diagnostics, mobile clinics and mobile assets, including small scale infrastructure preferring nature-based solutions								

DRAFT INTERREG PROGRAMME								
Programme Actions	**SEA OBJECTIVES**							
Impact assessment	Improving water quality and reducing water and sea pollution	Protection of biodiversity, ecosystems and wildlife	Sustainable management of natural resources	Protection of cultural heritage and landscape values	Reducing impacts on air and climate	Strengthening resilience and disaster risk reduction	Protection of human health and well-being	Sustainable management of waste
The implementation of this action includes increasing the efficiency of health services through the procurement and development of high-tech equipment in medicine. The action will have positive effects on the SEA objective of protection of human health and well-being.								
4. Transfer of knowledge through exchange of experience, awareness raising, lifelong learning, education and training programmes, and capacity building through online and in-situ trainings to improve skills in the field of health care and enhance the delivery of primary care and family-based and community-based care services								
The main focus of the action is exchange of experience and improving skills in the field of health and social care which may support health and social growth in area but has no significant or direct impacts on the environment in general or SEA objectives in particular. Since there are no negative impacts identified, no mitigation measures are proposed.								
5. Developing and implementing joint activities/solutions to promote healthy lifestyles and active and healthy aging, disease prevention.								
Action is expected to have a positive impact on human health and well-being, and has the potential to be connected with sustainable tourism actions.								
PA4 - Sustainable and inclusive tourism and culture The tourism sector plays an important role in the economy of the programme area, significantly contributing to employment and added value. Tourism also has great potential for further economic and social development of the programme area. The Covid-19 crisis has negatively affected tourism, culture, and related sectors, which have suffered significant losses, especially micro and small enterprises. In the post-Covid 19 period, it is important to develop a more resilient and sustainable tourism sector that will preserve the identity of the programme area and its shared resources, natural and cultural heritage that is currently challenged by insufficient conservation and sustainable valorisation.								
SO 4.6 - Enhancing the role of culture and sustainable tourism in economic development, social inclusion and social innovation								
1. Developing and implementing joint (pilot) actions to support diversification and sustainability of the tourism by investing in								

DRAFT INTERREG PROGRAMME								
Programme Actions	**SEA OBJECTIVES**							
Impact assessment	Improving water quality and reducing water and sea pollution	Protection of biodiversity, ecosystems and wildlife	Sustainable management of natural resources	Protection of cultural heritage and landscape values	Reducing impacts on air and climate	Strengthening resilience and disaster risk reduction	Protection of human health and well-being	Sustainable management of waste
lesser-known destinations and diverse forms of tourism (cultural, rural, agro, active, health tourism, etc.) including small-scale infrastructure preferring nature-based solutions								

Tourism is recognized as economic activity greatly supporting employment and having a quick return on investment and earnings. It compensates the decline of industries and agriculture in the Programme area, and sustains GDP. It is however strongly dependent on cultural and natural resources, so its competitiveness depends on their sustainable use.

The heterogeneity of the Programme territory accounts for different forms of tourism practiced depending on the natural and cultural attractors. Croatian economy is extremely dependent on tourism, mostly because of its coastline offering the "Sun and Sea" products. In Montenegro, tourism accounts for 22% of the total GDP with a strong growth trend. As opposed to the coastal part of the Programme territory, its continent is decisively less exploited and developed in terms of tourism, and such areas suffer economically in comparison. Sustainable tourism development may help bridge the social and economic issues in the continental part of the Programme territory and boost growth, especially in Bosnia and Herzegovina.

The concept of sustainable tourism development implies development of high-quality products, satisfying and adapting to the changing needs of tourists, and at the same time preserving tourist resources for future generations. Diversification on the other hand leads to strengthening the relationship between tourism and other sectors, both in terms of products and markets. Such approach should maintain variety of tourist offer, that is regional differences.

The measure therefore focuses on continental part of the Programme territory, especially seen as nowadays, the consumers are becoming more aware and are looking for a more diverse and lesser known tourist offer. Rural tourism is an umbrella term for all forms of tourism that are located in rural areas, be it agro tourism, recreational tourism, etc. Current trends note an increase in these forms of tourism, but mostly in coastal areas as they are sold as a secondary product or expanded offer to the ''Sun and Sea'' products. The Programme should therefore take into account that tourism as a sector is still ''monocentrically developed'' on coastal areas and that effects of the action/specific objectives will not be achieved, or will even result in adding to the already present regional differences, as well as the necessity to eliminate seasonality of the tourist offer. Apart from significantly improving economic standards and overall development of isolated and ''lesser-known'' areas, development of tourist diversification will also help relieve the pressure suffered by popular destinations from mass tourism, effects of seasonality, and promote sustainability and rural development.

Since all participating countries support sustainable tourism and diversification of tourist offer through their strategic document, there is no need for elaboration of further sectoral plans. Developing tourist destinations and products will require construction of accommodation capacities and infrastructure (water and energy supply) which if unplanned strategically may lead to overall urbanisation, increased consumption of resources, energy, water and generation of waste, affecting biodiversity, water quality, increasing transport needs etc. Implementation of stated

DRAFT INTERREG PROGRAMME								
Programme Actions	**SEA OBJECTIVES**							
Impact assessment	Improving water quality and reducing water and sea pollution	Protection of biodiversity, ecosystems and wildlife	Sustainable management of natural resources	Protection of cultural heritage and landscape values	Reducing impacts on air and climate	Strengthening resilience and disaster risk reduction	Protection of human health and well-being	Sustainable management of waste
actions must be done with precaution and implemented mitigation measures regarding SEA objectives, especially regarding water quality, protection of biodiversity, landscape values and sustainable waste management. Sustainable tourism has the potential to positively affect cultural and landscape values of the area, however promotion of culture is a long term process and the significant effects will very likely not be visible in the programming period, but will establish a path for future development. Diversification and development of alternative tourist forms, in order to achieve greater environmental benefits, should also support alternative modes of transport and use of sustainably produced fuels and power. However, it should be noted that reconstruction or construction of transport infrastructure in order to increase availability of tourist destinations may impact rare and endangered species and habitat types, and invasive species introduction and establishment, especially marine transport which is a potentially large source of introduction of invasive, alien or non-indigenous species. Degradation and destruction of marine/coastal habitats occur due to intensive competition for space and anthropogenic pressure on these valuable areas. Solid waste, including marine litter, plastics and other inorganic and organic materials is a growing problem. Additional issues of concern are noise pollution and light pollution, as well as potential collisions with marine mammals and sea turtles. Sustainable tourism development should support diversification of tourist offer, including synergy with local communities and products manufactured locally, reduction of seasonality and implementation of ICT within tourism systems. Specific types of tourism can considerably contribute to the prosperity of the local population, and even contribute to efforts to protect the biodiversity of the areas, and preserve tangible and intangible heritage. Projects must include a preliminary site analysis – contextual environmental analysis that will ensure appropriate implementation of projects into the landscape and cultural heritage, a suitability assessment towards the environment, climate risk assessment and other expert documents as seen in good practice globally in collaboration with relevant experts. It's desirable to redirect investments more towards the hinterland and continental parts of the Programme Area since those areas are less developed and in need for economic development and also to relieve the pressure on coastal areas.								
2. Developing and implementing innovative solutions and creating smart destinations (e.g. through digitalisation and creative industries), and new services and products for specific targeted market segments such as seniors, young people or people with disabilities including small scale infrastructure								

DRAFT INTERREG PROGRAMME								
Programme Actions	**SEA OBJECTIVES**							
Impact assessment	Improving water quality and reducing water and sea pollution	Protection of biodiversity, ecosystems and wildlife	Sustainable management of natural resources	Protection of cultural heritage and landscape values	Reducing impacts on air and climate	Strengthening resilience and disaster risk reduction	Protection of human health and well-being	Sustainable management of waste
preferring nature-based solutions								
Even though tourism is a low-tech industry, it may profit from the use of ICT in overcoming distance and speeding up processes. Smart destination is a territory supported by smart infrastructures, offering it a more competitive and efficient model of management. Tourism has a great potential to incorporate the advantages given by new technologies in a two way process – by offering tourists easier means of planning, movement, communication, and understanding of their surroundings, and by offering the destination manager information about the travellers' demands and footprint. It is also important for a destination to take account of visitors with disabilities and the elderly to be able to travel and move freely, for example by creating and implementing a tourist accessibility plan. As a prerequisite for becoming a smart destination, analysis of demands and needs of the destination should be performed taking into account available technological infrastructure, potential barriers, services provided, and costs. Given the above stated, it is more likely that such solutions will be implemented in already developed destinations with existing preconditions. The action doesn't have physical impacts on the environment. A higher energy demand and consumption may arise from the action requirements, but the impact is considered to be insignificant on the strategic level.								
3. Development and implementation of measures to protect, develop and promote sustainable cultural heritage and cultural services, public tourism assets and tourism services including investments in physical regeneration and security of public spaces, (including small scale infrastructure preferring nature-based solutions), in the scope of their inclusion in the touristic and/or cultural circuit								
The proposed action is focused mostly on using cultural heritage as a tourism resource in a sustainable manner, which includes developing and implementing cultural tourism products, services and physical regeneration of heritage. The overall impact of the stated action and its activities is positive towards cultural heritage, since it promotes the preservation of it and uses it as a main resource with the objective that without active preservation there is no successful tourist product. Giving attention and resources to developing cultural heritage as an asset can upgrade the state of heritage and contribute to overall goals of protection and preservation of heritage.								

DRAFT INTERREG PROGRAMME								
Programme Actions	**SEA OBJECTIVES**							
Impact assessment	Improving water quality and reducing water and sea pollution	Protection of biodiversity, ecosystems and wildlife	Sustainable management of natural resources	Protection of cultural heritage and landscape values	Reducing impacts on air and climate	Strengthening resilience and disaster risk reduction	Protection of human health and well-being	Sustainable management of waste
Physical regeneration of cultural heritage is of big importance, especially in areas that suffered earthquake damage, heritage that was damaged during the War of Independence or heritage that wasn't maintained because lack of funds or bad management. Since the majority of ''attractive'' cultural heritage for tourism is located mainly on the coastal parts of the Programme area, it's preferred to develop this action more towards the hinterland and lesser-known locations and towards heritage that hasn't been recognised as resourceful in the past, but could represent a significant economic benefit to local communities. It's encouraged to develop heritage routes, especially cross-border tourist routes within this action. Introducing landscapes as a part of cultural tourism offer is desirable as well, since protection, management and preservation of landscapes isn't carried out sufficiently on the Programme territory. When it comes to physical regeneration, cooperation with conservationists must be done in means of creating project documentation and construction supervision to minimise possible negative impact.								
4. Support of social innovation in tourism and culture - development of existing or new tourism and culture businesses models								
Social innovation may be seen as new solutions to social problems which lead to more effective and efficient solutions with likely change of social behaviour patterns. Giving the rapid technological changes taking place, and its impact on the behaviour of all stakeholders (including job migration, job losses), as well as the need to include sustainability and circular economy in business practices, new business models and new work places have to be developed in order to be able to face such challenges. The stated action is non-structural and even though it will have a positive impact on employment, inclusion etc., it doesn't represent a risk for SEA objectives.								
5. Protection, development and promotion of natural heritage and eco-tourism including Natura 2000 sites								
Tourism and biodiversity are closely linked both in terms of impacts and dependency. Many types of tourism rely directly on ecosystem services and biodiversity (ecotourism, agro-tourism, wellness tourism, adventure tourism, etc.). Tourism uses recreational services and supply services provided by ecosystems. Tourists are looking for cultural and environmental authenticity, contact with local communities and learning about flora, fauna, ecosystems and their conservation. On the other hand, too many tourists can also have a negative, degrading effect on biodiversity and ecosystems and the increased tourism forecast to biodiversity hotspot countries requires careful planning and management to avoid negative impacts on biodiversity.								

DRAFT INTERREG PROGRAMME								
Programme Actions	**SEA OBJECTIVES**							
Impact assessment	Improving water quality and reducing water and sea pollution	Protection of biodiversity, ecosystems and wildlife	Sustainable management of natural resources	Protection of cultural heritage and landscape values	Reducing impacts on air and climate	Strengthening resilience and disaster risk reduction	Protection of human health and well-being	Sustainable management of waste
Protected natural areas and Natura 2000 sites are managed under the Nature Management Plans, which again are subject to environmental impact procedures and appropriate assessment. Projects taking place in natural areas have to be in conformity with the national regulations, appropriate plans and measures proscribed within EIA and AA procedures. Given the differences in development between coastal and continental parts of the Programme territory, the Programme should prioritise developments in the continental areas or seek to preserve remaining natural coastal and island areas through ecotourism. Even though it is unlikely, there is still a possibility of negative impacts on biodiversity as a result of increased number visitors, in view of disturbance of wildlife and habitats, degradation of habitat quality, littering etc. Therefore, due to sensitive nature of biodiversity and Natura 2000 network, precaution and mitigation measures are necessary. For each project that will generate changes in terms of construction in protected sites, a suitability analysis should be conducted to avoid significant impact on biodiversity, habitats, site protection goals, etc. For each tourism product, a management plan for sustainable implementation should be developed to ensure sustainable use of resources, circular economy, minimal impact on environment, social contribution, etc.								
6. Integration of existing tourist products into cross-border thematic routes, products or destinations and their further advancement								
Cross-border thematic routes are often tied to natural or cultural heritage sites as gravity points or points of attraction. In the Programme Area, cross-border areas of natural heritage include sites of high value and sensitivity which are also protected sites, such as Dinara mountain. The history of the Programme Area stated is intertwined and cultural heritage has been developed throughout the history with shared elements of origin or shared influence. All of these sites, natural or cultural, represent high value and sensitive locations that have high potential to contribute to economic development. Cross-border tourist products and joint solutions can help create a more diverse tourism offer in the Programme area, reduce the pressure on current popular tourist destinations and help the economic development of less-developed and rural areas which would be included in the cross-border routes. If the tourist products that will be implemented follow sustainability principles and are created in a place-based and nature-based manner, the overall impact on environment and society would be positive. Since the Programme territory is largely characterised by highly attractive tourist destinations on the coastline, it's desirable to focus this action more towards lesser-known areas, areas in the hinterland, historical landscapes, recreational routes of high natural attractivity such as mountain hiking routes, etc. Each thematic route should be planned with the sensitivity of the area where it's located in mind.								
7. Capacity building for innovation in tourism and cultural heritage, focusing on recovery and resilience, and								

DRAFT INTERREG PROGRAMME								
Programme Actions	**SEA OBJECTIVES**							
Impact assessment	Improving water quality and reducing water and sea pollution	Protection of biodiversity, ecosystems and wildlife	Sustainable management of natural resources	Protection of cultural heritage and landscape values	Reducing impacts on air and climate	Strengthening resilience and disaster risk reduction	Protection of human health and well-being	Sustainable management of waste
sustainable development of new or upgrading of existing cross-border tourism products, product diversification to adapt to new trends and needs								
This action mostly focuses on human resources/ capacities that will develop solutions in tourism and cultural heritage management and their resilience and adaptation when it comes to climate change. This may indirectly positively impact the state of the environment and strengthening resilience objectives, but such impacts are not significant. It's proposed that at further stages of implementation of this action, experts such as urban planners, landscape architects, green buildings specialists, climate and environmental experts are included.								
8. Adoption of green concepts and standards in cross-border tourist products and services and sustainable use of culture and tourist potentials of the border regions								
The adaptation of the tourism sector in the Programme territory towards sustainability and climate change challenges is nowadays more than necessary era and especially in the Programme area where tourist destinations are becoming more and more vulnerable, especially since the gravitational area of tourism in the Programme area is located on the littoral areas which are at risk because of their environmental characteristics and that risk is amplified because of the development pressures, especially building and tourism. Most vulnerable areas of the littoral tourist destinations include urban areas, coastline and the sea. It's important and preferred that the stated actions focus on these areas in order to facilitate transition to sustainable forms of tourism and provide the environment the change to recover. The concepts, activities and standards planned within this action should also include activities that address marine environment protection (from exp. pollution from tourism and traffic activities), green building principles, sustainable and innovative waste management solutions, sustainable rainwater management, etc. In the hinterland and in rural areas, the points of attraction could be sustainable agriculture and small farms and preserved cultural landscapes.								

9.2.1 Cumulative impacts

The assessment was carried out at proposed action level, and even though the action list is not exhaustive, it allowed for identification of main causes of stress, impact paths, intensity of change, as well as capacity of environmental factors, i.e. SEA objective, to sustain such change. It is evident that the occurrence of cumulative impacts is more likely in locations where more projects will take place in a limited area or which cause parallel stress factors. The analysis of individual actions thus helped in assessing the likelihood that their implementation within the same time frame in the same area will bring about amplified positive or negative impacts, and to evaluate which SEA objectives will be under the greatest pressure (**Figure 21**).

As it can be seen from the graph below, the Programme has the potential to generate both positive and negative cumulative impacts on the environment, the greatest majority of which will be positive. It will strongly contribute to SEA objectives of Protection of human health and well-being, Strengthening resilience and disaster risk reduction, Reducing impacts on air and climate and Sustainable management of natural resources and Sustainable management of waste.

The positive impacts on the Protection of human health and well-being objective are also due to positive impacts on the Reducing impacts on air and climate. Specific objective 2.4. Promoting climate change adaptation and disaster risk prevention, resilience, taking into account eco-system base approaches, through actions such as Development and introduction of joint climate change adaptation, disaster prevention, Encouraging intersectoral/interstate cooperation in risk prevention and rapid response management, Establishment of joint emergency centres, including small-scale infrastructure, Integrating climate change aspects into water management strategies on local, regional and interregional level and Developing solutions for strengthening eco-system services for human health and wellbeing and specific objective 2.1. Promoting energy efficiency and reducing greenhouse gas emissions (Developing and implementing joint pilot and demonstration actions on innovative technologies, measures and solutions in the field of energy management, Investments in measures and actions that increase energy efficiency, Promoting the production and use of advanced biofuels etc.) will have positive impacts on reducing emissions and adapting to the climate resulting from the promotion and use of renewables. Furthermore, the implementation of actions related to the development and implementation of the system of response and defence against natural risks (floods, fires, earthquakes) will prevent possible negative impacts of hazards on infrastructure and population, which is why the above specific objectives also have a positive impact on SEA objectives of Protection of human health and well-being and Strengthening resilience and disaster risk reduction.

Positive impacts on SEA objective Sustainable management of waste will derive from specific objective SO 2.6 Promoting the transition to a circular and resource efficient economy, including action for Developing and implementing approaches and solutions for limiting landfilling of all types of waste, Improving waste management policies and competences of the public sector, including the prevention, processing and recycling of communal, Developing and testing solutions that support the recovery and reuse of raw materials etc.

Positive impacts of smaller intensity and scope regard Protection of biodiversity, ecosystems and wildlife, Protection of cultural heritage and landscape values, as a result of actions in specific objective

S0 4.6 Enhancing the role of culture and sustainable tourism in economic development, social inclusion and social innovation and.

Even though the Programme supports mainly non-structural actions, it may likewise generate cumulative negative impacts on SEA objectives, even though of a lesser intensity. Direct negative impacts on the Protection of biodiversity, ecosystems and wildlife directly may occur through implementation of RES projects, especially hydro and wind power exploitation, but also some adaptation measures. The effects can result in the loss, degradation and fragmentation of natural habitats and population of species that depend on these habitats for their existence, od as a direct threat from collision. Development of tourism, although sustainable, has also been assessed as moderately negative due to the baseline state and sensitivity of the environmental factors most affected by it, primarily marine environment. The potential negative impacts on SEA objectives Improving water quality and reducing water and sea pollution are coming from specific objective SO 4.6. Enhancing the role of culture and sustainable tourism in economic development, social inclusion and social innovation because of the possible impact coming from water use and pollution from tourist activities and offers, which is especially pronounced in the coastal area, i.e. the sea.

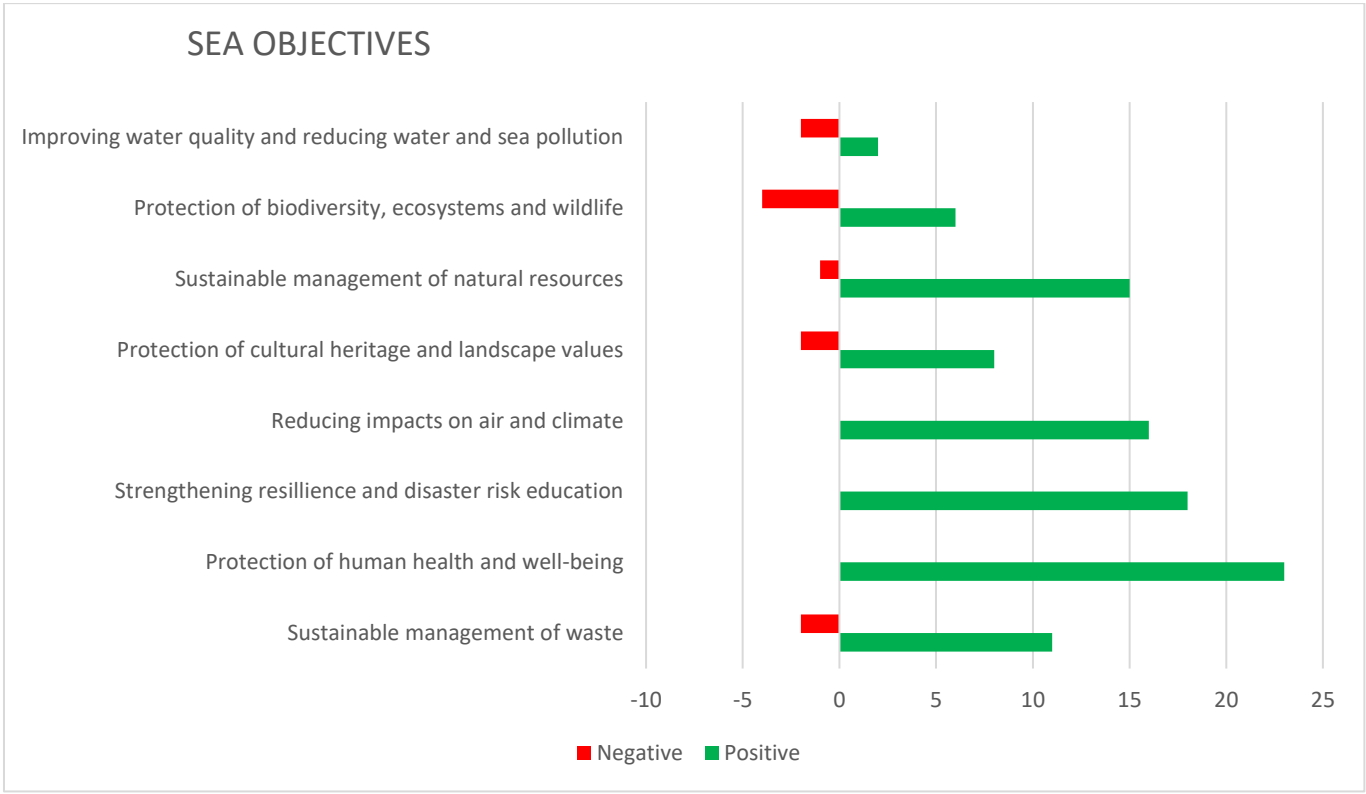


Figure 21. Presentation of quantified impacts of the Programme on environmental objectives

10. TRANSBOUNDARY IMPACTS

Taking into consideration that Interreg Programme is transboundary in nature and scope, aiming at achieving impacts on the cross-border region, the impacts were regarded as transboundary by default, with consultations being held in all participating countries.

As regards the likelihood of occurrence of impacts across borders of the Programme territory, taking into consideration the typology of proposed actions as well as their local spatial scope, the implementation of specific objectives proposed by the Programme are not expected to generate cross-border impacts on the neighbouring Slovenia, Albania, Kosovo and Serbia.

11. ENVIRONMENTAL PROTECTION AND ENHANCEMENT MEASURES

This Chapter describes measures for prevention, reduction and mitigation of likely negative impacts generated through implementation of the Programme, as assessed in chapter **9.2** *Results of the assessment of the impact of the implementation of the Development Programme on environmental objectives*

Protection measures have been defined on the basis of identified negative individual and cumulative impacts and are designed to minimize or completely avoid them. Apart from measures proposed in response to identified negative impacts, the SEA Report also proposes integration of enhancement measures formed in response to observed opportunities to improve environmental state or to increase sustainability of the solutions proposed by the Programme.

Therefore, for better understanding and implementation, the proposed measures were divided into measures to be implemented at the Interreg Programme level and measures to be applied during tendering procedure at project screening level during further implementation of the Programme.

Table 20. Environmental protection and enhancement measures to be implemented at Programme level

Programme Priority	SPECIFIC OBJECTIVE	Proposed measure/guideline regarding the Interreg Programme	SEA OBJECTIVES
PA1 - Smart investments in research, innovation and competitive entrepreneurship	SO 1.1 - Developing and enhancing research and innovation capacities and the uptake of advanced technologies	1. The action should also emphasise bridging over research and commercialisation of the final product. (S.O 1.1 – 3) 2. Apart from building capacities, it is necessary also to include information, education and support to the public in use of e-services of public administration. (S.O 1.1 – 8)	Sustainable management of natural resources Protection of human health and well-being
	SO 1.3 - Enhancing sustainable growth and competitiveness of SMEs and job creation in SMEs, including by productive investments	1. The Programme should consider reaching out to the underperforming SMEs in addition to supporting the already established persons (S.O 1.3 – 2) 2. The Programme should consider including simplification of legal and regulatory framework, accessible and easy finance, ensuring adequate infrastructure and education, and business support services (S.O 1.3 – 1)	Sustainable management of natural resources Protection of human health and well-being
PA2 - Green investments in environmental protection and efficient risk management	SO 2.1 - Promoting energy efficiency and reducing greenhouse gas emissions	1. The action should be completed with consideration of use of RES or clean mobility and transport (S.O. 2.1-2) 2. Strategic approach may wish to consider an energy hierarchy such as reduction of energy demand, ensuring efficient use of energy, generating energy needs from renewable sources (S.O 2.1 – 4) 3. Biomass derived from waste since is not supported since any activity leading to significant increase in incineration is not considered as eligible, and harms circular economy, for which reason waste biomass has to be omitted from the action. (8) DNSH	Sustainable management of natural resources Protection of cultural heritage and landscape values

Programme Priority	SPECIFIC OBJECTIVE	Proposed measure/guideline regarding the Interreg Programme	SEA OBJECTIVES
	SO 2.4 - Promoting climate change adaptation and disaster risk prevention, resilience, taking into account eco-system based approaches	1. Proposed strategies should also include disaster prevention strategies as a way to minimise impact on climate change. Strategies should also focus on good standards and practices and implement them, e.g. green infrastructure. 2. Vulnerability assessments of adequate sectors should be carried out as preconditions for selecting adequate approach to climate proofing. (S.O. 2.4 10) 3. Water management should also include waste-water collection and treatment (9) 4. The action of integrating climate change aspects into water management should also include preservation of wetlands, reforestation and preservation of natural floodplains. (SO 2.4 – 9)	Strengthening resilience and disaster risk reduction
PA4 - Sustainable and inclusive tourism and culture	SO 4.6 - Enhancing the role of culture and sustainable tourism in economic development, social inclusion and social innovation	1. Actions must be performed with precaution and taking into consideration environmental mitigation measures. (S.O. 4.6 -1) 2. Direct investments more towards the hinterland and continental parts of the Programme Area since those areas are less developed and in need for economic development and also to relieve the pressure on coastal areas (S.O 4.6 – 1)	Improving water quality and reducing water and sea pollution Sustainable management of natural resources Protection of cultural heritage and landscape values

Table 21. Environmental protection and enhancement measures at project screening level

Programme Priority	SPECIFIC OBJECTIVES	Proposed measures and guidelines regarding further implementation of the Programme	SEA OBJECTIVES
P1 - Smart investments in research, innovation and competitive entrepreneurship	SO 1.1 - Developing and enhancing research and innovation capacities and the uptake of advanced technologies	1. The proposed technologies will belong on the low carbon technology list and will include applications to minimize resource consumption in other sectors (agriculture, food production, manufacture etc.). (3) 2. Proven green solutions will include low carbon technology or will enable GHG emissions in other sectors by their implementation, use alternative fuels, generate or use renewable energy, and take into consideration transport emissions. (7)	DNSH DNSH
	SO 1.3 - Enhancing sustainable growth and competitiveness of SMEs and job creation in SMEs, including by productive investments	1. Established schemes as "green-building" certifications or EU building regulations and standards may be used as alternative proof of eligibility (6)	DNSH
P2 - Green investments in environmental protection and efficient risk management	SO 2.1 - Promoting energy efficiency and reducing greenhouse gas emissions	1. Use bioenergetic crops that do not require the use of pesticides (S.O 2.1 – 8) 2. Protect forests from excessive logging for energy purposes (S.O 2.1 – 8) 3. In biomass production and use prioritise locations of degraded qualities such as brownfields, abandoned quarries, or locations along or within existing transportation or transmission corridors (S.O 2.1-8) 4. Negative impacts of RES projects mitigate through siting (selection of location), and protection measures proscribed at the project level in environmental impact assessment procedures. (S.O 2.1-8) 5. In order to support sustainable management of natural resources objective, it is proposed that former	Protection of biodiversity, ecosystems and wildlife Sustainable management of natural resources Protection of cultural heritage and

Programme Priority	SPECIFIC OBJECTIVES	Proposed measures and guidelines regarding further implementation of the Programme	SEA OBJECTIVES
		hydrocarbon drillholes are used for survey and geothermal energy exploitation purposes (S.O 2.1 – 8) 6. Involve the public in the planning processes of RES power plants (S.O 2.1 – 8) 7. At project level, include experts/conservationists in the project development stage to ensure minimal negative impact on cultural heritage. Ensure expert supervision in implementation stages of pilot projects when it comes to cultural heritage (S.O 2.1 – 6) 8. When implementing and developing actions and specific projects regarding wind power plants, the dimensions and layout of wind turbines must be adapted to specific location context and values, with a viewshed analysis and with a goal to minimise the impact on landscape and heritage values. Modifying wind power plants for landscape context should be done as seen in good global practices and R&D (S.O 2.1 – 8) 9. Produce area sensitivity and suitability analyses for renewable energy plants (S.O 2.1 – 8) 10. As regards hydropower exploitation, future projects will involve change of technology, renovation and enhancement of the existing systems, while new hydropower plants are not supported by this Programme (S.O 2.1 – 8) 11. At project level, ensure that experts and skilled operatives are selected for work on traditional buildings/cultural heritage and are included in both project development and implementation phase (S.O 2.1 – 3)	landscape values Sustainable management of waste DNSH DNSH DNSH

Programme Priority	SPECIFIC OBJECTIVES	Proposed measures and guidelines regarding further implementation of the Programme	SEA OBJECTIVES
		12. Integration of traditional energy sources will not be supported. (2)	DNSH
		13. Green building certification is supported as alternative proof of eligibility of proposals. (2, 4, 6)	DNSH
		14. All emissions will be assessed within environmental assessment procedures and will not exceed limit values. (8)	
		15. Used biomass will not be derived from deforestation or forest degradation practices (8)	DNSH
		16. Biomass derived from waste since is not supported since any activity leading to significant increase in incineration is not considered as eligible, and harms circular economy, for which reason waste biomass has to be omitted from the action. (8)	DNSH
		17. Use of wind power will not include offshore generation as there are currently no applicable legal regulations or guidelines to be applied. (8)	DNSH
		18. Measures directed to reduce adverse impacts on water and protected habitats and species dependent on water to be applied regard ensuring of downstream and upstream fish migration, minimum ecological flow and sediment flow, and habitat protection and enhancement measures. They are regularly identified and prescribed within Environmental Impact Assessments and Appropriate Assessments for developments at or near NATURA 2000 sites. (8)	DNSH
		19. Programme shall support reuse and use of secondary raw materials and reused components, design for high durability, recyclability, waste management that	

Programme Priority	SPECIFIC OBJECTIVES	Proposed measures and guidelines regarding further implementation of the Programme	SEA OBJECTIVES
		prioritises recycling over disposal and traceability of substances and materials used. (8)	
	SO 2.4 - Promoting climate change adaptation and disaster risk prevention, resilience, taking into account eco-system based approaches	1. Any plans involving cultural heritage should be implemented with cooperation with experts/conservationists in order to ensure preservation, protection and maintenance of structures (S.O 2.4 – 8) 2. Reduction of existing risks should be developed on flood risk maps aiming at reduction of adverse consequences for human health, the environment, cultural heritage and economic activities (S.O 2.4 – 5) 3. Ensure implementation of green infrastructure, green building principles and sustainable rainwater management, especially in urban areas (S.O 2.4 – 8) 4. Property occupants and users should be directly involved in development of emergency-response plans (S.O 2.4 – 8) 5. Strategies developed within this action (S.O 2.4 – 9) will contain specific measures and guidelines for implementation of green infrastructure for sustainable water management or incorporate pilot projects for the stated 6. In order to have full effects of the action, it should take into consideration urban, land-use and marine spatial planning and to include by a wide range of specialists from ecologists, public health scientists and urban planners (S.O 2.4 – 11) 7. Include green infrastructure projects and activities for urban areas, as it can significantly improve environmental	Protection of cultural heritage and landscape values Strengthening resilience and disaster risk reduction Protection of human health and well-being

Programme Priority	SPECIFIC OBJECTIVES	Proposed measures and guidelines regarding further implementation of the Programme	SEA OBJECTIVES
		services that benefit human health physically and psychologically (S.O 2.4 – 11) 8. Activities planned with action – development and introduction of joint climate change adaptation, disaster prevention and first response plans, have to include education of the public, and regulation of behaviour, especially in the most affected areas and periods. 9. In order to identify physical climate risks, vulnerability assessment will be conducted through screening, vulnerability assessment and assessment of adaptation solutions that can reduce identified physical climate risks (1, 2, 5, 8, 9, 11) 10. Any discharges to natural receptors will be in accordance with national provisions and maximum permissible pollutant levels. (9)	DNSH DNSH DNSH
	SO 2.6 - Promoting the transition to a circular and resource efficient economy	1. Waste fractions will not be mixed in waste storages and transfer facilities with other waste or material of different properties and will be separately collected. (1, 3, 4) 2. Industrial waste within this programme will refer to industrial biodegradable waste. The action should also cover construction waste. (4)	DNSH DNSH
P4 - Sustainable and inclusive tourism and culture	SO 4.6 - Enhancing the role of culture and sustainable tourism in economic development, social inclusion and social innovation	1. Implementation of actions must be done with precaution and implemented mitigation measures regarding SEA objectives, especially regarding water quality, protection of biodiversity, landscape values and sustainable waste management (S.O 4.6 – 1) 2. Projects must include a preliminary site analysis – contextual environmental analysis that will ensure appropriate implementation	Protection of biodiversity,

Programme Priority	SPECIFIC OBJECTIVES	Proposed measures and guidelines regarding further implementation of the Programme	SEA OBJECTIVES
		of projects into the landscape and cultural heritage, a suitability assessment towards the environment, climate risk assessment and other expert documents as seen in good practice globally (S.O 4.6 – 1) 3. For each tourism product, a management plan for sustainable implementation should be developed to ensure sustainable use of resources, circular economy, minimal impact on environment, social contribution, etc (S.O 4.6 – 5) 4. Cooperation with conservationists should be ensured in creating project documentation and construction supervision over cultural heritage assets to minimise possible negative impacts (S.O 4.6 – 3) 5. The concepts, activities and standards should also include activities that address marine environment protection (e.g. pollution from tourism and traffic activities) (8) 6. The compliance with national legislation and waste management strategies and plans is a minimum requirement. (1, 3, 4, 5) 7. Adaptation measures should take into consideration physical strengthening to extreme weather events, and increase of safety, future increase of temperature, floods, monitoring and forecasting, waterproofing, and green infrastructure and green solutions in urban areas. (7)	ecosystems and wildlife Sustainable management of natural resources Protection of cultural heritage and landscape values DNSH DHNS

12. DIFFICULTIES DETECTED IN THE DEVELOPMENT OF A STRATEGIC STUDY (E.G. TECHNICAL WEAKNESSES OR LACK OF KNOWLEDGE AND EXPERIENCE) IN COLLECTING THE NECESSARY DATA

Due to the strategic nature of the measures planned by the Program, it is difficult to fully assess the environmental impact of interventions with complete reliability. In particular, the strategic environmental assessment was limited by the following key factors:

- The proposed interventions do not include a spatial component, but a general description of the actions without any indication of concrete interventions, which makes it difficult to safely assess possible environmental impacts, which is why the impacts for most measures were assessed in a broader context using precautionary measures.
- Assessment of actions, results and expected outcomes, in addition to the absence of spatial and quantitative reference, especially in view of heterogeneity of the Programme territory, was made difficult to determine the significance of individual impacts, especially related to the construction of infrastructure.
- Since there are no comprehensive and standardized databases on the state of the environment in the Programme territory, collected data on the state and trends of individual environmental factors for the purposes of SEA Report do not correspond in level of detail or relevance, or have been found to be mutually incomparable. Likewise, discrepancies were often encountered.
- According to instructions of the National Authorities, apart from the Croatian authorities, official data for Bosnia and Herzegovina and Montenegro were requested from National and competent authorities, as well as from GIS centres, of which the Ministry of Interior Affairs of Montenegro, Republic Hydrometeorological Institute of the Republic of Srpska, Agency for the watershed of Adriatic Sea (Bosnia and Herzegovina) and Agency for the Sava River Basin (Bosnia and Herzegovina) delivered requested information. Most of the authorities claimed not to possess or not to be competent for the information required. Due to lack of official data, data for Bosnia and Herzegovina and Montenegro were taken from various publicly available sectoral documents of the state and regional level, which often did not offer sufficient focus on the Programme area.

13. DESCRIPTION OF THE ENVISAGED MONITORING MEASURES

Monitoring the real impacts of the implementation of the Programme aims to verify that its implementation achieves the objectives set, then identify the negative impacts of implementation (anticipated and unforeseen), and to ensure that the environmental measures proposed by the strategic assessment are implemented.

In addition to the environmental monitoring systems already in place the results of which are considered essential for monitoring the impact of Program on the SEA objectives, i.e. the component and environmental pressures, the strategic assessment did not identify new environmental monitoring measures.

15. LEGISLATION AND SOURCES

Strategic Environmental Assessment

1. Andreas Sommer (2005). *Strategic environmental assessment: From scoping to monitoring. Content requirements and proposals for practical work*. Hallein.
2. European Commission (2013). *Guidance on Integrating Climate Change and Biodiversity into Strategic Environmental Assessment*
3. European Commission (undated). *Implementation of Directive 2001/42 on the Assessment of the Effects of Certain Plans and Programmes on the Environment*. European Commission DG Environment
4. GTZ Rioplus (2006). *Strategic Environmental Assessment - Practice-Orientated Training for Policy Makers, Administration Officials, Consultants and NGO Representatives*. Germany: Federal Ministry for Economic Cooperation and Development
5. Jiri Dusik (2001). *International Workshop on Public Participation and Health Aspects in Strategic Environmental Assessment*. Szentendre, Hungary: The Regional Environmental Center for Central and Eastern Europe
6. United Nations Economic Commission for Europe (2012). *Resource Manual to Support Application of the Protocol on Strategic Environmental Assessment*. New York and Geneva: United Nations
7. Strategic Environmental Assessment SEPA Guidance Note 5 Page, Guidance on consideration of human health in Strategic Environmental Assessment, 2019
8. Act on Environmental Impact Assessment and Acton Strategic Environmental Assessment
9. Convention on Environmental Impact Assessment in a Transboundary Context (1991, Espoo)
10. Convention on Access to Information, Public Participation in Decision Making and Access to Justice in Environmental Matters (Aarhus, 1998)
11. Strategic Environmental Assessment. - Practice-Orientated Training for Policy Makers, Administration Officials, Consultants and NGO Representatives
12. Andreas Sommer (2005.). Strategic environmental assessment: From scoping to monitoring. Content requirements and proposals for practical work. Hallein.

Air and Climate

1. Regional Note on Air Quality Management in the Western Balkans: Bosnia and Herzegovina, Kosovo, and North Macedonia*. World Bank, Washington, DC. © World Bank. https://openknowledge.worldbank.org/handle/10986/33557 License: CC BY 3.0 IGO*
2. Air quality: *https://www.eea.europa.eu/themes/air/air-quality-index/index*
3. Koppen-Geiger Climate Classification map of Europe
4. EEA - Climate: *https://experience.arcgis.com/experience/5f6596de6c4445a58aec956532b9813d*
5. Croatia's National Communications 2, 3 & 4, submitted to the UNFCCC 6 February 2007.
6. Seventh national communication and third biennial report of the Republic of Croatia under the United Nations Framework Convention on Climate Change (UNFCCC), 2018.
7. Nordea, 2019, Climate Risk Assessment Report: Croatia
8. Draft Climate Change Adaptation Strategy in the Republic of Croatia for the period to 2040 with a view to 2070, White book, Zagreb, 2017.

9. World Economic Forum (2022): Green Public Procurement, Catalyzing the Net Zero Economy
10. Primorac, M (2020): Analysis of forest fires in the Mediterranean area from year 2017. to 2019., Zagreb
11. JRC Technical Report: Advance EFFIS Report on Forest Fires in Europe, Middle East and North Africa 2020., European Commission
12. European Forest Fire Information System EFFIS: *https://effis.jrc.ec.europa.eu/*
13. Climate change risk profile Bosnia and Herzegovina: *Climate Risk Profile: Bosnia and Herzegovina | Global Climate Change (climatelinks.org)*
14. EU Climate and Energy Package
15. EU Strategy on Adaptation to Climate Change
16. Climate Change Adaptation Strategy in the Republic of Croatia for the period to 2040 with a view to 2070

Hydrography and water body status

1. Croatian Meteorological and Hydrological Service: *https://meteo.hr/index_en.php*
2. European Waters, Assessment of Status and Pressures 2018, EEA Report 7/2018
3. Program for Development of Flood Risk Management Plan in the Sava River Basin, International Sava River Basin Comission, 2017
4. Andričević R., Meliadou A., Miletić M., Kišević M. (2011): Adriatic sea environment program. Rapid Assessment of Pollution Hotspots for the Adriatic Sea, final report
5. European Strategy for the Danube Region (EUSDR)
6. European Strategy for the Adriatic and Ionian Region (EUSAIR)
7. Directive 2000/60/EC of the European Parliament and of the Council of 20 October 2000 establishing a framework for Community action in the field of water policy (Water Framework Directive)
8. Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Helsinki, 1992)

Human heritage and Landscape

1. Laković, I. et al (2020.): Endangered Mediterranean Mountain Heritage – Case study of katuns at the Kuči Mountain in Montenegro
2. Bralić, I. (1995.): Landscape regionalisation of Republic of Croatia according to its natural features made for the Strategy of Spatial Planning of Republic of Croatia
3. Obad Šćitaroci, M., Dumbović Bilušić, B., Bojanić Obad Šćitaroci, B. i Božić, N. (2014.): Landscape – Factor of Strategy of Spatial Planning: expert background document for the Strategy of Spatial Planning of Republic of Croatia
4. Republički zavod za urbanizam i projektovanje (2015.): Mapiranje i tipologija predjela Crne Gore
5. UNESCO World Heritage List and Tentative Lists; *https://whc.unesco.org/en/list/*
6. Encyclopedia Britannica, *https://www.britannica.com/*
7. Agriscape & me: Terraced Landscapes choosing the future
8. European Landscape Convention (Florence, 2000)

9. Convention on Protection of the World Natural and Cultural Heritage (World Heritage Convention, Paris, 1972)

Demography

1. Croatian Bureau of Statistic: *https://www.dzs.hr/default_e.htm*
2. Montenegro Bureau of Statistic: *https://www.monstat.org/cg/*
3. Statistics agency of BiH: *https://bhas.gov.ba/*

Human health and safety

1. Croatian Strategic Environmental Assessment SEPA Guidance Note 5 Page, Guidance on consideration of human health in Strategic Environmental Assessment, 2019

Biodiversity

1. Convention on Biological Diversity: *https://www.cbd.int/countries/?country=hr*
2. Biodiversity of Croatia, State Institute for Nature Protection Ministry of Culture – Republic of Croatia Zagreb, 2006.
3. THE Sixth National Report of Montenegro to the United Nations Convention on Biological Diversity, Montenegro, December 2018
4. Sixth National Report of Bosnia and Herzegovina to the Convention on Biological Diversity, 2019
5. Sixth National Report for the Convention on Biological Diversity, Croatia, 2019
6. Department of Environmental and Nature Protection (2019.): State of Nature Report for Republic of Croatia for the period of 2013 up to 2017, Ministry of Environmental Protection and energetics, Zagreb.
7. Alegro, A. Et al. (2010.): Botanički važna područja Hrvatske. Zagreb: Školska knjiga.
8. Plantlife Important Plant Areas: *https://www.plantlifeipa.org/home*
9. State Institute for Nature Protection – information system for nature protection (*http://www.bioportal.hr/gis/*)
10. Informacija o stanju životne sredine u Crnoj Gori za 2020. godinu, Ministarstvo ekologije, prostornog planiranja i urbanizma, Agencija za zaštitu životne sredine, Podgorica, 2021
11. Radford, E.A. and Odé, B. eds. (2009) Conserving Important Plant Areas: investing in the Green Gold of South East Europe. Plantlife International, Salisbury.
12. IUCN, Summary of national assessments of the state of nature conservation systems in South-Eastern Europe, 2018
13. EU Biodiversity Strategy for 2030
14. European Green Deal
15. Convention on the Conservation of Migratory Species of Wild Animals – Bonn Convention (Bonn, 1979)
16. Convention on Wetlands of International Importance especially and Waterfowl Habitat - Ramsar Convention (Ramsar, 1971)
17. Council Directive 79/409/EEC on the conservation of wild birds (EU Birds Directive)

18. Council Directive 92/43/EEC on the conservation of natural habitats an of wild fauna and flora (EU Birds Directive)

19. Guidance on Integrating Climate Change and Biodiversity into Strategic Environmental Assessment, 2013.

Waste management

1. Waste Management Plan of the Republic of Croatia for the Period 2017-2022

2. AEA (2018) Increasing the climate resilience of waste infrastructure

3. Von Schoenberg A., CMS (2021): Factsheet: Waste Management in Montenegro

4. EEA (2018) Municipal waste management country fact sheet Bosnia and Herzegovina

5. MINGOR (2021): Municipal Waste Report for 2020

6. Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives (Waste Framework Directive)

Light pollution

1. Light pollution: *https://www.lightpollutionmap.info/*

Tourism

1. Ksenija Vodeb (2006): Cross-border Tourism Cooperation of Slovenia and Croatia

Renewable Energy Sources

1. Tumara D., Škrlec M., Živković S., Kolbah S. (2019): Use of geothermal energy resources in Republic of Croatia

Laws and Regulations

Croatia

1. Environmental Protection Act (Official Gazette 80/13, 153/13 – Building Act, 78/15, 12/18 and 118/18)
2. Decree on Strategic Environmental Assessment of the impact of Strategies, Plans and Programmes (Official Gazette 61/14, 3/17)
3. Act on Regional Development of the Republic of Croatia (Official Gazette 147/14, 123/17, 118/18)
4. Water Act (Official Gazette 66/19)
5. River Basin District Management Plan for the Republic of Croatia for 2016 – 2021 (Official Gazette 66/16)
6. Noise Protection Act (Official Gazette 30/09, 55/13, 153/13, 41/16, 114/18, 14/21)
7. Regulation on the maximum permissible noise levels considering the type of the source of noise, the time and place of its origin (Official Gazette 147/2021)
8. Nature Protection Act (Official Gazette 80/13, 15/18, 14/19 and 127/19)
9. Decree on the ecological network and the jurisdiction of public institutions over the management of ecological network areas (Official Gazette 80/19)
10. Regulation on the list of habitat types and maps of habitats (Official Gazette 27/21)
11. Act on the Protection and Preservation of Cultural Property (Official Gazette 69/99, 151/03, 157/03, 87/09, 88/10, 61/11, 25/12, 136/12, 157/13, 152/14, 98/15, 44/17, 90/18 32/20 and 62/20)
12. Waste management Act (Official Gazette 94/13, 73/17, 14/19 and 98/19)
13. Air Protection Act (Official Gazette 127/19)
14. Decree on monitoring of greenhouse gas emissions, policies and measures for their reduction in the Republic of Croatia (Official Gazette 5/17)
15. Decree on limit values of air pollutant emissions from stationary sources (Official Gazette 42/21)
16. Decree on air pollutant levels (Official Gazette 77/20)
17. Regulation on air quality monitoring (Official Gazette 72/20)
18. Act on Climate Change and Ozone Layer Protection (Official Gazette 127/19)
19. Energy Development Strategy of the Republic of Croatia until 2030 with a view to 2050
20. Croatian National Development Strategy 2030
21. The European Strategy for the Adriatic and Ionian Region' (EUSAIR)
22. Maritime Development and Integrated Maritime Policy Strategy of the Republic of Croatia for the Period from 2014 to 2020
23. River Basin Management Plan of the Republic of Croatia 2016-2021
24. Low-Carbon Development Strategy of the Republic of Croatia until 2030 with an outlook to 2050

25. Regulations on Protection against Electromagnetic Fields (OG 146/14)

Bosnia and Herzegovina

1. Environmental Protection Act (Official Gazette 15/2021)
2. Act of Health Care (Official Gazette 46/2010, 75/2013)
3. Act of Energy Efficiency of the Federation of BiH (Official Gazette 22/2017)
4. Nature Protection Act (Official Gazette 66/2013)
5. Water Act (Official Gazette 30/2010, 93/2012, 101/2016, 95/2018)
6. General Energy Strategy of Bosnia and Herzegovina until 2035
7. Development Strategy of the Federation of Bosnia and Herzegovina 2021-2027
8. Brčko District strategy 2021 - 2027
9. Water Management Plan for the Sava River Basin District in the Federation of Bosnia and Herzegovina
10. Framework Energy Strategy for Bosnia and Herzegovina up to 2035
11. Climate Change Adaptation and Low Emission Development Strategy for Bosnia and Herzegovina
12. Republic Waste Management Plan in Republika Srpska
13. Establishment of the Emerald Network in BiH' (2004–2006)
14. Noise Protection Act (Official Gazette of the Federation of BiH)
15. First National Report to the United Nations Convention on Biological Diversity of Bosnia and Herzegovina

Montenegro

3. Water Act (Official Gazette 27/2007, 32/2011, 47/2011, 48/2015, 52/2016, 2/2017, 80/2017, 55/2016
4. Nature Act (Official Gazette 054/2016, 018/2019)
5. Environmental Protection Act (Official Gazette 052/2016, 073/2019)
6. Act of Health Care (Official Gazette 003/2016, 002/2017, 024/2019, 082/2020, 008/2021)
7. Act of Energy (Official Gazette 005/2016, 051/2017, 082/2020)
8. Energy Development Strategy of Montenegro 2014-2030
9. National Strategy for Sustainable Development until 2030 of Montenegro
10. National Climate Change Strategy of Montenegro (NCCS)
11. National Waste Management Plan of Montenegro 2015 – 2020

12. IPA project 'Strengthening of the environmental protection system in Montenegro'

13. Montenegro Ministry of Sustainable Development and Tourism (2014) (Official Gazette of Montenegro, No. 020/19 and 042/19)

Others:

1. United Nations 2030 Agenda for Sustainable Development

2. Flood Risk Management Plan in the Sava River Basin

3. Sava River Basin Management Plan

4. Renewable Energy Directive (EU) 2018/2001

5. United Nations Framework Convention on Climate Change (UNFCCC) (Rio de Janeiro, 1992)

6. UNFCCC Kyoto Protocol (1997)

7. Paris Agreement (Paris 2015)

8. UN Convention on Biological Diversity (Rio de Janeiro, 1992)

9. EU cohesion policy in 2021-2027

10. United Nations Economic Commission for Europe (2012.). Resource Manual to Support Application of the Protocol on Strategic Environmental Assessment. UNITED NATIONS New York and Geneva

11. The Regional Environmental Center for Central and Eastern Europe (2001.). International Workshop on Public Participation and Health Aspects in Strategic Environmental Assessment. Szentendre, Hungary.

12. Implementation of Directive 2001/42 on the Assessment of the Effects of Certain Plans and Programmes on the Environment". European Commission DG Environment. Undated.

13. Towards a Sustainable Europe by 2030 document

14. South - East Europe 2030 Strategy

15. Energy Development Strategy of the Republic Srpska until 2035

16. EEA 2018 Report – Environmental indicator report 2018, In support to the monitoring of the Seventh Environment Action Programme

17. Spatial Plan of the Republika Srpska by 2025

18. The Birds Directive (Directive 79/409/EEC)

19.Habitats Directive 92/43/EEC

20.Council Directive 92/43/EEC

16. ANNEXES

16.1 Decision to start the Strategic Environmental Assessment procedure

REPUBLIKA HRVATSKA
MINISTARSTVO REGIONALNOGA RAZVOJA
I FONDOVA EUROPSKE UNIJE

P / 2056479

KLASA: 910-06/21-01/1
URBROJ: 538-10-3-1-1/433-21-6
Zagreb, 10. studenog 2021. godine

Na temelju članka 5. stavka 2. Uredbe o strateškoj procjeni utjecaja strategije, plana i programa na okoliš (Narodne novine, broj 3/17), ministrica regionalnoga razvoja i fondova Europske unije donosi

ODLUKU
o započinjanju postupka strateške procjene utjecaja na okoliš za Interreg IPA program prekogranične suradnje Hrvatska – Bosna i Hercegovina – Crna Gora 2021. – 2027.

I.

Danom stupanja na snagu ove Odluke započinje postupak provođenja strateške procjene utjecaja na okoliš za Interreg IPA program prekogranične suradnje Hrvatska – Bosna i Hercegovina – Crna Gora 2021. – 2027. (u nastavku teksta: Program).

II.

Postupak strateške procjene provest će Ministarstvo regionalnoga razvoja i fondova Europske unije koje je nadležno za provedbu Programa (u nastavku teksta: Ministarstvo) na temelju Odluke Vlade Republike Hrvatske o utvrđivanju programa europske teritorijalne suradnje u Republici Hrvatskoj za financijsko razdoblje Europske unije 2021.-2027. i davanje suglasnosti tijelima zaduženima za njihovu pripremu da potvrde njihov sadržaj, KLASA: 022-03/21-04/269, URBROJ: 50301-05/14-21-3 od 29. srpnja 2021. godine.

III.

U postupku strateške procjene utjecaja na okoliš za Interreg IPA program prekogranične suradnje Hrvatska – Bosna i Hercegovina – Crna Gora 2021. – 2027. Ministarstvo će provesti određene radnje u skladu s odredbama Zakona o zaštiti okoliša (Narodne novine, broj 80/13, 153/13, 78/15, 12/18, 118/18) i Uredbe o strateškoj procjeni utjecaja strategije, plana i programa na okoliš, redoslijedom provedbe kako je utvrđeno u Prilogu I, a koji je sastavni dio ove Odluke.

IV.

U okviru provedbe strateške procjene utjecaja Programa na okoliš nije potrebno provesti postupak Glavne ocjene prihvatljivosti za ekološku mrežu prema rješenju Ministarstva gospodarstva i održivog razvoja, KLASA: UP/I 612-07/21-37/258, URBROJ: 517-10-2-3-21-3 od 22. listopada 2021. godine u kojem je navedeno da je Interreg IPA program prekogranične

Interreg - IPA CBC
Croatia - Bosnia and Herzegovina - Montenegro

suradnje Hrvatska – Bosna i Hercegovina – Crna Gora 2021. – 2027. prihvatljiv za ekološku mrežu.

V.

Ministarstvo će pokrenuti postupak strateške procjene utjecaja na okoliš u roku od osam dana od dana donošenja ove Odluke. U svrhu određivanja sadržaja strateške studije Ministarstvo će zatražiti mišljenja tijela nadležnih za pojedine sastavnice okoliša i opterećenja za okoliš, koja su navedena u Prilogu II, a koji je sastavni dio Odluke.
Nakon pribavljenih mišljenja relevantnih tijela, Ministarstvo će donijeti odluku o sadržaju strateške studije u skladu s člankom 10., stavkom 2. Uredbe o strateškoj procjeni utjecaja strategije, plana i programa na okoliš.

VI.

Ministarstvo regionalnoga razvoja i fondova Europske unije obvezno je informirati javnost o odluci o pokretanju postupka strateške procjene i izradi strateške studije, u skladu s člankom 160. Zakona o zaštiti okoliša i člankom 5. Uredbe o informiranju i sudjelovanju javnosti i zainteresirane javnosti u pitanjima zaštite okoliša (Narodne novine, broj 64/08).

VII.

Ova Odluka stupa na snagu danom donošenja.

MINISTRICA REGIONALNOGA
RAZVOJA I FONDOVA EUROPSKE UNIJE

Nataša Tramišak, mag. iur.

Prilozi:
1. Redoslijed radnji koje će se provesti u postupku strateške procjene utjecaja Programa na okoliš
2. Popis tijela koja će sudjelovati u postupku provođenja strateške procjene utjecaja na okoliš

Dostaviti:
1. Ministarstvu gospodarstva i održivog razvoja
2. Pismohrana, ovdje

OBRAZLOŽENJE

Razlozi za donošenje Interreg IPA programa prekogranične suradnje Hrvatska – Bosna i Hercegovina – Crna Gora 2021. – 2027. iz točke I. ove Odluke utvrđeni su u Odluci Vlade RH o utvrđivanju programa europske teritorijalne suradnje u Republici Hrvatskoj za financijsko razdoblje Europske unije 2021.-2027. i davanje suglasnosti tijelima zaduženima za njihovu pripremu da potvrde njihov sadržaj, KLASA: 022-03/21-04/269, URBROJ: 50301-05/14-21-3 od 29. srpnja 2021. godine. U članku III. te Odluke naveden je popis programa teritorijalne suradnje, koji između ostalih, sadržava i Interreg IPA program prekogranične suradnje Hrvatska – Bosna i Hercegovina – Crna Gora 2021. – 2027. Nadalje, člankom IV. iste Odluke utvrđeno je da je Ministarstvo tijelo nadležno za cjelokupnu organizaciju i koordinaciju procesa pripreme navedenog Programa.
Predviđeno je da je Interreg IPA program prekogranične suradnje Hrvatska – Bosna i Hercegovina – Crna Gora 2021. – 2027. obuhvati aktivnosti u okviru 3 cilja politike od ukupno 5 koje podupire Europski fond za regionalni razvoj, a koji su navedeni u članku 5. stavku 1. Uredbe (EU) 2021/1060. U sklopu svakog odabranog cilja politike, dogovoreni su i specifični ciljevi, koji su navedeni u nastavku.

Kroz cilj politike 1 „Konkurentnija i pametnija Europa promicanjem inovativne i pametne gospodarske preobrazbe i regionalne povezivosti u području IKT-a“, specifični cilj 1.1 Razvoj i jačanje istraživačkih i inovacijskih kapaciteta te primjenu naprednih tehnologija, predviđa se financiranje sljedećih indikativnih aktivnosti:

- podrška istraživačko-razvojnim institucijama, javnim istraživačkim centrima, sveučilištima i centrima kompetencija u poticanju prekogranične inovacije i tehnologije temeljene na pristupu pametne specijalizacije;
- jačanje i modernizacija usluga poslovne podrške koje bi mogle pomoći kod osposobljavanja, u marketingu, razvoju i implementaciji novih usluga/proizvoda, korištenju IKT usluga i novih tehnologija, prilikom uvođenja inovativnih rješenja u organizaciju poslovanja i procese itd.
- ubrzavanje inovacija i prijenos tehnologije (npr. plava i zelena ekonomija, poljoprivreda, proizvodnja hrane, ribarstvo i akvakultura, klimatske promjene, obnovljivi izvori, pametna proizvodnja, bioraznolikost, kulturna i kreativna industrija, razvoj vještina za pametnu specijalizaciju, zdravlje i buduće digitalne tehnologije), suradnja između istraživačkih institucija, MSP-ova, javnog sektora i razvojnih organizacija s ciljem poticanja inovacija i razvoja tehnologija koje se temelje na pametnim specijalizacijama.
- investiranje u istraživačku infrastrukturu manjeg obujma i opremu.

Kroz specifični cilj 1.3 Jačanje održivog rasta i konkurentnosti MSP-ova i otvaranjem radnih mjesta u njima, među ostalim i kroz produktivna ulaganja, predviđa se financiranje sljedećih indikativnih aktivnosti:

- podrška lokalnim malim i srednjim poduzećima u suočavanju s izazovima u vezi s njihovom veličinom, ograničenim resursima (poput vještina i financija) ili industrijskim i tržišnim uvjetima, uključujući unutar lanaca opskrbe i s većim poduzećima putem shema vaučera za kupnju prekograničnih poslovnih savjeta ili u obliku sub-grantova ili fondova za male projekte;
- poboljšanje kapaciteta poduzetnika, uključujući mikro poduzetnike, poput obiteljskih poljoprivrednih gospodarstava, u pogledu marketinga, robne marke, istraživanja tržišta, e-poslovanja, konkurentnosti i obrazovanja te osposobljavanja za poduzetničke vještine u područjima poljoprivrede, turizma i IKT-a;
- razvoj i podrška postojećim poslovnim klasterima i mrežama malih i srednjih poduzeća u cilju razvoja i promicanja zajedničkih proizvoda za lokalna prekogranična i međunarodna tržišta.

Kroz cilj politike 2 „Zelenija, otporna Europa s niskom razinom emisija koja prelazi na gospodarstvo s nultom neto stopom emisija ugljika promicanjem prelaska na čistu i pravednu energiju, zelenih i plavih ulaganja, kružnoga gospodarstva, ublažavanja klimatskih promjena i prilagodbe klimatskim promjenama, sprečavanja rizika i upravljanja njime te održive urbane mobilnosti“, specifični cilj 2.1 Promicanje energetske učinkovitosti i smanjenje emisija stakleničkih plinova, predviđa se financiranje sljedećih indikativnih aktivnosti:

- razvoj i provedba zajedničkih pilot i demonstracijskih akcija na inovativnim tehnologijama, mjere i rješenja u području upravljanja energijom i smanjenja emisije stakleničkih plinova (npr. praćenje kvalitete zraka i drugih parametara u javnim zgradama u većem opsegu);
- ulaganja u mjere i radnje koje povećavaju energetsku učinkovitost i poboljšavaju integraciju održivih izvora energije u različite sektore (npr. javna rasvjeta);
- promicanje pilot aktivnosti u sektoru zgradarstva u skladu s Valom obnove i Europskim zelenim planom. Pristup međusektorskog povezivanja treba biti naglašen povezivanjem energije zgrada i seizmičkog ojačanja;
- zajednički poticaji i pilot projekti za poticanje i osiguravanje strateškog pristupa energetskoj učinkovitosti (npr. razvoj SECAP -a);
- jačanje prekogranične suradnje i prijenosa znanja u regiji kroz razmjenu iskustva, informacija (podizanje svijesti), znanja i jačanja kapaciteta putem online i in-situ treninga s ciljem poboljšanja vještina u području energetske učinkovitosti

Kroz specifični cilj 2.4 Promicanje prilagodbe klimatskim promjenama i sprječavanja rizika od katastrofa te otpornosti, uzimajući u obzir pristupe utemeljene na ekosustavima, predviđa se financiranje sljedećih indikativnih aktivnosti:

- razvoj i uvođenje zajedničkih rješenja i sustava za praćenje, sprječavanje i upravljanje potencijalnim rizicima (npr. poplave, požari, klizišta, suše, onečišćenje mora, potresi, itd.);
- poticanje međusektorske/međudržavne suradnje u sprječavanju rizika i upravljanju brzim odgovorom kroz razvoj i provedbu zajedničkih protokola, postupaka i pristupa;
- jačanje institucionalnih i stručnih kapaciteta i podizanje svijesti za rješavanje pitanja okoliša, klimatskih promjena i rizika od katastrofa
- uspostava zajedničkih centara za hitne slučajeve, uključujući infrastrukturu manjeg obujma i opremu kao i promoviranje investiranja manjeg obujma u javnu infrastrukturu edukacije;
- razvoj prekograničnih strategija za procjenu rizika od prekograničnih nepogoda poput šumskih požara, klizišta, poplava i promjena u relativnoj razini mora.

Kroz specifični cilj 2.6 Promicanje prijelaza na kružno i resursno učinkovito gospodarstvo, predviđa se financiranje sljedećih aktivnosti:

- razvoj i provedba pristupa i rješenja za ograničavanje odlaganja svih vrsta otpada na odlagališta i zadržavanje njihove vrijednosti (kao budućih resursa) u gospodarskom ciklusu;
- povećanje svijesti kreatora politike i dionika o okolišnim i ekonomskim mogućnostima kružnog gospodarstva i poboljšanje njihovih kapaciteta za praktičnu primjenu pristupa kružnog gospodarstva u različitim sektorima (poput elektronike, graditeljstva i građevinarstva , tekstila, plastike, ambalaže, hrane, poljoprivrede);
- razvoj i provedba zajedničkih pilot i demonstracijskih akcija koje blisko uključuju građane (npr. dobra praksa u odvojenom prikupljanju otpada i ponovnoj upotrebi otpada, pilot testiranje popravaka, ponovna uporaba, itd.) kako bi se potaknule promjene u ponašanju, veće prihvaćanje održivijih proizvoda te uspostavili obrasci potrošnje i proizvodnje koji štede resurse.

Kroz cilj politike 4 „Uključivija Europa s istaknutijom socijalnom komponentom provedbom europskog stupa socijalnih prava“, specifični cilj 4.5 Osiguravanje jednakog pristupa zdravstvenoj skrbi i poticanje otpornosti zdravstvenih sustava, uključujući primarnu skrb, te

promicanje prijelaza s institucionalne skrbi na skrb unutar obitelji i zajednice, predviđa se financiranje sljedećih indikativnih aktivnosti:

- razvoj i provedba IKT rješenja i (pilot) aktivnosti za podršku digitalizaciji u zdravstvu;
- zajedničko ulaganje i poboljšanje zdravstvene zaštite i dugotrajna skrb za ugrožene skupine, s naglaskom na starije osobe, djecu i osobe s invaliditetom;
- kupnja visokotehnološke opreme za podršku zajedničkim prekograničnim uslugama, npr. telemedicina, dijagnostika, mobilne klinike, uključujući infrastrukturu manjeg obujma;
- Prijenos znanja u regiji kroz razmjenu iskustva, podizanje svijesti i jačanja kapaciteta putem online i in-situ treninga s ciljem poboljšanja vještina u području zdravstvene skrbi i socijalne skrbi (uključujući primarnu zdravstvenu zaštitu i obiteljsku te skrb zajednice).

Kroz specifični cilj 4.6 Jačanje uloge kulture i održivog turizma u gospodarskom razvoju, socijalnoj uključenosti i socijalnim inovacijama, predviđa se financiranje sljedećih indikativnih aktivnosti:

- razvoj i provedba zajedničkih akcija za podršku raznolikosti turizma ulaganjem u manje poznate destinacije i različite oblike turizma (kulturni, seoski, agroturizam, aktivni, zdravstveni turizam itd.);
- razvoj i implementacija inovativnih rješenja, stvaranje pametnih destinacija (npr. putem digitalizacije i kreativnih industrija) te novih usluga i proizvoda za određene ciljane segmente tržišta (starije osobe, mladi ljudi ili osobe s invaliditetom);
- razvoj i provedba mjera zaštite, razvoja i promicanja kulturne baštine i kulturnih usluga;
- potpora malim i srednjim poduzećima, uključujući društvene inovacije u turizmu i kulturi - razvoj postojećih ili novih turističkih i kulturnih poduzeća (uz naglasak na zaštiti, razvoju i promicanju prirodne baštine i eko-turizma);
- ulaganja u fizičku obnovu i sigurnost javnih prostora, u okviru njihovog uključivanja u turističke i/ili kulturne krugove.

U skladu s navedenim, Programom je predviđeno financiranje i provedba aktivnosti iz područja jačanja istraživačkih i inovacijskih kapaciteta, primjene naprednih tehnologija, kao i stimuliranje rasta i podrške MSP-u. Također, predviđeno je financiranje i provedba aktivnosti iz područja promicanja energetske učinkovitosti i smanjenja emisije stakleničkih plinova, prilagodbe klimatskim promjenama u cilju sprečavanja rizika od katastrofa te kružne ekonomije, kao i iz područja zdravstva, kulture i održivog turizma.

PRILOG I

Redoslijed radnji koje će se provesti u postupku strateške procjene utjecaja Programa na okoliš

Radnje koje se provode u postupku strateške procjene utjecaja Programa na okoliš su:

1. Ministarstvo regionalnoga razvoja i fondova Europske unije (u daljnjem tekstu: Ministarstvo) započinje postupak u roku od osam dana od dana donošenja ove Odluke. Prva radnja u tom postupku je određivanje sadržaja strateške studije. U svrhu određivanja sadržaja strateške studije Ministarstvo će u navedenom roku zatražiti mišljenja tijela nadležnih za pojedine sastavnice okoliša i opterećenja na okoliš o sadržaju strateške studije (tijelima će se dostaviti odluka o izradi programa i programska polazišta i ciljevi). U svrhu usuglašavanja mišljenja o potrebitom sadržaju strateške studije provodi se rasprava s gore navedenim tijelima. Ove radnje provode se u skladu s odredbama članka 7. do 10. Uredbe o strateškoj procjeni utjecaja strategije, plana i programa na okoliš.
2. U postupku određivanja sadržaja studije Ministarstvo objavljuje na internetskoj stranici odluku o izradi programa, programska polazišta i ciljeve te informira javnost o načinu sudjelovanja u postupku strateške procjene, a u skladu s odredbama članaka 5., 6. i 12. Uredbe o informiranju i sudjelovanju javnosti i zainteresirane javnosti u pitanjima zaštite okoliša.
3. Nakon pribavljenih mišljenja tijela iz točke 1., Ministarstvo donosi odluku o obaveznom sadržaju strateške studije u skladu s člankom 10. i 11. Uredbe o strateškoj procjeni utjecaja strategije, plana i programa na okoliš te objavljuje Odluku na web-stranici Ministarstva.
4. Ministarstvo u roku od 8 dana od donošenja Odluke o sadržaju strateške studije, istu dostavlja ovlašteniku koji će izraditi stratešku studiju (u skladu s člankom 12. Uredbe o strateškoj procjeni utjecaja strategije, plana i programa na okoliš).
5. Nakon što ovlaštenik izradi stratešku studiju i nositelj izrade programa izradi radni materijal nacrta prijedloga programa, Ministarstvo donosi odluku o upućivanju strateške studije i nacrta prijedloga programa na javnu raspravu u skladu s člankom 23. Uredbe o strateškoj procjeni utjecaja strategije, plana i programa na okoliš.
6. Postupak sudjelovanja javnosti u javnoj raspravi o strateškoj studiji i nacrtu prijedloga programa provodi se prema odredbama članaka 5., 6. i 12. Uredbe o informiranju i sudjelovanju javnosti i zainteresirane javnosti u pitanjima zaštite okoliša.
7. Istodobno s upućivanjem na javnu raspravu, Ministarstvo stratešku studiju i nacrt prijedloga programa dostavlja na mišljenje tijelima nadležnim za pojedine sastavnice okoliša i opterećenja na okoliš.
8. Nakon provedene javne rasprave, a prije upućivanja nacrta konačnog prijedloga programa u postupak donošenja, Ministarstvo je dužno prema odredbi članka 25. Uredbe o strateškoj procjeni utjecaja strategije, plana i programa na okoliš pribaviti mišljenje Ministarstva gospodarstva i održivog razvoja o provedenoj strateškoj procjeni.
9. Prije stavljanja u proceduru donošenja pri utvrđivanju konačnog prijedloga programa, obvezno se uzimaju u obzir rezultati strateške procjene, mišljenja tijela i/ili osoba određenih posebnim propisom te se razmatraju primjedbe, prijedlozi i mišljenja javnosti i rezultati prekograničnih konzultacija ako su bile obvezne, koji su dani na nacrt prijedloga programa i mišljenje Ministarstva gospodarstva i održivog razvoja.
10. Nakon donošenja programa, Ministarstvo izrađuje izvješće o provedenoj strateškoj procjeni i programu praćenja provedbe programa u skladu s člankom 27. Uredbe o strateškoj procjeni utjecaja strategije, plana i programa na okoliš.

11. Izvješće o provedenoj strateškoj procjeni i donesenom programu Ministarstvo objavljuje na internetskoj stranici u skladu s člankom 27. Uredbe o strateškoj procjeni utjecaja strategije, plana i programa na okoliš.

PRILOG II

Popis tijela koja će sudjelovati u postupku provođenja strateške procjene utjecaja na okoliš

1. Ministarstvo gospodarstva i održivog razvoja
   - Uprava za zaštitu prirode
   - Uprava za klimatske aktivnosti
   - Uprava za procjenu utjecaja na okoliš i održivo gospodarenje otpadom
   - Uprava za energetiku
   - Uprava vodnog gospodarstva i zaštite mora
   - Uprava za industriju, poduzetništvo i obrt
2. Ministarstvo kulture i medija
   - Uprava za zaštitu kulturne baštine
3. Ministarstvo poljoprivrede
   - Uprava šumarstva, lovstva i drvne industrije
   - Uprava za poljoprivredno zemljište, biljnu proizvodnju i tržište
4. Ministarstvo zdravstva
   - Uprava za primarnu zdravstvenu zaštitu, zdravstveni turizam, lijekove i medicinske proizvode, javno zdravstvo i javnozdravstvenu zaštitu
5. Ministarstvo rada, mirovinskoga sustava, obitelji i socijalne politike
   - Uprava za tržište rada i zapošljavanje
   - Uprava za obitelj i socijalnu politiku
6. Ministarstvo turizma i sporta
   - Uprava za održivi razvoj i konkurentnost turističke destinacije
   - Uprava za razvoj poduzetništva, investicije i konkurentnost turističkoga gospodarstva
7. Ministarstvo znanosti i obrazovanja
   - Uprava za znanost i tehnologiju

16.2 Decision on the contents of the Strategic Environmental Assessment Report

REPUBLIKA HRVATSKA
MINISTARSTVO REGIONALNOGA RAZVOJA
I FONDOVA EUROPSKE UNIJE

P / 2 0 6 2 3 8 3

KLASA: 910-06/21-01/1
URBROJ: 538-07-3-1-2/429-21-24
Zagreb, 20. prosinca 2021. godine

Na temelju članka 68. stavka 3. Zakona o zaštiti okoliša (Narodne novine, broj 80/13, 153/13, 78/15, 12/18 i 118/18) i članka 10. stavka 2. Uredbe o strateškoj procjeni utjecaja strategije, plana i programa na okoliš (Narodne novine, broj 3/17), ministrica regionalnoga razvoja i fondova Europske unije, donosi

ODLUKU
o sadržaju Strateške studije procjene utjecaja Interreg IPA programa prekogranične suradnje Hrvatska-Bosna i Hercegovina- Crna Gora 2021.-2027. na okoliš

I.

Ovom Odlukom utvrđuje se sadržaj Strateške studije procjene utjecaja Interreg IPA Programa prekogranične suradnje Hrvatska-Bosna i Hercegovina-Crna Gora 2021.-2027. (u daljnjem tekstu: Program) na okoliš (u daljnjem tekstu: Strateška studija). Odluka se donosi u okviru postupka strateške procjene utjecaja na okoliš koji je započeo Odlukom o započinjanju postupka strateške procjene utjecaja na okoliš za Interreg IPA Program prekogranične suradnje Hrvatska-Bosna i Hercegovina-Crna Gora 2021.-2027. (KLASA: 910-06/21-01/1, URBROJ: 538-10-3-1-1/433-21-6), od 10. studenog 2021. godine.

Programska polazišta, obuhvat i ciljevi programa

II.

Program suradnje utvrđen je Odlukom Vlade Republike Hrvatske o utvrđivanju programa europske teritorijalne suradnje u Republici Hrvatskoj za financijsko razdoblje Europske unije 2021.-2027. i davanje suglasnosti tijelima zaduženim za njihovu pripremu da potvrde njihov sadržaj (KLASA: 022-03/21-04/269, URBROJ: 50301-05/14-21-3), od 29. srpnja 2021. godine. U točci III. Odluke navedeno je da se, za financijsko razdoblje Europske unije 2021.-2027., utvrđuje lista programa suradnje, između ostalih i IPA Program prekogranične suradnje Hrvatska-Bosna i Hercegovina-Crna Gora 2021.-2027. Točkom IV. iste Odluke utvrđeno je da je Ministarstvo regionalnoga razvoja i fondova Europske unije tijelo zaduženo za cjelokupnu organizaciju i koordinaciju procesa pripreme Programa.

Interreg - IPA CBC
Croatia - Bosnia and Herzegovina - Montenegro

Cilj Programa je poticanje pametnog, zelenog i uključivog razvoja prekograničnih regija Hrvatske, Bosne i Hercegovine i Crne Gore.

Program suradnje obuhvatit će aktivnosti unutar 3 cilja politike od njih 5, koliko je ih je predviđeno člankom 5. Uredbe (EU) 2021/1060 Europskog parlamenta i Vijeća od 24. lipnja 2021. godine, a koje podupire Europski fond za regionalni razvoj. Uz ciljeve politike, odabrano je 7 specifičnih ciljeva, koji su između ostalih, predviđeni člankom 3. Uredbe (EU) 2021/1058 Europskog parlamenta i Vijeća od 24. lipnja 2021. godine.

- Cilj politike 1: Konkurentnija i pametnija Europa promicanjem inovativne i pametne gospodarske preobrazbe i regionalne povezivosti u području IKT-a:
  - Specifični cilj 1.1 Razvoj i jačanje istraživačkih i inovacijskih kapaciteta te primjena naprednih tehnologija;
  - Specifični cilj 1.3 Jačanje održivog rasta i konkurentnosti MSP-ova i otvaranje radnih mjesta u njima, među ostalim i kroz produktivna ulaganja.

- Cilj politike 2: Zelenija, otporna Europa s niskom razinom emisija koja prelazi na gospodarstvo s nultom neto stopom emisija ugljika promicanjem prelaska na čistu i pravednu energiju, zelenih i plavih ulaganja, kružnoga gospodarstva, ublažavanja, klimatskih promjena i prilagodbe klimatskim promjenama, sprečavanja rizika i upravljanja njime te održive urbane mobilnost:
  - Specifični cilj 2.1 Promicanje energetske učinkovitosti i smanjenje emisija stakleničkih plinova;
  - Specifični cilj 2.4 Promicanje prilagodbe klimatskim promjenama i sprječavanja rizika od katastrofa te otpornosti, uzimajući u obzir pristupe utemeljene na ekosustavima;
  - Specifični cilj 2.6 Promicanje prijelaza na kružno i resursno učinkovito gospodarstvo.

- Cilj politike 4: Uključivija Europa s istaknutijom socijalnom komponentom provedbom europskog stupa socijalnih prava:
  - Specifični cilj 4.5 Osiguravanje jednakog pristupa zdravstvenoj skrbi i poticanje otpornosti zdravstvenih sustava, uključujući primarnu skrb, te promicanje prijelaza s institucionalne skrbi na skrb unutar obitelji i zajednice;
  - Specifični cilj 4.6 Jačanje uloge kulture i održivog turizma u gospodarskom razvoju, socijalnoj uključenosti i socijalnim inovacijama.

Sadržaj strateške studije za Program suradnje

III.

Strateška studija treba sadržavati poglavlja u kojima su dane sljedeće informacije:
- pregled sadržaja i glavnih ciljeva Programa i odnosa s drugim odgovarajućim planovima i programima,
- relevantni aspekt postojećeg stanja okoliša i mogući razvoj okoliša ako ne dođe do provedbe plana ili programa;
- okolišne značajke područja na koja provedba programa može značajno utjecati;
- postojeći okolišni problemi koji su važni za Program, uključujući, posebno, one koji se odnose na bilo koja područja od posebne važnosti za okoliš, kao što su područja određena u skladu s posebnim zakonima o zaštiti okoliša;

- ciljevi zaštite okoliša utvrđeni na međunarodnoj razini, razini Zajednice i države članice, a koji su relevantni za Program i način na koji su ti ciljevi i svi aspekti zaštite okoliša uzeti u obzir tijekom njegove pripreme;
- vjerojatno značajni utjecaji (sekundarni, kumulativni, sinergijski, kratkoročni, srednjoročni i dugoročni, stalni i privremeni, pozitivni i negativni) na okoliš, uključujući pitanja kao što su biološka raznolikost, stanovništvo, zdravlje ljudi, fauna, flora, tlo, voda, zrak, klimatski čimbenici, materijalna dobra, kulturna baština, krajolik i međuodnos između navedenih čimbenika;
- mjere predviđene za sprječavanje, smanjenje i što potpunije otklanjanje značajnih štetnih učinaka na okoliš provedbe Programa;
- kratki pregled razloga za odabir razmotrenih alternativnih rješenja i opis načina provođenja procjene, uključujući eventualne poteškoće (kao što su tehnički nedostaci ili nedostatak znanja i iskustva) na koje se naišlo pri prikupljanju potrebnih informacija;
- opis predviđenih mjera praćenja;
- ostale podatke i zahtjeve utvrđene tijekom utvrđivanja djelokruga u posebnom postupku;
- ne-tehnički sažetak informacija iz prethodnih točaka.

Slijedom provedenog postupka određivanja sadržaja strateške studije utjecaja na okoliš, potrebno je, uz već gore navedeno, analizirati i sljedeće aspekte u poglavlju okoliša:

1. Bioraznolikost:
- flora, vegetacija i staništa,
- Important Plant Areas (IPA),
- karta tipova kopnenih staništa za programsko područje,
- karta kopnenih ne šumskih staništa za Programsko područje,
- fauna,
- zaštićena područja u Programskom području,
- NATURA 2000 područja u programskom području (POP, POVS, vPOVS i PPOVS.).

2. Klima i klimatske promjene:
- oborine, vjetar, temperatura,
- klimatske promjene,
- projekcija emisija stakleničkih plinova po sektoru,
- opasnosti i rizici klimatskih promjena na području Programa,
- Smjernice o integriranju klimatskih promjena i biološke raznolikosti u procjenu utjecaja na okoliš (PUO).

3. Voda
- hidrografske i hidrogeološke karakteristike područja,
- vodni resursi – površinski vodotoci, podzemne vode, prijelazne i priobalne vode,
- stanje vodnog okoliša,
- upravljanje rizicima od poplava.

4. Kulturna baština i krajolik
- povijesni pregled i specifičnosti područja,
- stanje kulturne baštine na Programskom području, posebice arheološke baštine, povijesnih ruralnih i urbanih naselja i tradicijske arhitekture,
- vrste krajolika u programskom području,
- stanje krajobraza u programskom području, posebno kulturnih krajolika.

5. Zdravlje ljudi
- demografske podatke o programskom području, karakteristike gustoće naseljenosti, prirodne promjene stanovništva, društvene i ekonomske karakteristike),
- vektori okoliša koji utječu na zdravlje ljudi (voda, zrak, tlo, buka),
- svjetlosno zagađenje,
- elektromagnetska zračenja,
- procjena populacijskih, materijalnih i kulturnih dobara i okolišnog rizika za programsko područje,
- posljedice klimatskih promjena koje značajno utječu na zdravlje ljudi (učestalost toplinskih valova, razvoj patogena i prenositelja bolesti, povećanje ozljeda uslijed poplava/oluja i sl.).

6. Gospodarenje otpadom
- usvojen sustav gospodarenja otpadom,
- stanje gospodarenja otpadom.

Temeljem rješenja Ministarstva gospodarstva i održivog razvoja KLASA: UP/I 612-07/21-37/258; URBROJ: 517-10-2-3-21-3, od 22. listopada 2021., u skladu s člankom 48. stavkom 5. Zakona o zaštiti prirode (Narodne novine, broj 80/13, 15/18, 14/19 i 127/19), Strateška studija ne treba sadržavati poglavlje Glavna ocjena prihvatljivosti za ekološku mrežu.

Popis tijela i/ili osoba određenih posebnim propisima, koja su sudjelovala u postupku određivanja sadržaja strateške studije

IV.

1. Ministarstvo gospodarstva i održivog razvoja
   - Uprava za zaštitu prirode
   - Uprava za klimatske aktivnosti
   - Uprava za procjenu utjecaja na okoliš i održivo gospodarenje otpadom
   - Uprava za energetiku
   - Uprava vodnog gospodarstva i zaštite mora
   - Uprava za industriju, poduzetništvo i obrt
2. Ministarstvo kulture i medija,
   - Uprava za zaštitu kulturne baštine
3. Ministarstvo poljoprivrede
   - Uprava šumarstva, lovstva i drvne industrije
   - Uprava za poljoprivredno zemljište, biljnu proizvodnju i tržište
4. Ministarstvo zdravstva
   - Uprava za primarnu zdravstvenu zaštitu, zdravstveni turizam, lijekove i medicinske proizvode, javno zdravstvo i javnozdravstvenu zaštitu
5. Ministarstvo rada, mirovinskog sustava, obitelji i socijalne politike
   - Uprava za tržište rada i zapošljavanje
   - Uprava za obitelj i socijalnu politiku
6. Ministarstvo turizma i sporta
   - Uprava za održivi razvoj i konkurentnost turističke destinacije
   - Uprava za razvoj poduzetništva, investicije i konkurentnost turističkog gospodarstva
7. Ministarstvo znanosti i obrazovanja
   - Uprava za znanost i tehnologiju

Informiranje javnosti

V.

U svrhu informiranja javnosti, informacija o provedbi postupka određivanja sadržaja strateške studije za Interreg IPA Program prekogranične suradnje Hrvatska – Bosna i Hercegovina-Crna Gora 2021.-2027. objavljena je na internetskim strancima Ministarstva regionalnoga razvoja i fondova Europske unije (/razvoj.gov.hr/) i na internetskoj stranici Programa (https://www.interreg-hr-ba-me.eu/) u razdoblju od 12. studenog 2021. godine do 11. prosinca 2021. godine.

Tijekom navedenog razdoblja zaprimljena su mišljenja i/ili prijedlozi o sadržaju i razini obuhvata podataka koji se moraju obraditi u strateškoj studiji od Ministarstva rada, mirovinskoga sustava, obitelji i socijalne politike (KLASA: 910-04/21-01/28, URBROJ: 524-04-02-01/2-21-2, od 22. studenog 2021.), Ministarstva zdravstva (KLASA: 351-03/21-01/99, URBROJ: 534-03-3-2/10-21-2, od 25. studenog 2021.), Ministarstva poljoprivrede (KLASA: 910-04/21-01/12, URBROJ: 525-05/0046-21-2, od 25. studenog 2021.), Ministarstva znanosti i obrazovanja (KLASA: 910-03/21-05/00002, URBROJ: 533-03-21-0002, od 26. studenog 2021.), Ministarstva gospodarstva i održivog razvoja, Uprave za zaštitu prirode (KLASA: 612-07/21-58/52, URBROJ: 517-10-2-3-21-2, od 30. studenog 2021.), Ministarstva turizma i sporta (KLASA: 351-02/21-02/18, URBROJ: 529-04-02-01-01/3-21-2, od 3. prosinca 2021.), Ministarstva gospodarstva i održivog razvoja, Uprave za energetiku (od 8. prosinca 2021) te Ministarstva kulture i medija, Uprave za zaštitu kulturne baštine (KLASA: 612-08/21-11/0080, URBROJ: 532-05/4-21-2, od 10. prosinca 2021.).

U skladu s člankom 9. stavkom 4. Uredbe o strateškoj procjeni utjecaja strategije, plana i programa na okoliš, Ministarstvo regionalnoga razvoja i fondova Europske unije organiziralo je 29. studenog 2021. godine raspravu u svrhu usuglašavanja mišljenja o sadržaju strateške studije i utvrđivanja konačnog sadržaja strateške studije.

Osnovni podaci o izrađivaču Programa

VI.

Za izradu Programa suradnje nadležno je Ministarstvo regionalnoga razvoja i fondova Europske unije prema Odluci Vlade Republike Hrvatske o utvrđivanju programa europske teritorijalne suradnje u Republici Hrvatskoj za financijsko razdoblje Europske unije 2021.-2027. i davanje suglasnosti tijelima zaduženim za njihovu pripremu da potvrde njihov sadržaj.

Nadležnost za izradu strateške studije

VII.

Stratešku studiju mora izraditi pravna osoba koja ima suglasnost Ministarstva zaštite okoliša i prirode za obavljanje stručnih poslova zaštite okoliša – poslova stručne Izrade studije o značajnom utjecaju plana i programa na okoliš, u skladu s člankom 4. Pravilnika o uvjetima za izdavanje suglasnosti pravnim osobama za obavljanje stručnih poslova zaštite okoliša (Narodne novine, broj 57/10).

Interreg - IPA CBC
Croatia - Bosnia and Herzegovina - Montenegro

Objava Odluke o sadržaju strateške studije

VIII.

U skladu s člankom 160. Zakona o zaštiti okoliša i člankom 5. Uredbe o informiranju i sudjelovanju javnosti u pitanjima zaštite okoliša (Narodne novine, broj 64/08), a u svrhu informiranja javnosti, ova se Odluka objavljuje na internetskoj stranci Ministarstva regionalnoga razvoja i fondova Europske unije (/razvoj.gov.hr/) te na internetskoj stranici Programa (https://www.interreg-hr-ba-me.eu/).

IX.

Ova Odluka stupa na snagu danom donošenja.

MINISTRICA REGIONALNOGA RAZVOJA I FONDOVA EUROPSKE UNIJE

Nataša Tramišak, mag. iur.

16.3 Decision of the Ministry of Economy and Sustainable Development on the need to carry out the Main Assessment for the Ecological Network

REPUBLIKA HRVATSKA
MINISTARSTVO GOSPODARSTVA
I ODRŽIVOG RAZVOJA
10000 Zagreb, Radnička cesta 80
Tel: 01/ 3717 111 fax: 01/ 3717 149

Uprava za zaštitu prirode

KLASA: UP/I 612-07/21-37/258
URBROJ: 517-10-2-3-21-3
Zagreb, 22. listopada 2021.

Ministarstvo gospodarstva i održivog razvoja temeljem članka 48. stavka 5. vezano uz članak 26. stavak 2. i članak 46. stavak 1. Zakona o zaštiti prirode (Narodne novine, br. 80/13, 15/18, 14/19, 127/19), povodom zahtjeva nositelja izrade plana, Ministarstva regionalnog razvoja i fondova Europske unije, Miramarska cesta 22, Zagreb, za provedbu postupka prethodne ocjene prihvatljivosti za ekološku mrežu Interreg IPA programa prekogranične suradnje Hrvatska-Bosna i Hercegovina-Crna Gora 2021.-2027., nakon provedenog postupka, donosi

R J E Š E N J E

I. Da je Interreg IPA program prekogranične suradnje Hrvatska-Bosna i Hercegovina-Crna Gora 2021.-2027. prihvatljiv za ekološku mrežu.

II. Ovo Rješenje objavljuje se na mrežnim stranicama Ministarstva gospodarstva i održivog razvoja.

O b r a z l o ž e n j e

Nositelj izrade Programa, Ministarstvo regionalnoga razvoja i fondova Europske unije podnijelo je zahtjev (KLASA: 910-06/21-01/1, URBROJ: 538-07-3-1-2/429-21-2) za provedbu postupka prethodne ocjene prihvatljivosti Interreg IPA program prekogranične suradnje Hrvatska-Bosna i Hercegovina-Crna Gora 2021.-2027. (dalje u tekstu: Programa) za ekološku mrežu. U zahtjevu su u bitnom navedeni podaci sukladno odredbama članka 48. stavka 2. Zakona o zaštiti prirode (dalje u tekstu: Zakon).
U provedenom postupku ovo Ministarstvo je razmotrilo predmetni zahtjev, razloge donošenja, ciljeve i obuhvat Programa te je utvrdilo sljedeće:

Interreg IPA program prekogranične suradnje Hrvatska - Bosna i Hercegovina - Crna Gora 2021.-2027. obuhvatit će aktivnosti u okviru 3 cilja politike od ukupno 5 koje podupire Europski fond za regionalni razvoj, a koji su navedeni u članku 5. stavku 1. Uredbe (EU) 2021/1060. U sklopu svakog odabranog cilja politike, dogovoreni su i specifični ciljevi.

1/5

Programom je predviđeno financiranje i provedba aktivnosti iz područja jačanja istraživačkih i inovacijskih kapaciteta, primjene naprednih tehnologija, kao i stimuliranje rasta i podrške malom i srednjem poduzetništvu (dalje u tekstu: MSP). Predviđeno je financiranje i provedba aktivnosti iz područja promicanja energetske učinkovitosti i smanjenja emisije stakleničkih plinova, prilagodbe klimatskim promjenama u cilju sprečavanja rizika od katastrofa te kružne ekonomije, kao i iz područja zdravstva, kulture i održivog turizma.
Interreg IPA program prekogranične suradnje Hrvatska-Bosna i Hercegovina-Crna Gora 2021.-2027. financira se iz Europskog fonda za regionalni razvoj te iz Instrumenata pretpristupne pomoći (IPA III).

Kroz cilj politike 1 „Konkurentnija i pametnija Europa promicanjem inovativne i pametne gospodarske preobrazbe i regionalne povezivosti u području IKT-a", specifični cilj 1.1 Razvoj i jačanje istraživačkih i inovacijskih kapaciteta te primjenu naprednih tehnologija, predviđa se financiranje sljedećih indikativnih aktivnosti:

- podrška istraživačko-razvojnim institucijama, javnim istraživačkim centrima, sveučilištima i centrima kompetencija u poticanju prekogranične inovacije i tehnologije temeljene na pristupu pametne specijalizacije;
- jačanje i modernizacija usluga poslovne podrške koje bi mogle pomoći kod osposobljavanja, u marketingu, razvoju i implementaciji novih usluga/proizvoda, korištenju IKT usluga i novih tehnologija, prilikom uvođenja inovativnih rješenja u organizaciju poslovanja i procese itd.
- ubrzavanje inovacija i prijenos tehnologije (npr. plava i zelena ekonomija, poljoprivreda, proizvodnja hrane, ribarstvo i akvakultura, klimatske promjene, obnovljivi izvori, pametna proizvodnja, bioraznolikost, kulturna i kreativna industrija, razvoj vještina za pametnu specijalizaciju, zdravlje i buduće digitalne tehnologije).

Kroz specifični cilj 1.3 Jačanje održivog rasta i konkurentnosti MSP-ova i otvaranjem radnih mjesta u njima, među ostalim i kroz produktivna ulaganja, predviđa se financiranje sljedećih indikativnih aktivnosti:

- podrška lokalnim malim i srednjim poduzećima u suočavanju s izazovima u vezi s njihovom veličinom, ograničenim resursima (poput vještina i financija) ili industrijskim i tržišnim uvjetima, uključujući unutar lanaca opskrbe i s većim poduzećima putem shema vaučera za kupnju prekograničnih poslovnih savjeta ili u obliku sub-grantova ili fondova za male projekte;
- poboljšanje kapaciteta poduzetnika, uključujući mikro poduzetnike, poput obiteljskih poljoprivrednih gospodarstava, u pogledu marketinga, robne marke, istraživanja tržišta, e-poslovanja, konkurentnosti i obrazovanja te osposobljavanja za poduzetničke vještine u područjima poljoprivrede, turizma i IKT-a;
- razvoj i podrška postojećim poslovnim klasterima i mrežama malih i srednjih poduzeća u cilju razvoja i promicanja zajedničkih proizvoda za lokalna prekogranična i međunarodna tržišta.

Kroz cilj politike 2 „Zelenija, otporna Europa s niskom razinom emisija koja prelazi na gospodarstvo s nultom neto stopom emisija ugljika promicanjem prelaska na čistu i pravednu energiju, zelenih i plavih ulaganja, kružnoga gospodarstva, ublažavanja klimatskih promjena i prilagodbe klimatskim promjenama, sprečavanja rizika i upravljanja njime te održive urbane mobilnosti", specifični cilj 2.1 Promicanje energetske učinkovitosti i smanjenje emisija stakleničkih plinova, predviđa se financiranje sljedećih indikativnih aktivnosti:

- razvoj i provedba zajedničkih pilot i demonstracijskih akcija na inovativnim tehnologijama, mjere i rješenja u području upravljanja energijom i smanjenja emisije stakleničkih plinova (npr. praćenje kvalitete zraka i drugih parametara u javnim zgradama u većem opsegu);
- ulaganja u mjere i radnje koje povećavaju energetsku učinkovitost i poboljšavaju integraciju održivih izvora energije u različite sektore (npr. javna rasvjeta);
- zajednički poticaji i pilot projekti za poticanje i osiguravanje strateškog pristupa energetskoj učinkovitosti (npr. razvoj SECAP -a).

Kroz specifični cilj 2.4 Promicanje prilagodbe klimatskim promjenama i sprječavanja rizika od katastrofa te otpornosti, uzimajući u obzir pristupe utemeljene na ekosustavima, predviđa se financiranje sljedećih indikativnih aktivnosti:

- razvoj i uvođenje zajedničkih rješenja i sustava za praćenje, sprječavanje i upravljanje potencijalnim rizicima (npr. poplave, požari, klizišta, suše, onečišćenje mora itd.);
- poticanje međusektorske/međudržavne suradnje u sprječavanju rizika i upravljanju brzim odgovorom kroz razvoj i provedbu zajedničkih protokola, postupaka i pristupa;
- jačanje institucionalnih i stručnih kapaciteta i podizanje svijesti za rješavanje pitanja okoliša, klimatskih promjena i rizika od katastrofa.

Kroz specifični cilj 2.6 Promicanje prijelaza na kružno i resursno učinkovito gospodarstvo, predviđa se financiranje sljedećih aktivnosti:

- razvoj i provedba pristupa i rješenja za ograničavanje odlaganja svih vrsta otpada na odlagališta i zadržavanje njihove vrijednosti (kao budućih resursa) u gospodarskom ciklusu;
- povećanje svijesti kreatora politike i dionika o okolišnim i ekonomskim mogućnostima kružnog gospodarstva i poboljšanje njihovih kapaciteta za praktičnu primjenu pristupa kružnog gospodarstva u različitim sektorima (poput elektronike, graditeljstva i građevinarstva , tekstila, plastike, ambalaže, hrane, poljoprivrede);
- razvoj i provedba zajedničkih pilot i demonstracijskih akcija koje blisko uključuju građane (npr. dobra praksa u odvojenom prikupljanju otpada i ponovnoj upotrebi otpada, pilot testiranje popravaka, ponovna uporaba, itd.) kako bi se potaknule promjene u ponašanju, veće prihvaćanje održivijih proizvoda te uspostavili obrasci potrošnje i proizvodnje koji štede resurse.

Kroz cilj politike 4 „Uključivija Europa s istaknutijom socijalnom komponentom provedbom europskog stupa socijalnih prava“, specifični cilj 4.5 Osiguravanje jednakog pristupa zdravstvenoj skrbi i poticanje otpornosti zdravstvenih sustava, uključujući primarnu skrb, te promicanje prijelaza s institucionalne skrbi na skrb unutar obitelji i zajednice, predviđa se financiranje sljedećih indikativnih aktivnosti:

- razvoj i provedba IKT rješenja i akcija za podršku digitalizaciji u zdravstvu;
- zajedničko ulaganje i poboljšanje zdravstvene zaštite i dugotrajna skrb za ugrožene skupine, s naglaskom na starije osobe i osobe s invaliditetom;
- kupnja visokotehnološke opreme za podršku zajedničkim prekograničnim uslugama, npr. telemedicina, dijagnostika itd.

Kroz specifični cilj 4.6 Jačanje uloge kulture i održivog turizma u gospodarskom razvoju, socijalnoj uključenosti i socijalnim inovacijama, predviđa se financiranje sljedećih indikativnih aktivnosti:

- razvoj i provedba zajedničkih akcija za podršku raznolikosti turizma ulaganjem u manje poznate destinacije i različite oblike turizma (kulturni, seoski, agroturizam, aktivni turizam itd.);
- razvoj i implementacija inovativnih rješenja, stvaranje pametnih destinacija (npr. putem digitalizacije i kreativnih industrija) te novih usluga i proizvoda za određene ciljane segmente tržišta (starije osobe, mladi ljudi ili osobe s invaliditetom
- razvoj i provedba mjera zaštite, razvoja i promicanja kulturne baštine i kulturnih usluga.

Razmatrajući predmetni zahtjev, a nakon provedene analize ovo Ministarstvo nalazi da s obzirom na općeniti karakter predmetnog Programa koji ne utvrđuje prostorni smještaj pojedinih elementa, Programom se ne planiraju konkretni zahvati u prostoru nego je predmetni Program usmjeren na jačanje društvenog, gospodarskog i teritorijalnog razvoja prekograničnog područja kroz provedbu zajedničkih projekata, uz pridržavanje važećih zakonskih propisa, može se isključiti mogućnost značajnih negativnih utjecaja Interreg IPA programa prekogranične suradnje Hrvatska-Bosna i Hercegovina-Crna Gora 2021.-2027. na ciljeve očuvanja i cjelovitost područja ekološke mreže i nije potrebno provesti postupak Glavne ocjene prihvatljivosti za ekološku mreže te je stoga riješeno kao u izreci.

Sukladno odredbama članka 26. stavka 2. Zakona za strategije, planove i programe, za koje je posebnim propisom kojim se uređuje zaštita okoliša određena obveza strateške procjene, prethodna ocjena obavlja se prije pokretanja postupka strateške procjene utjecaja strategije, plana i programa na okoliš.
Člankom 46. stavkom 1. Zakona propisano je da Ministarstvo provodi prethodnu ocjenu i glavnu ocjenu za strategije, planove i programe koji se pripremaju i/ili donose na državnoj i područnoj (regionalnoj) razini, kao i za one koji se pripremaju i/ili donose na državnoj i područnoj (regionalnoj) razini, a za koje je posebnim propisom kojim se uređuje zaštita okoliša određena obveza strateške procjene ili ocjene o potrebi strateške procjene.

Ako Ministarstvo isključi mogućnost značajnih negativnih utjecaja strategije, plana ili programa na ciljeve očuvanja i cjelovitost područja ekološke mreže, sukladno odredbama članka 48. stavka 5. Zakona donosi rješenje da je strategija, plan ili program prihvatljiv za ekološku mrežu.

U skladu s odredbom članka 51. stavka 2. Zakona ovo Rješenje objavljuje se na mrežnoj stranici Ministarstva.

UPUTA O PRAVNOM LIJEKU
Ovo je Rješenje izvršno u upravnom postupku te se protiv njega ne može izjaviti žalba, ali se može pokrenuti upravni spor pred upravnim sudom na području kojeg tužitelj ima prebivalište, odnosno sjedište. Upravni spor pokreće se tužbom koja se podnosi u roku od 30 dana od dana dostave ovog Rješenja.

4/5

Tužba se predaje nadležnom upravnom sudu neposredno u pisanom obliku, usmeno na zapisnik ili se šalje poštom, odnosno dostavlja elektronički.

VIŠA STRUČNA SAVJETNICA

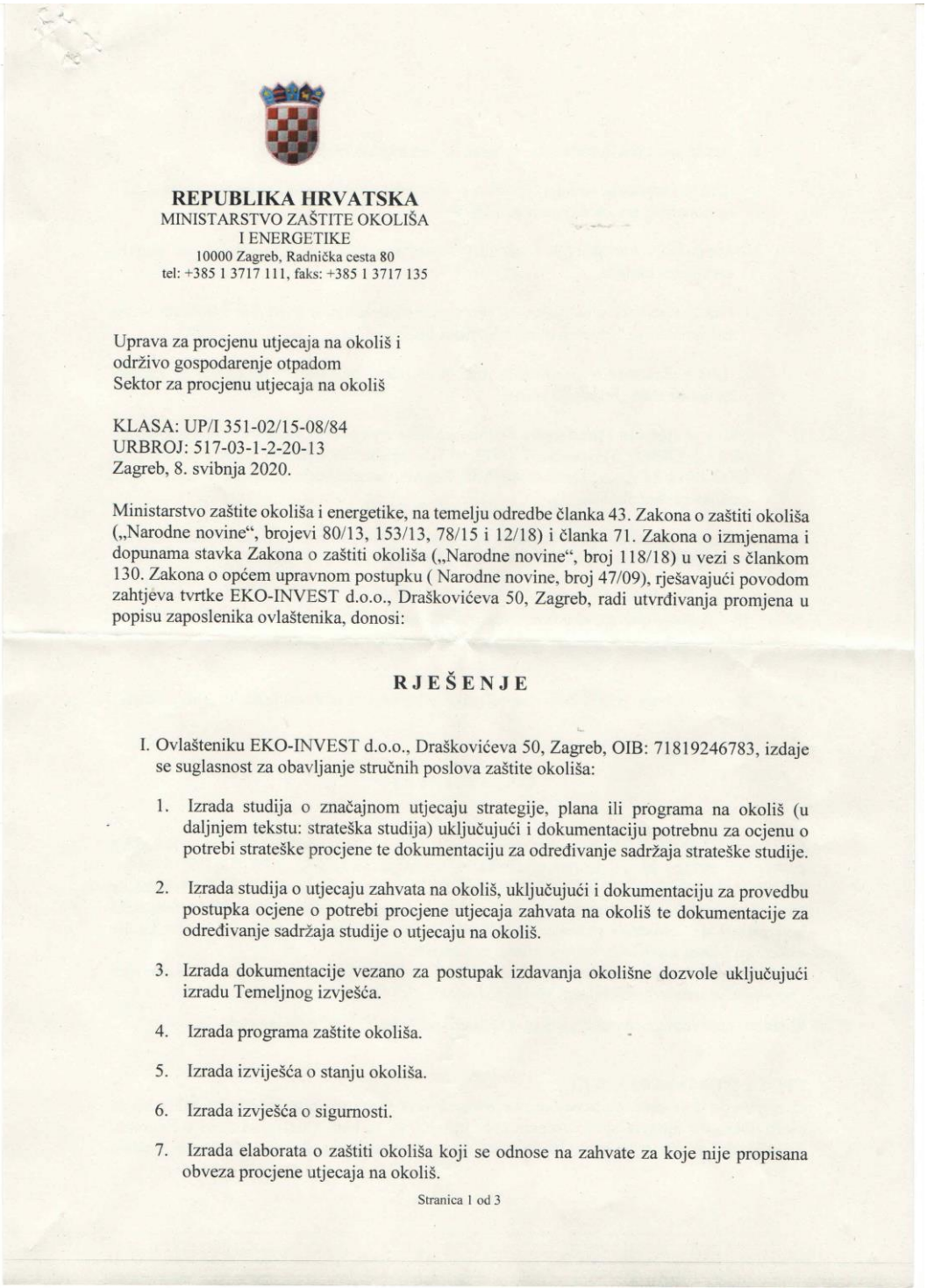
Natalija Cengić Zglavnik

Dostaviti:

1. **Ministarstvo regionalnoga razvoja i fondova Europske unije, Miramarska cesta 22, HR-10 000 Zagreb**
2. **U spis predmeta**

5/5

16.4 Consent for the performance of professional environmental tasks



REPUBLIKA HRVATSKA
MINISTARSTVO ZAŠTITE OKOLIŠA
I ENERGETIKE
10000 Zagreb, Radnička cesta 80
tel: +385 1 3717 111, faks: +385 1 3717 135

Uprava za procjenu utjecaja na okoliš i
održivo gospodarenje otpadom
Sektor za procjenu utjecaja na okoliš

KLASA: UP/I 351-02/15-08/84
URBROJ: 517-03-1-2-20-13
Zagreb, 8. svibnja 2020.

Ministarstvo zaštite okoliša i energetike, na temelju odredbe članka 43. Zakona o zaštiti okoliša („Narodne novine", brojevi 80/13, 153/13, 78/15 i 12/18) i članka 71. Zakona o izmjenama i dopunama stavka Zakona o zaštiti okoliša („Narodne novine", broj 118/18) u vezi s člankom 130. Zakona o općem upravnom postupku (Narodne novine, broj 47/09), rješavajući povodom zahtjeva tvrtke EKO-INVEST d.o.o., Draškovićeva 50, Zagreb, radi utvrđivanja promjena u popisu zaposlenika ovlaštenika, donosi:

R J E Š E N J E

I. Ovlašteniku EKO-INVEST d.o.o., Draškovićeva 50, Zagreb, OIB: 71819246783, izdaje se suglasnost za obavljanje stručnih poslova zaštite okoliša:

1. Izrada studija o značajnom utjecaju strategije, plana ili programa na okoliš (u daljnjem tekstu: strateška studija) uključujući i dokumentaciju potrebnu za ocjenu o potrebi strateške procjene te dokumentaciju za određivanje sadržaja strateške studije.
2. Izrada studija o utjecaju zahvata na okoliš, uključujući i dokumentaciju za provedbu postupka ocjene o potrebi procjene utjecaja zahvata na okoliš te dokumentacije za određivanje sadržaja studije o utjecaju na okoliš.
3. Izrada dokumentacije vezano za postupak izdavanja okolišne dozvole uključujući izradu Temeljnog izvješća.
4. Izrada programa zaštite okoliša.
5. Izrada izvješća o stanju okoliša.
6. Izrada izvješća o sigurnosti.
7. Izrada elaborata o zaštiti okoliša koji se odnose na zahvate za koje nije propisana obveza procjene utjecaja na okoliš.

Stranica 1 od 3

8. Izrada sanacijskih elaborata, programa i sanacijskih izvješća.

9. Izrada projekcija emisija, izvješća o provedbi politike i mjera smanjenja emisija i nacionalnog izvješća o promjeni klime.

10. Izradu i/ili verifikaciju posebnih elaborata, proračuna i projekcija za potrebe sastavnica okoliša.

11. Izrada elaborata o usklađenosti proizvoda s mjerilima u postupku ishođenja znaka zaštite okoliša "Prijatelj okoliša"i znaka EU Ecolabel.

12. Izrada elaborata o utvrđivanju mjerila za određenu skupinu proizvoda za dodjelu znaka okoliša „Prijatelj okoliša".

II. Ukida se rješenje Ministarstva zaštite okoliša i energetike: KLASA: UP/I 351-02/15-08/84, URBROJ: 517-06-2-1-1-19-11 od 1. listopada 2019. godine kojim je ovlašteniku EKO-INVEST d.o.o., Draškovićeva 50, Zagreb, dana suglasnost za obavljanje stručnih poslova zaštite okoliša.

III. Suglasnost iz točke I. ove izreke prestaje važiti u roku od godine dana od dana stupanja na snagu propisa iz članka 40. stavka 11. Zakona o zaštiti okoliša.

IV. Ovo rješenje upisuje se u očevidnik izdanih suglasnosti za obavljanje stručnih poslova zaštite okoliša koje vodi Ministarstvo zaštite okoliša i energetike.

V. Uz ovo rješenje prileži Popis zaposlenika ovlaštenika i sastavni je dio ovoga rješenja.

O b r a z l o ž e n j e

Ovlaštenik EKO-INVEST d.o.o., Draškovićeva 50, iz Zagreba (u daljnjem tekstu: ovlaštenik), podnio je zahtjev za izmjenom podataka u Rješenju: (KLASA: UP/I 351-02/15-08/84, URBROJ: 517-06-2-1-1-19-11 od 1. listopada 2019. godine izdanom od Ministarstva zaštite okoliša i energetike (u daljnjem tekstu Ministarstvo), a vezano za popis zaposlenika ovlaštenika koji prileži uz navedeno rješenje. Ovlaštenik je zatražio izmjenu popisa zaposlenika jer djelatnica Matea Kalčićek više nije njihov zaposlenik.
Zahtjev za obavljanje stručnih poslova zaštite okoliša iz točke I. izreke ovog rješenja je osnovan i iz popisa se izostavlja djelatnica Matea Kalčićek.

Slijedom navedenoga, utvrđeno je kao u točkama od I. do V. izreke ovoga rješenja.

UPUTA O PRAVNOM LIJEKU:
Ovo rješenje je izvršno u upravnom postupku i protiv njega se ne može izjaviti žalba, ali se može pokrenuti upravni spor. Upravni spor pokreće se tužbom Upravnom sudu u Zagrebu, Avenija Dubrovnik 6, u roku 30 dana od dana dostave ovog rješenja. Tužba se predaje

navedenom upravnom sudu neposredno u pisanom obliku, usmeno na zapisnik ili se šalje poštom, odnosno dostavlja elektronički.

Upravna pristojba na zahtjev i ovo rješenje naplaćena je državnim biljezima sukladno Zakonu o upravnim pristojbama („Narodne novine“, broj 115/16). i Uredbi o tarifi upravnih pristojbi („Narodne novine“, broj 8/17, 37/17, 129/17, 18/19 i 128/19).

VIŠA STRUČNA SAVJETNICA

Davorka Maljak

U prilogu: Popis zaposlenika ovlaštenika

DOSTAVITI:

1. EKO-INVEST d.o.o., Draškovićeva 50, Zagreb, (**R!, s povratnicom!**)
2. Očevidnik, ovdje

POPIS

zaposlenika ovlaštenika: EKO-INVEST d.o.o., Draškovićeva 50, Zagreb, slijedom kojih je ovlaštenik ispunio propisane uvjete za izdavanje suglasnosti za obavljanje stručnih poslova zaštite okoliša sukladno rješenjima Ministarstva KLASA: UP/I 351-02/15-08/84; URBROJ: 517-03-1-2-20-13 od 8. svibnja 2020.

STRUČNI POSLOVI ZAŠTITE OKOLIŠA PREMA ČLANKU 40. STAVKU 2. ZAKONA	*VODITELJI STRUČNIH POSLOVA*	*STRUČNJAK*
1. Izrada studija o značajnom utjecaju strategije, plana ili programa na okoliš (strateška studija) uključujući i dokumentaciju potrebnu za ocjenu o potrebi strateške procjene te dokumentaciju za određivanje sadržaja strateške studije	dr.sc. Nenad Mikulić, dipl.ing.kem.teh. i dipl.ing.grad. Marina Stenek, dipl.ing.biol. Vesna Marčec Popović, prof.biol. i kem.	Martina Cvitković, mag.geogr.
2. Izrada studija o utjecaju zahvata na okoliš, uključujući i dokumentaciju za provedbu postupka ocjene o potrebi procjene utjecaja zahvata na okoliš te dokumentacije za određivanje sadržaja studije o utjecaju na okoliš	voditelji navedeni pod točkom 1.	stručnjak naveden pod točkom 1.
8. Izrada dokumentacije vezano za postupak izdavanja okolišne dozvole uključujući izradu Temeljnog izvješća	voditelji navedeni pod točkom 1.	stručnjak naveden pod točkom 1.
9. Izrada programa zaštite okoliša	voditelji navedeni pod točkom 1.	stručnjak naveden pod točkom 1.
10. Izrada izvješća o stanju okoliša	voditelji navedeni pod točkom 1.	stručnjak naveden pod točkom 1.
11. Izrada izvješća o sigurnosti	voditelji navedeni pod točkom 1.	stručnjak naveden pod točkom 1.
12. Izrada elaborata o zaštiti okoliša koji se odnose na zahvate za koje nije propisana obveza procjene utjecaja na okoliš	voditelji navedeni pod točkom 1.	stručnjak naveden pod točkom 1.
14. Izrada sanacijskih elaborata, programa i sanacijskih izvješća	voditelji navedeni pod točkom 1.	stručnjak naveden pod točkom 1.
15. Izrada projekcija emisija, izvješća o provedbi politike i mjerenja smanjenja emisija i nacionalnog izvješća o promjeni klime	voditelji navedeni pod točkom 1.	stručnjak naveden pod točkom 1.
20. Izradu i /ili verifikaciju posebnih elaborata, proračuna, i projekcija z apotrebe sastavnica okoliša	voditelji navedeni pod točkom 1.	stručnjak naveden pod točkom 1.
25. Izrada elaborata o usklađenosti proizvoda s mjerilima u postupku ishođenja znaka zaštite okoliša "Prijatelj okoliša" i znaka EU Ecolabel	voditelji navedeni pod točkom 1.	stručnjak naveden pod točkom 1.
26. Izrada elaborata o utvrđivanju mjerila za određenu skupinu proizvoda za dodjelu znaka zaštite okoliša Prijatelj okoliša.	voditelji navedeni pod točkom 1.	stručnjak naveden pod točkom 1.

16.5 Consent to carry out professional nature protection tasks

REPUBLIKA HRVATSKA
MINISTARSTVO ZAŠTITE OKOLIŠA
I ENERGETIKE
10000 Zagreb, Radnička cesta 80
tel: +385 1 3717 111, faks: +385 1 3717 135

Uprava za procjenu utjecaja na okoliš i
održivo gospodarenje otpadom
Sektor za procjenu utjecaja na okoliš

KLASA: UP/I 351-02/15-08/82
URBROJ: 517-03-1-2-20-14
Zagreb, 8. svibnja 2020.

Ministarstvo zaštite okoliša i energetike, na temelju odredbe članka 43. Zakona o zaštiti okoliša („Narodne novine", brojevi 80/13, 153/13 78/15 i 12/18) i članka 71. Zakona o izmjenama i dopunama Zakona o zaštiti okoliša („Narodne novine", broj 118/18) u vezi s člankom 130. Zakona o općem upravnom postupku („Narodne novine", broj 47/09), rješavajući povodom zahtjeva ovlaštenika EKO INVEST d.o.o., Draškovićeva 50, Zagreb, radi utvrđivanja promjena u popisu zaposlenika ovlaštenika, donosi:

R J E Š E N J E

I. Ovlašteniku EKO INVEST d.o.o., Draškovićeva 50, Zagreb, OIB:71819246783, izdaje se suglasnost za obavljanje stručnih poslova zaštite prirode:

1. Izrada poglavlja i studija ocjene prihvatljivosti strategija, plana, programa ili zahvata za ekološku mrežu

II. Suglasnost iz točke I. ove izreke prestaje važiti u roku od godine dana od dana stupanja na snagu propisa iz članka 40. stavka 11. Zakona o zaštiti okoliša.

III. Ovo rješenje upisuje se u očevidnik izdanih suglasnosti za obavljanje stručnih poslova zaštite okoliša koje vodi Ministarstvo zaštite okoliša i energetike.

IV. Ukida se rješenje Ministarstva zaštite okoliša i energetike: KLASA: UP/I 351-02/15-08/82, URBROJ: 517-06-2-1-2-19-12 od 22. listopada 2019. godine kojim je ovlašteniku EKO INVEST d.o.o., Draškovićeva 50, Zagreb, dana suglasnost za obavljanje stručnih poslova iz područja zaštite prirode.

V. Uz ovo rješenje prileži Popis zaposlenika ovlaštenika i sastavni je dio ovoga rješenja.

Stranica 1 od 2

O b r a z l o ž e n j e

Tvrtka EKO INVEST d.o.o., Draškovićeva 50, iz Zagreba (u daljnjem tekstu: ovlaštenik), podnijela je zahtjev za izmjenom podataka u Rješenju: (KLASA: UP/I 351-02/15-08/82, URBROJ: 517-03-1-2-19-12 od 22. listopada 2019. godine izdanom od Ministarstva zaštite okoliša i energetike (u daljnjem tekstu Ministarstvo), a vezano za popis zaposlenika ovlaštenika koji prileži uz navedeno rješenje. Ovlaštenik je zatražio izmjenu popisa zaposlenika jer djelatnica Matea Kalčićek više nije njihov zaposlenik.
Zahtjev za obavljanje stručnih poslova zaštite okoliša iz točke I. izreke ovog rješenja je osnovan i iz popisa se izostavlja djelatnica Matea Kalčićek.

Slijedom navedenoga, utvrđeno je kao u točkama od I. do V. izreke ovoga rješenja.

UPUTA O PRAVNOM LIJEKU:
Ovo rješenje je izvršno u upravnom postupku i protiv njega se ne može izjaviti žalba, ali se može pokrenuti upravni spor. Upravni spor pokreće se tužbom Upravnom sudu u Zagrebu, Avenija Dubrovnik 6, u roku 30 dana od dana dostave ovog rješenja. Tužba se predaje navedenom upravnom sudu neposredno u pisanom obliku, usmeno na zapisnik ili se šalje poštom, odnosno dostavlja elektronički.

Upravna pristojba na zahtjev i ovo rješenje naplaćena je državnim biljezima sukladno Zakonu o upravnim pristojbama („Narodne novine“, broj 115/16)) i Uredbi o tarifi upravnih pristojbi . („Narodne novine“, broj 8/17, 37/17, 129/17, 18/19 i 128/19).

VIŠA STRUČNA SAVJETNICA

Davorka Maljak

U prilogu: Popis zaposlenika ovlaštenika

DOSTAVITI:
1. EKO INVEST d.o.o., Draškovićeva 50, Zagreb, (**R!, s povratnicom!**)
2. Evidencija, ovdje

Stranica 2 od 2

POPIS

zaposlenika ovlaštenika: EKO-INVEST d.o.o., Draškovićeva 50, Zagreb, slijedom kojih je ovlaštenik ispunio propisane uvjete za izdavanje suglasnosti za obavljanje stručnih poslova zaštite okoliša iz područja zaštite prirode sukladno rješenju Ministarstva KLASA: UP/I 351-02/15-08/82; URBROJ: 517-03-1-2-20-14 od 8. svibnja 2020. godine.

STRUČNI POSLOVI ZAŠTITE OKOLIŠA PREMA ČLANKU 40. STAVKU 2. ZAKONA	*VODITELJ STRUČNIH POSLOVA*	*STRUČNJACI*
3. Izrada poglavlja i studija ocjene prihvatljivosti strategija, plana, programa ili zahvata za ekološku mrežu	Marina Stenek, dipl.ing.biol. Vesna Marčec Popović, prof.biol. i kem.	dr.sc. Nenad Mikulić, dipl.ing.kem.teh. i dipl.ing.građ. Martina Cvitković, mag.geogr.