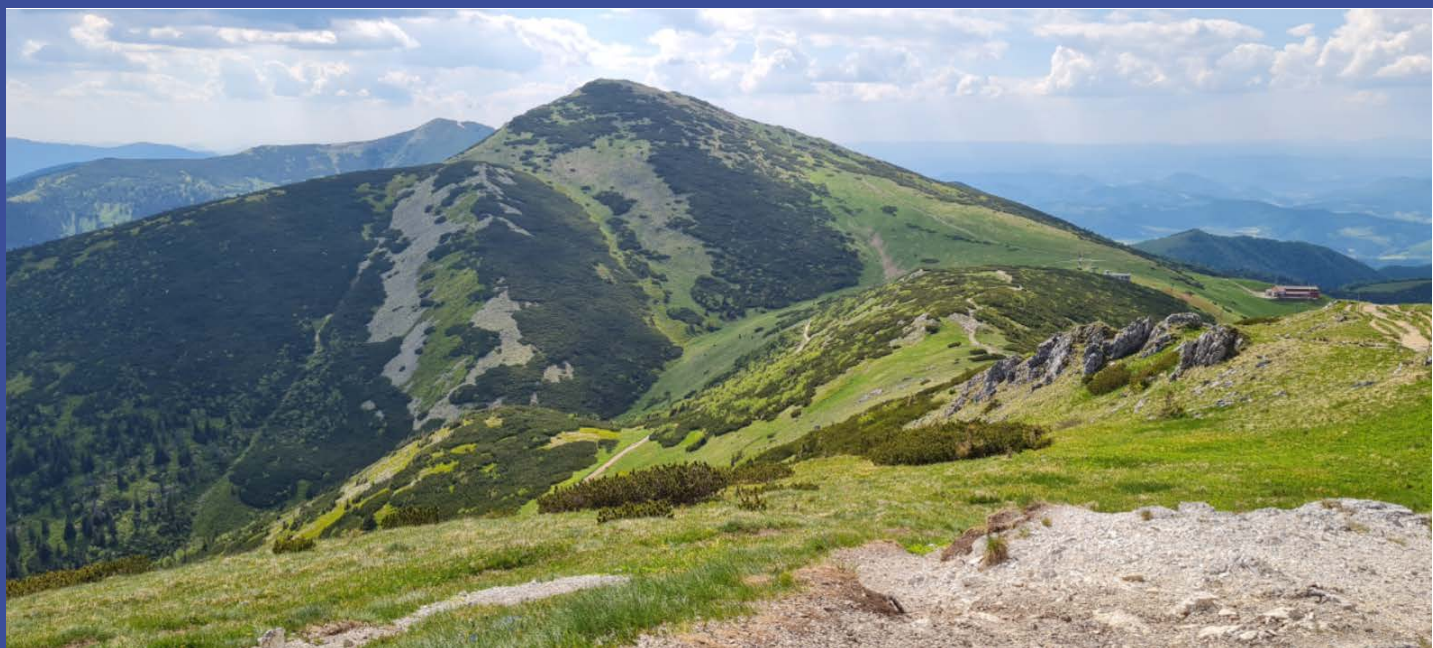


# Macroregional Carpathian Strategy – Proposed Actions in the Light of Diagnosis, International Experiences and Stakeholder Preferences



Ministry of  
Development Funds  
and Regional Policy

**RSA** Regional Studies  
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## INTRODUCTION

Transborder cooperation, understood as one of the forms of international cooperation, includes actions and measures aimed to reduce development barriers posed by the presence of state borders (**Gorzelak, Krok 2006; Dołzbasz, Raczyk 2010; Gorzelak, Zawalińska 2013; Madeiros 2018**). If viewed more narrowly, we can distinguish cross-border (transborder), transnational and interregional strands of cooperation pursued as part of the European Territorial Cooperation and European Neighbourhood Policy of the European Union (**Stead et al. 2016**). In addition to that, and in order to tap into transborder potentials and solve shared problems of the neighbouring countries and regions, four regional strategies have been formulated at the EU level: for the Baltic Sea region (2009), the Danube region (2010), the Adriatic and Ionian region (2014), and the Alpine region (2015) (**Sielker, Rauhut 2018**).

In September 2016, the Polish Ministry for Regional Development started preparatory work intended to devise yet another EU Macroregional Strategy for the Carpathian region. Its adoption could help intensify and better coordinate ongoing activities, such as those implemented as part of Interreg B Programmes: Central Europe and the Danube. The first stage involved preparing a diagnosis for the Carpathian macroregion, which took into account the social, economic and spatial aspects and underpinned the formulation of the Strategy assumptions. In 2018, a draft macroregional Strategy was drawn up in cooperation and consultation with other countries of the region. This led to the signing of the so-called Carpathian Declaration by representatives of Slovakia, Ukraine, Hungary and Poland, which took place in the town of Krynica on 5 September 2018.

The overarching aim of this study is to verify the initiatives proposed in the draft Macroregional Strategy for the Carpathian Region, including their adaptation to the current internal and external determinants of the region's development. In particular, the report provides an evaluation of the rationale for the implementation of actions stipulated in the Strategy and suggests the types of projects which ought to be pursued first. The results of the analyses represent a contribution to programming the development of the Carpathians region for the 2030 perspective, particularly as regards the advisability of adopting a new Macroregional Strategy or updating the existing one. This is essential in the context of programming and implementing the EU financial perspective 2021– 2027, which will be implemented in various forms in the Carpathians, and for the National Recovery Plans being developed by individual Member State governments.

## RESEARCH METHODOLOGY

The research completed in May and June 2021 employed three basic analytical methods: a) desk research of key diagnostic and strategic studies, b) comparative analysis of the draft Carpathian Strategy and the Alpine Strategy, and c) questionnaire surveys to identify the needs and preferences of the Carpathian macroregion's stakeholders.

During the first stage, i.e. **desk research**, the following documents were analysed:

- “Analysis of selected social, economic and spatial determinants underpinning the development of the Carpathian macroregion”, September 2020, hereinafter the **“Diagnosis”**
- a set of documents making up a new strategic vision of EU's development, including: (1) Communication from the Commission (2020d) to the European Parliament, the Council, The European Social and Economic Committee and the Committee of the Regions: *A new Circular Economy Action Plan for a cleaner and more competitive Europe* (2) Regulation of the European Parliament and the Council establishing the Just Transition Fund (3) Communication from the Commission (2020e) to the European Parliament, the Council, The European Social and Economic Committee and the Committee of the Regions: *Sustainable Europe Investment Plan. European Green Deal Investment Fund* (4) Communication from the Commission (2019b) to the European Parliament, the Council, The European Social and Economic Committee and the Committee of the Regions: *The European Green Deal* with the annex, hereinafter the **“European Green Deal”**
- documents relating to the instrument entitled “EU Next Generation”, as well as the European Commission priorities and a Europe fit for the digital age, including: (1) European Council conclusions 17-21 July 2020 (2) Communication from the Commission (2020a) to the European Parliament, the Council, The European Social and Economic Committee and the Committee of the Regions: *Europe's moment: Repair and Prepare for the Next Generation* (3) Regulation (EU) 2021/241 of the European Parliament and of the Council establishing the Recovery and Resilience Facility with the annexes, hereinafter the **“EU Next Generation”** (4) von der Leyen, *A Union that strives for more. My agenda for Europe: political guidelines for the next European Commission (2019–2024)* (5) European Commission (2020f), *Shaping Europe's Digital Future* (6) European Commission (2021), *2030 Digital Compass. The European Way for the Digital Decade* (7) European Commission (2020b), *Digital Economy and Society Index (DESI) 2020. Thematic chapters*, hereinafter the **“EU digital objectives”**.

On this basis, the draft Carpathian Strategy 2018 (hereinafter the **“Strategy”**) was evaluated; it is a document which formulates a vision for the development of the Carpathian macroregion in respect of:

- a) addressing the development potentials, barriers and trends indicated in the “Diagnosis”;
- b) its convergence with the priorities, models, principles and plans of the “European Green Deal”;
- c) its convergence with the pillars of the “EU Next Generation” and the “EU’s digital objectives”.

During the second stage, a **comparative analysis** was conducted of the Carpathian Strategy 2018 and the EU Strategy for the Alpine Region. In particular, the following issues were reviewed:

- a) the convergence of the objectives and actions of the Alpine Strategy and the planned Carpathian Strategy at the level of strategic documents;
- b) the implementation initiatives of the Alpine Strategy with respect to the objectives and actions of the Carpathian Strategy, in order to evaluate the latter’s implementation potential (broken down into the project, financial and institutional potentials).

**Questionnaire surveys**, circulated among the Carpathian macroregion’s stakeholders using an on-line questionnaire in English, were the third component of the adopted methodology. The survey’s questions were mostly concerned with the evaluation of the significance of the planned objectives and actions and identification of preferred types of projects and tools in view of the Strategy’s implementation. In particular, the respondents were asked to indicate desirable types of thematic projects (72) relating to priority areas 1-3 , i.e. *Competitive, Green* and *Cohesive* Carpathians, and tools (26) which could be used within the framework of horizontal priority area 4 *Institutional cooperation and spatial development*. The list of project types and tools evaluated by the stakeholders was compiled on the basis of the *Strategy’s “examples of possible projects” and “potential areas of cooperation”*, and supplemented with the use of the strategic documents analysed during the first stage of the research.

The respondents for the questionnaire survey were selected using the snowball sampling technique (e.g. **Jabłońska, Sobieraj 2013**). As the first step, key stakeholders at the national and regional level and the level of transnational and transborder organisations (e.g. ministries and government agencies, local governments, Euroregions, European Groupings of Territorial Cooperation) were contacted and requested to fill in the questionnaire and disseminate it among other sectoral and territorial stakeholders. As the next step, those stakeholders who filled in the questionnaire were contacted and requested to disseminate it further. The respondents’ opinions were collected in the period from 4 May to 9 June 2021.

As a result of these efforts, 310 completed questionnaires were returned. In terms of territorial distribution, the greatest interest on the part of the stakeholders could be observed in such countries as Romania, Poland, Ukraine and Slovakia (87% of all the questionnaires) and, to a lesser degree, in Hungary. In contrast, considerably fewer



questionnaires were returned from Czechia, Moldova and Serbia (**Tab. 1**). If we take into account the number of the population of the macroregion's constituent parts, it can be concluded that interest in the survey was relatively the greatest in Ukraine and Slovakia, and then in Poland and Romania.

**Tab. 1** Questionnaire survey respondents by location (**N=310**)

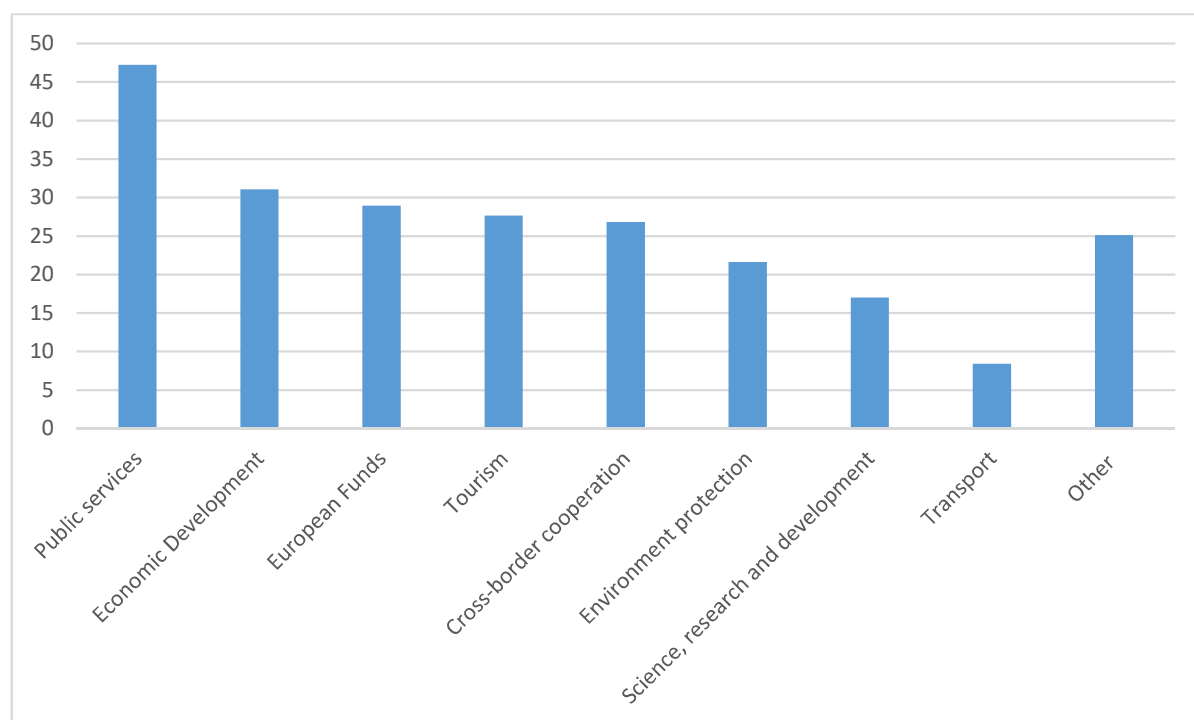
	N	%	Population of macroregion in thousand	Number of questionnaires per 1 million inhabitants of macroregion
Czechia	9	3	5 629	1,6
Hungary	25	8	8 893	2,8
Poland	68	22	13 259	5,1
Romania	99	32	19 414	5,1
Serbia	2	1	5 046	0,4
Slovakia	40	13	5 450	7,3
Ukraine	60	19	6 029	10,0
Moldova	3	1	3 542	0,8
Transnational organisations	4	1	n.a.	n.a.

*Source: own elaboration based on the questionnaire survey and the Diagnosis.*

The bulk of the respondents came from central administration bodies and their agencies, including regional and local ones (50%). The remaining stakeholders came from NGOs (17%), local governments (19%), as well as other institutions and organisations, also international and transborder ones (14%). Their range of activity was quite broad and mostly involved public services (about 37%) (Błąd! Nieprawidłowy odsyłacz do zakładki: wskazuje na nią samą.). The remaining types of activity were balanced as regards the variety of the represented entities, and included entities which operated in the field of environmental protection (22%), economic development (31%), tourism (27%), science and R&D (17%). On the other hand, there were fewer organisations which declared transport as their essential field of activity (8%), while a large share of the institutions/organisations dealt with a) transborder cooperation (27%) and/or b) European funds (29%). Other types of activity were declared by about 25% of the respondents; these included e.g. regional and urban development, education, culture, health and agriculture. The surveyed institutions/organisations focused their activities on various territorial levels, ranging from international (18%), to national (26%), regional (32%) and local (23%) level. If no main level of activity was defined (6%), this could be interpreted as pursuit of initiatives at more than one level of the territorial division.



**Fig. 1** Types of activity of organisations/institutions participating in the survey [%]\*



\* more than one answer could be given.

*Source: own elaboration based on the questionnaire survey.*

## PART 1. CONVERGENCE OF THE MACROREGIONAL STRATEGY FOR THE CARPATHIAN REGION WITH THE DETERMINANTS OF MACROREGIONAL DEVELOPMENT AND HIGHER-ORDER STRATEGIES

### 1.1. Links between the Diagnosis and the draft Carpathian Strategy

The 2020 document entitled “Analysis of selected social, economic and spatial determinants underpinning the development of the Carpathian macroregion” includes several elements from the diagnosis of the state of the Carpathian macroregion. The selective nature of the analysis was not a matter of a strategic choice, but rather resulted from the factors pertinent to the adopted methodology, in which the research relied on the availability of “hard”, i.e. measurable, data and information. In effect, there is no full consistency between the document in question and the draft Strategy, which was prepared with the participation of, and in consultation with, the macroregional stakeholders. Notably, the diagnosis discusses a number of aspects which the Strategy does not raise either directly or at the level of proposed actions and projects. This concerns in particular the following:

- the level of economic development and the macroregion’s economic structure,
- the labour market (employment, unemployment),
- demography (age structure, education, migration),
- territorial disparities in the level of socio-economic development (both between countries and between regions)
- selected aspects of the standards of living (e.g. income levels).

At the same time, these issues should be regarded as superior (**cf. Smętkowski 2013**) to the objectives and actions proposed in the planned Carpathian Strategy. In consequence, it can be assumed that the fulfilment of the objectives relating to “competitive”, “green” and “cohesive” Carpathians as well as “institutional cooperation and spatial development” in the Carpathian region should have a positive impact on those aspects.

Secondly, the diagnosis’ level of detail was in some respects greater than that of the actions and projects proposed in the Strategy; this was the case regarding e.g. types of transport (railway, water) or cultural heritage (protection of historic monuments). On the other hand, the draft Strategy proposed certain actions and/or projects which exceeded the scope of the Diagnosis. This was due to the use of participatory elements in designing the Strategy, an approach thanks to which some of the information and proposals submitted by the stakeholders could be factored in.

On the other hand, with regard to the key research questions addressing the potentials and barriers and the impact on the development trends identified in the Diagnosis, the situation is as described below. The initiatives suggested as part of the Strategy’s specific measures (the number of projects is given in brackets):

- address, fully or largely, the **potentials** offered by the natural environment and the cultural sphere, transport (excluding the Danube waterway and seaports), the social

sphere regarding the presence of strong academic centres, and in the economic sphere regarding the significant role of industry in the macroregional economy (9)

- can help overcome such development **barriers** as: degradation of forest resources and uneven use of mineral waters, development of transport infrastructure (roads in particular), better use of ICTs, more efficient use of the agricultural sector and increasing the share of renewable energy sources (RES) in energy generation (7)
- can strengthen positive **development trends** relating to nature protection and conservation, improving the condition of the water and sewage infrastructure and the water balance, increasing transport accessibility (road and air), development of broadband network, improving access to telecommunication technologies and increasing the number of residents using e-services (10).

The following scores were adopted to evaluate the impact of individual types of initiatives: 0.5 – for those types of projects which only marginally address the potentials, barriers or trends; 1– for those types of projects which largely address the potentials, barriers or trends; and 2 – for those types of projects which fully address the potentials, barriers or trends (**Tab. 2**).

**Tab. 2** Potentials, barriers and development trends identified in the diagnosis addressed by project types within the Carpathian Strategy

	Number of project types	Summary scope of impact	Examples of project types
Potentials	9	10.0	<ul style="list-style-type: none"> <li>• Cooperation between scientific institutions from the Carpathian Area (and from the outside)</li> <li>• Plan for new TEN-T transport infrastructure development</li> <li>• New ecological corridors, including the Pan-European Carpathian Corridor</li> </ul>
Barriers	7	14.0	<ul style="list-style-type: none"> <li>• Development of technologies to acquire energy from renewable sources</li> <li>• Development of food processing clusters based on local products (eg. cheese, wine, organic food)</li> <li>• Digital literacy programmes</li> <li>• Introduction of e-services in administration</li> </ul>
Trends	10	14.5	<ul style="list-style-type: none"> <li>• Map of the Internet access indicating “white spots”</li> <li>• Promotion of water saving, water recycling</li> <li>• Development of ICT products connected with the Carpathian industry specialisation</li> </ul>

Source: own elaboration based on Diagnosis and project of Carpathian Strategy

However, no direct impact on the diagnosed **negative trends** in the social sphere was found (such as e.g. depopulation), nor on positive trends regarding the economy (GDP increase, higher employment). This is due to the superior character of these issues with regard to the objectives of transborder cooperation in the Carpathian macroregion.

## **1.2. Convergence of the draft Carpathian Strategy with the priorities, models, principles and plans of the “European Green Deal”**

The EU has the ambition to become a climate-neutral continent by 2050. The means to achieve this goal include preparing European-level regulations which will help to transform this commitment into a common law. The major document intended to programme the preparatory process in that regard is the **European Green Deal Strategy**. The Strategy outlines the plan of actions aimed to increase an efficient use of the resources, launching a circular model of the economy, prevent biodiversity loss and reduce pollution levels. In addition to regulatory instruments, the Strategy designed by the European Commission has such components as financial instruments and investments.

The new strategy for growth, which is intended to help transform the European Union into a modern, resource-saving and competitive economy, rests on **three main pillars** (1) to reach net-zero greenhouse gas emissions by 2050, (2) to decouple economic growth from resource use, and (3) introduce a just transition mechanism, whereby no individual and no region will be left behind. The latter pillar also guarantees financial support and technical assistance for those who are the most severely affected by the consequences of the transition to ecological economy. The basis for this will be a Just Transition Fund, which assumes an allocation of EUR 100 billion in 2021–2027 for compensatory measures for selected entities and regions.

Fulfilling those objectives will require measures to be undertaken in all sectors of the economy, such as: (1) investments in environmentally-friendly (green) technologies, (2) support to innovation in industry, (3) introducing new, cheaper and healthier forms of private and public transport, (4) reducing emissions in the energy sector, (5) making building more energy-efficient, (6) cooperation with international partners to adopt stricter global environmental standards.

The set of the overarching objectives of the “European Green Deal” Strategy draws on the priorities that assume a review of the existing legislation and its impact on climate, introducing regulations for circular economy, renovation of buildings, biodiversity, agriculture and innovation. The **10 priorities** were proposed in this regard:

1. Climate neutrality in the EU
2. Circular economy
3. Renovation of buildings
4. Zero pollution
5. Ecosystems and biodiversity
6. Healthy food and sustainable agriculture
7. Sustainable mobility

8. Financial resources for the regions most in need
9. Research, development and innovation
10. Diplomatic representation outside the EU.

The document entitled “A new Circular Economy Action Plan for a cleaner and more competitive Europe”, prepared by the European Commission, is a tool which operationalises the “European Green Deal Strategy”. The document is subdivided into **five main fields** relating to the primary fields of intervention. The first presents a Sustainable Product Policy Framework and lists in this area regulations including (2.1) designing sustainable products, (2.2) empowering consumers and public buyers, (2.3) circularity in production processes. The second area involves the Key Product Value Chains and relates to specific branches of economy, including (3.1) electronics and ICT, (3.2) batteries and vehicles, (3.3) packaging, (3.4) plastics, (3.5) textiles, (3.6) construction and buildings, (3.7) food, water and nutrients (3.7).

In the next section, the Plan emphasises waste reduction (LESS WASTE, MORE VALUE – 4.) and the need to implement an (4.1) enhanced waste policy in support of waste prevention and circularity, (4.2) enhancing circularity in a toxic-free environment, (4.3) creating a well-functioning EU market for secondary raw materials, and (4.4) addressing waste exports from the EU (4.4).

Item four assumes making circularity work for people, regions and cities (6), while the last outlines cross-cutting actions. In that case, circularity is presented as a prerequisite for climate neutrality (6.1), stressing getting the economics right (6.2) and driving the transition through research, innovation and digitalisation (6.3).

The **Sustainable Europe Investment Plan** is the final major component updating the Commission’s commitments aimed to solve problems associated with climate and the natural environment, including climate change.

**Fig. 2** European Green Deal investment plan. European Green Deal



Source: Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of The Regions, Sustainable Europe Investment Plan European, Green Deal Investment Plan, p. 2.

The accompanying programming documents stipulate that, for the purposes of the European Green Deal, all political tools will be used in a consistent manner: regulations and standardisation, investments and innovations, national reforms, dialogue with social partners and international cooperation. The areas that the Commission regards as crucial in this respect include:

- Increasing the EU's climate ambition for 2030 and 2050 (Chapter 2.1.1, European Green Deal)
- Supplying clean, affordable and secure energy (2.1.2)
- Mobilising industry for a clean and circular economy (2.1.3)
- Building and renovating in an energy and resource efficient way (2.1.4)
- Accelerating the shift to sustainable and smart mobility (2.1.5)
- From 'Farm to Fork': designing a fair, healthy and environmentally-friendly food system (2.1.6)
- Preserving and restoring ecosystems and biodiversity (2.1.7)
- A zero pollution ambition for a toxic-free environment (2.1.8).

All the planning and operational elements listed above, which together make up New Green Deal for Europe Strategy, provide a frame of reference for updates in the Carpathian Strategy.

The convergence of the project types planned for implementation in the Carpathian Strategy and of the 10 priorities listed in the New Green Deal was evaluated in the following manner:

- a) 0 – for those project types which do not fit into the areas identified in the European Green Deal Strategy;
- b) 0,5 – for those project types which only partly fit into the Strategy;
- c) 1 – for those project types which are concordant with the Strategy and the accompanying operational documents.

The evaluation process of the convergence of the New Green Deal Strategy was conducted for all 72 thematic project types. Due to a wider scope of the constituent documents, the evaluation comprised four elements, tantamount to answers to the following questions:

- Is a given action convergent with the Green Deal priorities?
- Does a given action fit into the circular economy model?
- Does a given action help preserve biodiversity and reduce pollution levels?
- Does a given action fit into the Sustainable Europe Development Plan?

For the full four-question set, the average score was 0.3 and was higher in 33 cases (41 items were not awarded any score). The highest score (100% convergence) was achieved in 11 cases, and in another seven it was at a level of 80–90%.

The highest average scores were awarded to such actions as: 2.1 *Protection and sustainable management of natural resources* (0.7), 2.2 *Diversification of energy sources* (0.7), 2.3 *Management of environmental risk and natural threats* (0.6), followed by 1.1 *Development of the clean, green industries*, 1.3 *Increasing the competitiveness of the agro-food sector*, and 3.1 *Increasing transport accessibility of the Carpathian region and within the region* (0.5 for each).

At the level of individual project types, however, it can be noted that in relation to the Roadmap for a Closed Economy and a Cleaner and More Competitive Europe, by far the greatest convergence with the area of *supporting smart, sustainable economic growth*, while *green transformation* and *digital transformation* came next. The objectives associated with waste management, packaging and recyclable materials practically yielded no answers. Similarly, references to the building renovation policy were few and far between.

The tables below summarise the information about the project types planned for implementation as part of the first three objectives of the Carpathian Strategy by: 1) 10 priorities of the New Green Deal Strategy; (2) the circular economy model, and (3) the Sustainable Europe Investment Plan.



**Tab. 3** Convergence of the project types of the Carpathian Strategy and the New Green Deal priorities

Priority	Number of convergent project types
9. Research, development and innovation	16
1. Climate neutrality for Europe	14
2. Circular economy	9
4. Eliminating pollution, zero waste	9
5. Biodiversity	8
8. Just Transition Fund	8
6. Farm to Fork	6
7. Sustainable mobility	6
3. Building and Renovation	2

*Source: own elaboration based on the draft Carpathian Strategy and the Communication From The Commission to The European Parliament, The European Council, The Council, The European Economic And Social Committee And The Committee Of The Regions "The European Green Deal".*

**Tab. 4** Convergence of the project types of the Carpathian Strategy and the Circular Economy Action Plan

Policy area	Number of convergent project types
2.2. Empowering consumers and public buyers	10
2.1. Designing sustainable products	9
6.1. Circularity as a prerequisite for climate neutrality	8
2.3. Circularity in production processes	7
3.7. Key product value chains - Food, water and nutrients	7
6.3. Driving the transition through research, innovation and digitalisation	7
4.1. Enhanced waste policy in support of waste prevention and circularity	6
3.1. Key product value chains - Electronics and ICT	3
5. Making circularity work for people, regions and cities	2
6.2. Getting the economics right	2
4.2. Enhancing circularity in a toxic-free environment	1

*Source: own elaboration based on the draft Carpathian Strategy and the Communication From The Commission to The European Parliament, The European Council, The Council, The European Economic And Social Committee And The Committee Of The Regions "Circular Economy Action Plan".*

**Tab. 5** Convergence of the project types of the Carpathian Strategy and the Sustainable Europe Action Plan

Policy area	Number of convergent project types
2.1.7. Preserving and restoring ecosystems and biodiversity	7
2.1.6. From 'Farm to Fork': designing a fair, healthy and environmentally-friendly food system	6
2.1.3. Mobilising industry for a clean and circular economy	5
2.1.1. Increasing the EU's climate ambition for 2030 and 2050	4
2.1.2. Supplying clean, affordable and secure energy	4
2.1.5. Accelerating the shift to sustainable and smart mobility	4
2.1.4. Building and renovating in an energy and resource efficient way	1

*Source: own elaboration based on the draft Carpathian Strategy and the Communication From The Commission to The European Parliament, The European Council, The Council, The European Economic And Social Committee And The Committee Of The Regions "Sustainable Europe Action Plan".*

### 1.3. Convergence of the draft Carpathian Strategy with the pillars of the Recovery and Resilience Facility and the EU's digital objectives

The evaluation of the actions planned in the Carpathian Strategy in terms of the EU's current challenges and priorities was carried out in two stages: (1) at a more general level of convergence with the areas – pillars regarded as top priorities for the coming years, and (2) through an in-depth evaluation of two of the areas whose implementation is mandatory for some of the EU's financial instruments, viz.: (2a) the Green Deal (discussed above), and (2b) the digital objectives.

#### 1.3.1. Pillars of the Recovery and Resilience Facility

The extraordinary situation triggered by the COVID-19 pandemic led to the reformulation of the earlier objectives and financial frameworks of the European Union. Furthermore, in addition to the adopted Multiannual Financial Framework, funding has been secured as part of a temporary instrument, the **Next Generation EU – NGEU** (EUR 750 billion). The bulk of its financing is to be provided through the **Recovery and Resilience Facility – RRF**, with a budget of EUR 672.5 billion (European Council conclusions, 17-21 July 2020). The spending directions indicated in the RRF, which is specifically envisaged as an instrument aimed to eliminate the negative consequences of the crisis associated with COVID-19, give an overview of the EU's investment priorities for the coming years, and therefore have been incorporated into the evaluation of the project types planned for implementation in the Carpathian Strategy.

In the expert evaluation of the project types designed in the Carpathian Strategy, a special role has been accorded to two areas, defined as the two first pillars of the Recovery and

Resilience Facility, areas which have a significant part to play in the Next Generation EU (Communication from the Commission (2020a): *Europe's moment: Repair and Prepare for the Next Generation*), and which are also convergent with two of the overarching political goals for Europe, European Commission priorities for 2019-2024<sup>1</sup>: **a European Green Deal and a Europe fit for the digital age** (von der Leyen, *A Union that strives for more. My agenda for Europe: political guidelines for the next European Commission (2019–2024)*). In its Conclusions dated 3 December 2020, also the Council of the European Union called for accelerating macroregional actions consistent with these two objectives; they were also noted in the EU's Territorial Agenda 2030. Due to the exceptional role of those areas, reflected in the RRF requirement to allocate, respectively, 37% of the overall financial allocation to actions in the field of climate and environmental sustainability (an increased cap compared to 30% expenditure on the pursuit of climate goals in the EU budget) and 20% to digitalisation, these two priorities are discussed in two separate parts of the expert evaluation.

Under the Regulation (EU) 2021/241 of the European Parliament and of the Council of 12 February 2021 establishing the Recovery and Resilience Facility, the Member States in their submitted national recovery and resilience funds (which may also include cross-border or multi-country projects) need to explain how these plans will help achieve all the **six RRF pillars – policy areas of Europe-wide significance**, listed below:

- 1) green transition;
- 2) digital transformation;
- 3) smart, sustainable and inclusive growth, including economic cohesion, jobs, productivity, competitiveness, research, development and innovation, and a well-functioning internal market with strong small and medium enterprises (SMEs);
- 4) social and territorial cohesion;
- 5) health, and economic, social and institutional resilience, with the aim of, inter alia, increasing crisis preparedness and crisis response capacity;
- 6) policies for the next generation, children and the youth, such as education and skills.

The RRF's contribution to the fulfilment of these pillars is evaluated by the European Commission as part of the relevance criterion (Annex V to the Regulation).

In the expert evaluation of the project types planned for implementation in the Carpathian Strategy in terms of their convergence with the above-listed six pillars, the following scores were awarded:

- d) 0 – for those project types which do not fit into the above pillars;
- e) 0.5 – those project types which fit into the above pillars only to a moderate degree;

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<sup>1</sup> [https://ec.europa.eu/info/strategy/priorities-2019-2024\\_pl#documents](https://ec.europa.eu/info/strategy/priorities-2019-2024_pl#documents)

- f) 1 – those project types which fit into the above pillars to a considerable degree (at least two pillars).

The evaluation was conducted for the first three (thematic) objectives of the Strategy, taking into account the project types included in the questionnaire addressed to the stakeholders (a total of 72 project types). 33 project types received a score of 0.5, and 39 project types – a score of 1; it can be said, therefore, that all the thematic actions at least partially correspond to the RRF's intervention pillars. On average, the highest scores were awarded to measures 3.2 *Increasing the digital accessibility* and 3.3 *Developing e-services system*. The table below provides information on the quantitative distribution of the project types planned for implementation as part of the first three objectives of the Carpathian Strategy, by specific pillars/policy areas. Each type of action could fit into several such areas (not more than three were selected). The figures given in the **Tab. 6** represent aggregate answers.

**Tab. 6** Number of project types in the Carpathian Strategy which fit into a given pillar/policy area\*

Pillar/policy area	Number of project types in Carpathian Strategy which fit into a given pillar/policy area
3. smart, sustainable and inclusive growth, including economic cohesion	39
1. green transition	27
2. digital transformation	20
4. social and territorial cohesion	15
5. health, and economic, social and institutional resilience	10
6. policies for the next generation, children and the youth	4

\* the aggregate number is higher than the number of project types since one project type could be ascribed to more than one pillar.

*Source: own elaboration based on the draft Carpathian Strategy and the Regulation establishing the Recovery and Resilience Facility.*

The highest number of project types corresponded with the area of support to smart, sustainable and inclusive growth, followed by green transition and digital transformation. The fewest projects were identified in the pillars associated with policies for the next generation, children and youth (it should be noted that the actions associated with this particular area were included in the fourth horizontal objective of the Carpathian Strategy, i.e. one which was not included in the calculations), health, and economic, social and institutional resilience; the latter was particularly emphasised in the European documents in the wake of the COVID-19 pandemic, i.e. after the draft Strategy had been finalised. The

types of projects associated with social and territorial cohesion (which also elicited a lower than average number of project types) are also partly included in the Strategy's fourth objective.

### 1.3.2. Convergence of the draft Carpathian Strategy with the EU's digital objectives

The evaluation of project types planned in the Carpathian Strategy with regard to digitalisation was based on the Methodology for digital tagging laid down in the Recovery and Resilience Facility (Annex VII to Regulation (EU) 2021/241 of the European Parliament and of the Council), which, at the implementation level, corresponds e.g. to the strategic directions indicated in *Shaping Europe's Digital Future* from February 2020 or in *2030 Digital Compass. The European Way for the Digital Decade* from March 2021. The DESI dimensions present in the evaluation are used for the monitoring of digital economy in the European Union - Digital Economy and Society Index (<https://digital-strategy.ec.europa.eu/en/policies/desi>).

The evaluation employed the product of the relevance coefficient and the coefficient for calculating support for digital transformation relating to the type of intervention relevant to a given type of project, according to the methodology for digital tagging and using the formula presented below (**Tab. 7**).

The evaluation found that 36 of 72 project types included in three thematic objectives of the Carpathian Strategy are not connected with the intervention areas/DESI dimensions; 17 project types directly correspond to these areas, while 19 project types are only partially aligned with them. According to the adopted methodology, the digital objectives are most closely reflected by Action 3.3 *Developing e-services system*.

Each project type which could contribute to the fulfilment of the digital objectives was ascribed to the closest corresponding intervention area/DESI dimension (**Tab. 8**). Most project types comprised by the thematic objectives of the Carpathian Strategy correspond to the area associated with digital public services, followed by digitalisation of businesses. The areas of connectivity and human capital each include several project types, while some individual project types may be partially linked to digital-related investment in R&D and advanced technology infrastructure.

**Tab. 7** Mode of calculating the values for the evaluation of digital objectives and actual evaluation results

Relevance coefficient		Coefficient for the calculation of support to digital transformation				Possible final evaluation results			
Values: - 1 – the project type corresponds to the intervention field/DESI dimension; - 0.3 – the project type may partially correspond to the intervention field/DESI dimension; - 0 – the project type is not related to the intervention field/DESI dimension.		Possible values according to the intervention table of the Methodology for digital tagging under the Facility: - 100%; - 40%; - 0%.				- 1; - 0.4; - 0.3; - 0.12; - 0.			
		*				=			
Aggregated evaluation results									
Value	Number of project types		Value	Number of project types	Value	Number of project types		Value	Number of project types
1	17		100 %	17	40%	0		1	17
0.3	19		100 %	9	40%	10		0.3	9
								0.12	10
0	36		N/A		N/A			0	36

Source: own elaboration based on the draft Carpathian Strategy and the Regulation establishing the Recovery and Resilience Facility.

**Tab. 8** Number of project types which even partially correspond to intervention fields and DESI dimensions\*

Intervention field	DESI dimension	Number of types of projects
4: e-government, digital public services and local digital ecosystems	5: Digital Public services	15
5: Digitalisation of businesses	4: Integration of digital technologies	9
3: Human Capital	2: Human Capital	6

<b>Intervention field</b>	<b>DESI dimension</b>	<b>Number of types of projects</b>
1: Connectivity	1: Connectivity	4
2: Digital-related investment in R&D	“The EU ICT Sector and its R&D Performance”	1
6: Investment in digital capacities and deployment of advanced technologies	4: Integration of digital technologies + ad hoc data collections	1

\* according to the Methodology for digital tagging and the Digital Economy and Society Index.

*Source: own elaboration based on the draft Carpathian Strategy and the Regulation establishing the Recovery and Resilience Facility.*



## PART 2. REVIEW OF ACTIONS AND PROJECTS IMPLEMENTED AS PART OF THE EU MACROREGIONAL STRATEGY FOR THE ALPINE REGION

The European Union Strategy for the Alpine Region (EUSALP)<sup>2</sup> was adopted as a culmination of longstanding cooperation, as the fourth of the EU's macroregional strategies. It was initiated not at the state level, but by regions themselves (Schuh et al. 2015), which remain strongly engaged in the Strategy's implementation.

It encompasses five EU Member States (Austria, France, Germany, Italy and Slovenia) plus Liechtenstein and Switzerland, i.e. a total of 48 regions. Its area covers the territory comprised by the Alpine Convention, while in respect of the Interreg Alpine Space Programme it also includes seven German regions, but does not comprise the French Grand Est region (Fig. 3).

**Fig. 3** The EUSALP area in comparison to the Interreg Alpine Space and the Alpine Convention areas



Source: <https://www.alpine-region.eu/mission-statement>.

The Alpine Strategy is structured around four objectives – three thematic policy areas and one horizontal area focusing on governance. The thematic areas are divided into nine actions<sup>3</sup>, whose implementation rests with the Action Groups (AG).

<sup>2</sup> European Commission (2015b) *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions concerning a European Union Strategy for the Alpine Region* and (2015a) *Commission Staff Working Document: Action Plan Accompanying the Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions concerning the European Union Strategy for the Alpine Region*.

<sup>3</sup> COWI et al (2017a) states that all EUSALP actions are macro-regionally relevant, but four of them (1: To develop an effective research and innovation system, 2: To increase the economic potential of strategic sectors, 4: To promote inter-modality and interoperability in passenger and freight transport, and 7: To develop ecological connectivity in the whole EUSALP territory)

The analysis comprised both the initial strategic documents of EUSALP (**Strategy** – European Commission (2015b) and the **Action Plan** - European Commission (2015a)) as well as the subsequently adopted joint declarations and political guidelines (e.g. Joint Declarations from the years 2017-2019, Manifesto and Recommendations from 2020, Policy Brief from 2021)<sup>4</sup>. These were complemented by a set of specific implementation initiatives (i.e. actually completed projects) and information about the Action Groups operating as part of EUSALP and their activities; this helped trace the evolution of the EUSALP objectives with respect to the implementation priorities. Even though the original Action Plan has not been modified, a flexible approach is well visible, including the activities undertaken by the Action Groups which go beyond the Plan itself<sup>5</sup>, and, on the other hand, prioritising the initiatives launched in a given period, improving the consistency of AGs' activities and joint implementation of cross-cutting policy areas can be observed. Five such Strategic Priority Policy Areas (SPPA) are planned for 2020-2022, with each AG involved in the delivery of at least one: (1) Spatial Planning, (2) Smart Villages, (3) Carbon Neutral Alpine Region, (4) Innovation Hub for Green Business, (5) EUSALP Innovation Facility<sup>6</sup>. It should be noted that some pilot activities were deployed in the past, e.g. in the SPPA Smart Villages area (the Interreg Alpine Space project – Smart Villages: Smart digital transformation of villages in the Alpine Space), which were followed up in subsequent projects (SMART ALPS - Network of Alpine Smart Villages and Regions) and expanded to form a comprehensive approach of a steadily growing significance. It can be concluded, therefore, that the original strategic directions of action are evolving, based on the lessons learnt.

## 2.1. Review at the strategic documents level

**Table 9** shows how the objectives and actions of the two Strategies listed in the relevant strategic documents (i.e. the draft Carpathian Strategy and, for the Alpine Strategy, Communication from the Commission (2015b) concerning a European Union Strategy for the Alpine Region and the accompanying Action Plan – (2015a)) are linked. Some of the actions quite closely correspond to the relevant actions of the other Strategy. The main differences between the two Strategies at the level of objectives and actions are shown below.

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do not correspond to an identified need since the Alpine macroregion shows strong performances on the indicators used in the comparisons.

<sup>4</sup> EUSALP (2017a) *Joint declaration...*, EUSALP (2018a) *Joint declaration...*, EUSALP (2019a) *Joint Declaration*, EUSALP (2020c) *Manifesto...*, EUSALP (2020a) *An Alpine Macro Regional Strategy at the heart of the future EU funding programmes...*, EUSALP (2021a) *Policy Brief*.

<sup>5</sup> European Commission (2019c).

<sup>6</sup> EUSALP (2021a) *Policy Brief*.

**Tab. 9** Links between objectives and actions of the Carpathian Strategy and the EU Strategy for the Alpine Region (EUSALP)

PRIORITY AREA/OBJECTIVE – CARPATHIAN STRATEGY	ACTION - CARPATHIAN STRATEGY	ACTION - EUSALP	THEMATIC POLICY AREA/ OBJECTIVE - EUSALP
<b>PRIORITY AREA I: COMPETITIVE CARPATHIANS</b>  OBJECTIVE I. STRENGTHENING ECONOMIC COOPERATION	1.1 DEVELOPMENT OF THE CLEAN, GREEN INDUSTRIES	Action 2: To increase the economic potential of strategic sectors	<b>1st THEMATIC POLICY AREA: ECONOMIC GROWTH AND INNOVATION</b>  1st OBJECTIVE: Fair access to job opportunities, building on the high competitiveness of the Region
	1.3 INCREASING THE COMPETITIVENESS OF THE AGRO-FOOD SECTOR		
	1.2 SUSTAINABLE DEVELOPMENT OF TOURISM	Action 3: To improve the adequacy of labour market, education and training in strategic sectors	
	1.4 DEVELOPMENT OF MACROREGIONAL INNOVATION ECOSYSTEM	Action 1: To develop an effective research and innovation ecosystem	
<b>PRIORITY AREA II: GREEN CARPATHIANS</b>  OBJECTIVE II. HIGH QUALITY OF NATURAL ENVIRONMENT	2.1 PROTECTION AND SUSTAINABLE MANAGEMENT OF NATURAL RESOURCES	Action 6: To preserve and valorise natural resources, including water and cultural resources	<b>3rd THEMATIC POLICY AREA: ENVIRONMENT AND ENERGY</b>  3rd OBJECTIVE: A more inclusive environmental framework for all and renewable and reliable energy solutions for the future
		Action 7: To develop ecological connectivity in the whole EUSALP territory	
	2.2 DIVERSIFICATION OF ENERGY SOURCES	Action 9: To make the territory a model region for energy efficiency and renewable energy	
	2.3 MANAGEMENT OF ENVIRONMENTAL	Action 8: To improve risk management and	

PRIORITY AREA/OBJECTIVE – CARPATHIAN STRATEGY	ACTION - CARPATHIAN STRATEGY	ACTION - EUSALP	THEMATIC POLICY AREA/ OBJECTIVE - EUSALP
	RISK AND NATURAL THREATS	to better manage climate change, including major natural risks prevention	
PRIORITY AREA III: COHESIVE CARPATHIANS  OBJECTIVE III. INCREASING THE FUNCTIONAL ACCESSIBILITY OF THE CARPATHIANS	3.1 INCREASING TRANSPORT ACCESSIBILITY OF THE CARPATHIAN REGION AND WITHIN THE REGION	Action 4: To promote inter-modality and interoperability in passenger and freight transport	2nd THEMATIC POLICY AREA: MOBILITY AND CONNECTIVITY  2nd OBJECTIVE: Sustainable internal and external accessibility to all
	3.2 INCREASING THE DIGITAL ACCESSIBILITY	Action 5: To connect people electronically and promote accessibility to public services	
	3.3 DEVELOPING E-SERVICES SYSTEM		
HORIZONTAL PRIORITY AREA: INSTITUTIONAL COOPERATION AND SPATIAL DEVELOPMENT	4.1 SPATIAL PLANNING	Action 6: To preserve and valorise natural resources, including water and cultural resources	3rd THEMATIC POLICY AREA: ENVIRONMENT AND ENERGY  3rd OBJECTIVE: A more inclusive environmental framework for all and renewable and reliable energy solutions for the future
		Action 7: To develop ecological connectivity in the whole EUSALP territory	
	4.2 CROSS-BORDER AND TRANSNATIONAL COOPERATION	Action 3: To improve the adequacy of labour market, education and training in strategic sectors	1st THEMATIC POLICY AREA: ECONOMIC GROWTH AND INNOVATION  1st OBJECTIVE: Fair access to job opportunities, building on the high competitiveness of the Region

PRIORITY AREA/OBJECTIVE – CARPATHIAN STRATEGY	ACTION - CARPATHIAN STRATEGY	ACTION - EUSALP	THEMATIC POLICY AREA/ OBJECTIVE - EUSALP
	4.3 PROGRAMMING DEVELOPMENT AND CAPACITY BUILDING. CARPATHIAN INSTITUTIONS		<b>CROSS-CUTTING POLICY AREA: GOVERNANCE, INCLUDING INSTITUTIONAL CAPACITY</b>  4th OBJECTIVE: A sound macro-regional governance model for the Region (to improve cooperation and the coordination of action)

Source: own elaboration based on the Alpine Strategy and the draft Carpathian Strategy.

In **Objective I**, both Strategies focus on the economic dimension: to support economic growth and jobs. The Alpine Strategy includes, in one Action 2 *To increase the economic potential of strategic sectors* (largely addressed to SMEs, and comprising agriculture, forestry, tourism, energy sector, health and advanced technologies) the areas comprised in three actions of the Carpathian Strategy: 1.1. *Development of the clean, green industries*, 1.2. *Sustainable development of tourism* 1.3. *Increasing the competitiveness of the agro-food sector*. In contrast, the Alpine Strategy has a separate action under Objective I devoted to the labour market, education and training. Action 1.2 *Sustainable development of tourism* in the Carpathian Strategy tackles the issues of education and training and provision of support to employees of the tourism sector; this, however, is not directly reflected in the examples of project types (and for this reason education-related projects are not ascribed here in the further sections of the analysis).

**Objective II** of the Carpathian Strategy is reflected by Objective III in the Alpine Strategy. Two actions of the Alpine Strategy: *To preserve and valorise natural resources, including water and cultural resources*, and 7: *To develop ecological connectivity in the whole EUSALP territory*, correspond to Action 2.1. *Protection and rational management of natural resources* of the Carpathian Strategy; furthermore, Action 6 EUSALP also lists preservation of cultural resources, which are not explicitly mentioned in the Carpathian Strategy.

As regards **Objective III** of the Carpathian Strategy, which is thematically parallel to Objective II of the Alpine Strategy, the most acute difference lies in the inclusion of all issues related to digitalisation in one action of the Alpine Strategy (5: *To connect people electronically and promote accessibility to public services*), whereas in the Carpathian Strategy it is spread across two Actions: 3.2. *Increasing the digital accessibility*, and 3.3. *Developing e-services*

system. Additionally, the initiatives launched as part of Action 5 of the Alpine Strategy reach beyond the electronic dimension of public services provision.

**Objective IV** of the Alpine Strategy, which refers to horizontal issues related to governance and institutional facilities, does not identify any separate actions. By contrast, the Carpathian Strategy includes three Actions: 4.1. *Spatial planning*, 4.2. *Cross-border and transnational cooperation*, and 4.3. *Programming development and capacity building*. Carpathian institutions in the horizontal priority area relating to institutional cooperation and spatial development. Due to the instrumental nature of these actions, they do not fully correspond to the thematic actions of the Alpine Strategy. However, e.g. the thematic content of Action 3 EUSALP: *To improve the adequacy of the labour market, education and training in strategic sectors* is partly present in Action 4.2. *Cross-border and transnational cooperation* of the Carpathian Strategy, due to the inclusion of project types associated with education, the labour market and young people in that particular section of the Strategy (in addition to types of projects associated with other thematic areas). For this reason, the relevant projects implementing the Alpine Strategy were ascribed to Action 4.2 of the Carpathian Strategy. Similarly, some of the projects from e.g. EUSALP Action 6: *To preserve and valorise natural resources, including water and cultural resources*, and Action 7: *To develop ecological connectivity in the whole EUSALP territory* partially tally with Action 4.1 *Spatial Planning* of the Carpathian Strategy. The Alpine Strategy does not propose a separate action dealing with spatial planning, but this particular area was identified as one of the five strategic priorities for 2020-2022 (*EUSALP: Policy Brief*). In contrast, Action 4.3 *Programming development and capacity building*. Carpathian institutions of the Carpathian Strategy best matches the entire Objective IV of the Alpine Strategy. At the same time, this Action in the Carpathian Strategy includes projects in the sphere of capacity building, creating a platform of knowledge and an observatory of the local quality of life and standard of living, to which the scope of EUSALP projects was also matched in the further part of the analysis.

At the planning level, i.e. formulation of strategic goals, both documents are largely convergent; the differences, which result from a dissimilar approach to horizontal areas and manifest themselves in a separate inclusion of actions of a more instrumental nature, open to various dimensions of cooperation, in the Carpathian Strategy, do not mean that there are no such initiatives in the Alpine Strategy, but that they were not defined as separate actions in the document. It should be observed that the significance of the action associated with spatial planning, separately identified in the Carpathian Strategy and absent in such a way from the action level of the Alpine Strategy, was appreciated after several years of programme implementation by being accorded the status of a strategic priority.

Cross-border and transnational cooperation is a significant policy area also in the Alpine context. However, it should be borne in mind that it is pursued also as part of bilateral programmes between countries such as Interreg A. Presentation of good practices from bilateral programmes as part of Alpine cooperation, e.g. during events accompanying the implementation of EUSALP or at meetings organised by the Action Groups, can be viewed as

proof of the significant role and wide penetration of projects deployed as part of it. However, unlike the Carpathian Strategy, the Alpine Strategy does not separately identify the actions through which it can be implemented. The project types proposed for cross-border and transborder cooperation in the Carpathian Strategy could be regarded as examples, but the associated themes (such as education, youth participation, border control) are not present in such a way in the project types in other of the Strategy's Actions, which can suggest that they were so identified also for thematic, and not only instrumental reasons.

## **2.2. Review of the EUSALP implementation initiatives in comparison with the objectives and actions of the Carpathian Strategy**

Due to the fact that the Alpine Strategy precedes the formulation of the Carpathian Strategy by several years, it is possible not only to compare the contents of these two documents, but also to review the implementation of the objectives set for the Alpine Region. As a macroregional strategy, EUSALP has no separate source of financing and is to be implemented by mobilising and aligning the existing EU and national funding relevant to its objectives and actions (European Commission (2015b)).

In the financial perspectives so far, coordination between the European Funds and the objectives of macroregional strategies was rather limited (European Commission (2020g)). The Interreg Alpine Space programme, which covers a similar territory (the slight differences between the two are indicated above), remains the main source of funding for EUSALP (t33 (2020); COWI et al (2017b)). The programme has also provided funding for two EUSALP governance projects – *AlpGov* and *AlpGov2*. Altogether, the budget for Interreg Alpine Space projects in 2014-2020 totalled about EUR 140 million.

Since the previous financial perspectives of the European Funds were planned before the adoption of EUSALP, they could hardly be targeted in terms of the macroregion's strategy (COWI et al (2017a)). However, extensive cooperation was ensured in the Interreg Alpine Space 2014-2020 programme round: all the Interreg projects could be linked to EUSALP actions (Interreg ASP (2018) *Alpine cooperation stories*) even though Interreg is structured around four autonomous objectives (the linkages between the Interreg Alpine Space objectives and its projects with EUSALP actions were analysed during the desk research).

Nonetheless, the conducted questionnaire surveys indicate that not all entities implementing Interreg Alpine Space projects regard them as ones which contribute to the fulfilment of EUSALP (with divergent opinions even among the partners within a single project – *Programme Impact Assessment: Interreg Alpine Space programme 2014-2020* (2020)). Similarly, according to official data (the keep.eu database), some of these projects are not identified as consistent with EUSALP. This well illustrates the problems accompanying the coordination of various funding sources and identification of related projects. An analysis of EUSALP actions suggests that some of them consists in identifying potential sources of funding (without their real coordination or project identification); in the case of research and development activity, three reports on the possibilities for the financing



of activities were compiled in Action Group 1<sup>7</sup>, and regarding bioeconomy – a report in Action Group 2<sup>8</sup>.

The Interreg Alpine Space 2014-2020 projects represented the main body of information regarding implementation (**first dataset**) relating to the Alpine Strategy. Thanks to the initiative of the European Parliament, the Strategy received an allocation under the Alpine Region Preparatory Action Fund (ARPAF I – EUR 2 million, and ARPAF II – EUR 1.22 million – European Commission (2020c)). The projects deployed under ARPAF represent the **second dataset**. The data on Interreg Alpine Space 2014-2020 and ARPAF projects used in the analysis come from the keep.eu database, various publications on the Alpine Strategy and individual project websites.

**The third dataset** comprised other, selected initiatives, which explicitly declared pursuit of the Alpine Strategy objectives (according to the keep.eu data), are being implemented or supported by the EUSALP Action Groups, which, in line with the trend of the increasing role of executive bodies (European Commission (2020h)), provide a platform for cooperation for the day-to-day implementation of the EUSALP Action Plan. It includes projects deployed under other Interreg 2014–2020 programmes and consistent with EUSALP according to the keep.eu data, as well as projects presented in the materials related to the implementation of the Alpine Strategy (documents, website, EUSALP-related events) as significant for the Strategy, including 14 transport projects, which received an opinion about their contribution to the EUSALP objectives from Group 4 (*Projects labelled by the EUSALP AG4 Assessment Methodology in 2020*). The analysis includes project initiatives as well as strategic priority areas enumerated the *Policy Brief*. However, the set of projects comprised by quantitative analysis did not include analytical, diagnostic or programme work carried out as part of the Action Groups (presented in the working papers) nor organised events. Unlike the first two sets, the group of “Other” projects cannot be regarded as a complete set but merely as a representation and a selection of initiatives, both those undertaken by the Action Groups and chosen by them from among the projects initiated in other territorial systems.

These three datasets were used to assign **projects associated with the implementation of EUSALP to the objectives and actions of the planned Carpathian Strategy**. It should be stressed that this classification is hypothetical and illustrative, especially in view of the fact that the final decisions on the scope of the linked projects will be made at the implementation stage of the Carpathian Strategy. Of key importance for the conclusions on project convergence were the project types stipulated for implementation in the Carpathian Strategy (taking into account additional types and modifications introduced when the questionnaire form was being designed), and, to a lesser extent, descriptions of the actions (the stipulated project types did not always include all the elements provided in the description of the action). The aim of the proposed assignment of the EUSALP projects is to illustrate the types of projects being carried out in a similar thematic area in the Alpine

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<sup>7</sup> EUSALP (2017b), EUSALP (2018b), EUSALP (2018c).

<sup>8</sup> EUSALP (2019b).

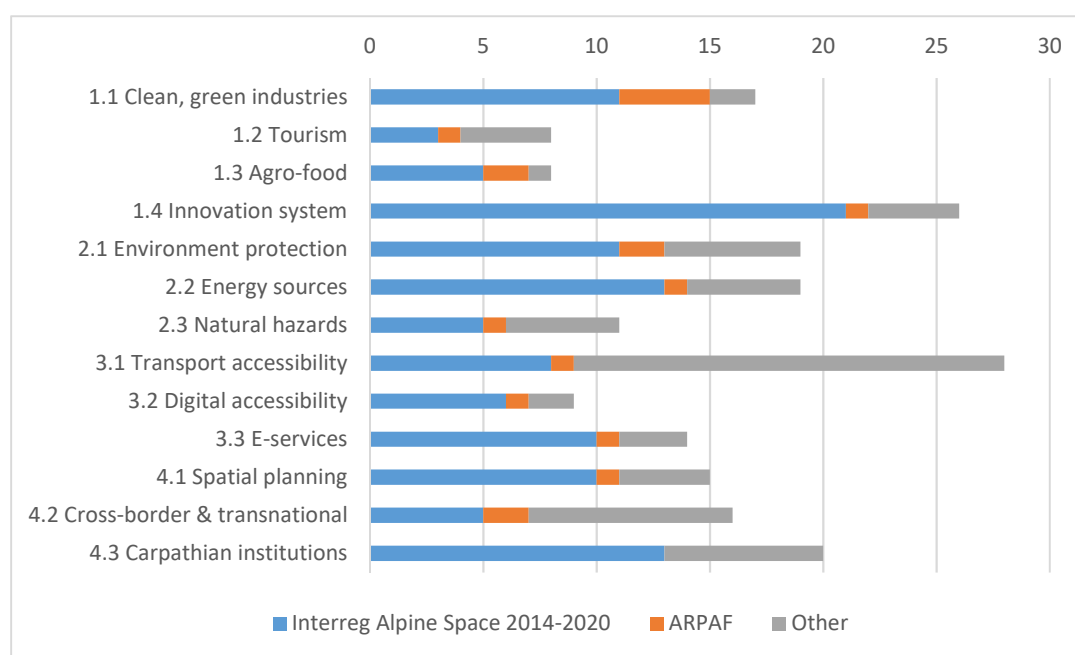
Region. Frequently, the scopes of the projects tally with the themes of several actions of the Carpathian Strategy; in such an event they were listed in several actions.

Based on the ascribed EUSALP projects, the **implementation potential of the objectives and actions of the Carpathian Strategy was assessed, broken down into the project, financial and institutional potentials**. The **project potential** was assessed using all the project sets, and the unit of measure was the **number of projects** which were ascribed to specific actions planned for the Carpathian macroregion. All the projects were assigned, some of them to more than one action.

The largest number of Interreg Alpine Space 2014–2020 projects was ascribed to Action 1.4 *Development of macroregional innovation ecosystem*, and the lowest – to Action 1.2 *Sustainable development of tourism*. In the case of ARPAF projects, most initiatives were undertaken as part of Action 1.1 *Development of the clean, green industries*, and none under 4.3 *Programming development and capacity building. Carpathian institutions*. Projects in the “Other” category were mostly classified under Action 3.1 *Increasing transport accessibility of the Carpathian Region and within the Region*, which is connected with the process of labelling transport projects as macroregional projects by Action Group 4. Thanks to such a large group of projects, Action 3.1 was ranked the highest in terms of the project potential measured by the total number of all collected initiatives linked to a given action. However, taking into account only Interreg Alpine Space and ARPAF projects, Action 1.4 *Development of macroregional innovation ecosystem* manifested the greatest potential in respect of generating implementation initiatives, followed by Action 1.1 *Development of the clean, green industries* and Action 2.2 *Diversification of energy sources*.

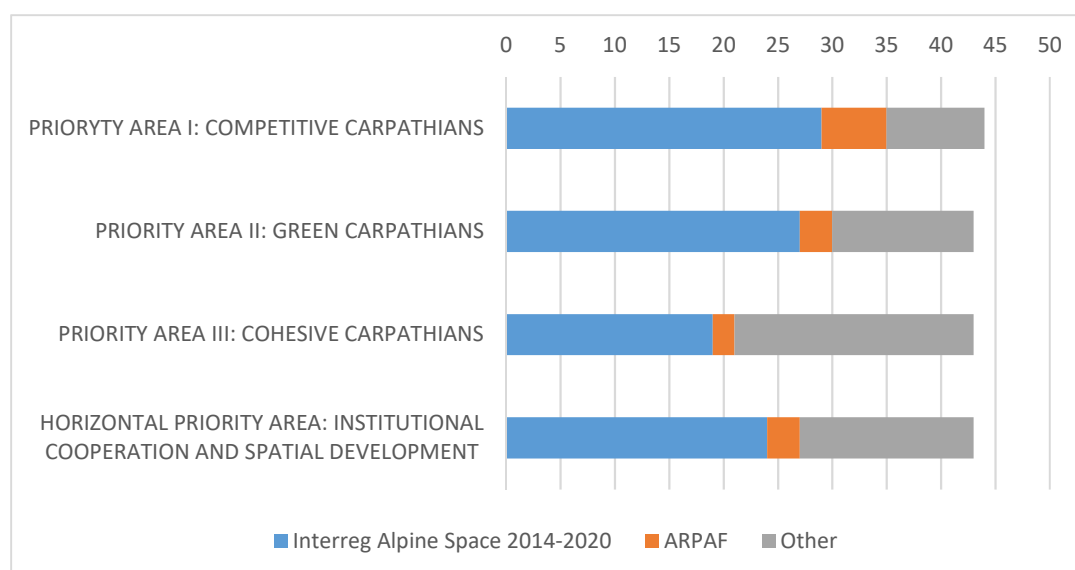
As regards the total number of projects (from all the three data sets), we can see their uniform distribution among the four objectives of the Carpathian Strategy. In contrast, in the case of Interreg Alpine Space and ARPAF projects, Priority Area I *Competitive Carpathians*, yielded the highest number of projects, while Priority Area III *Cohesive Carpathians* – the lowest.

**Fig. 4** Number of EUSALP projects broken down by the Carpathian Strategy actions



Source: own elaboration based on the draft Carpathian Strategy and collected information on EUSALP projects.

**Fig. 5** Number of EUSALP projects broken down by the Carpathian Strategy objectives



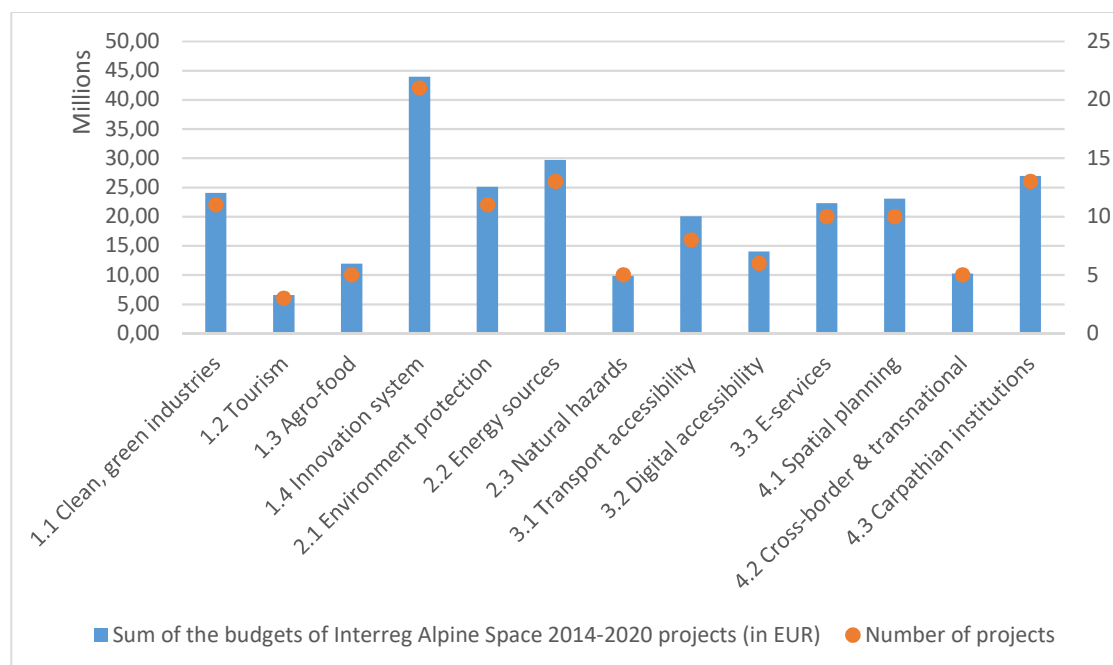
Source: own elaboration based on the draft Carpathian Strategy and collected information on EUSALP projects.

The financial potential of the Carpathian Strategy actions was measured by the **sum of the budgets** of the EUSALP projects ascribed to them. Given the availability and completeness of the data, only Interreg Alpine Space 2014–2020 projects were considered (the entire set had the relevant financial data). The financial potential was measured using **two methods**:

- 1) for each project, the total amount of financing in each action to which the project was assigned was taken into account (**method I**);

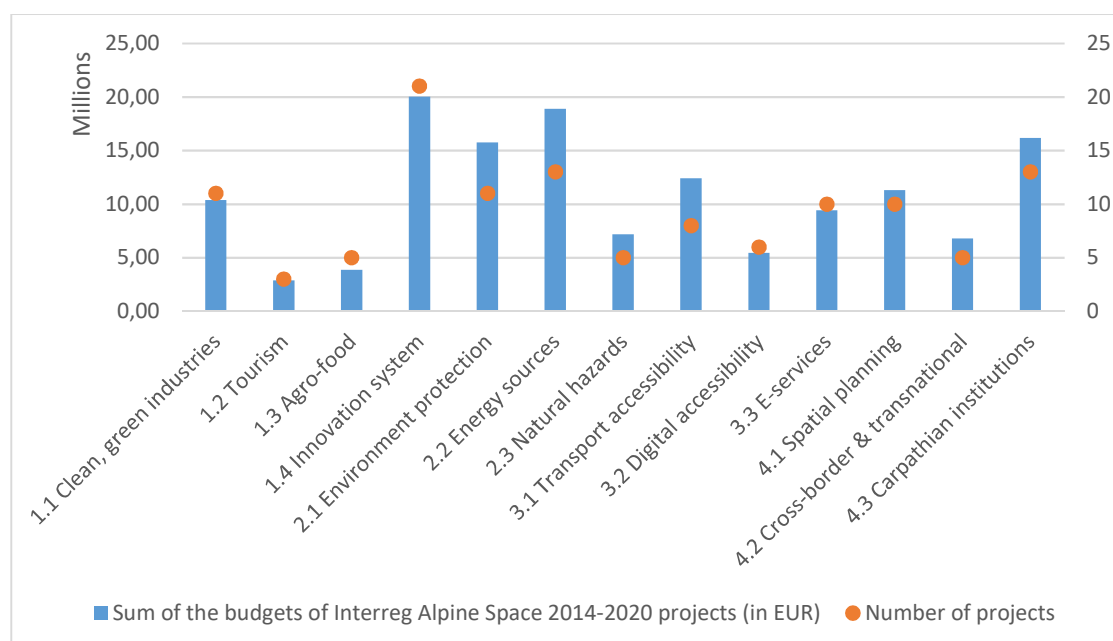
- 2) for each action,  $1/n$  of the amount of every project assigned to such an action was taken into account (**method II**);  $n$ =number of actions to which a given project was assigned.

**Fig. 6** Interreg Alpine Space 2014-2020 projects broken down by the Carpathian Strategy actions – method I



Source: own elaboration based on the draft Carpathian Strategy and collected information on EUSALP projects.

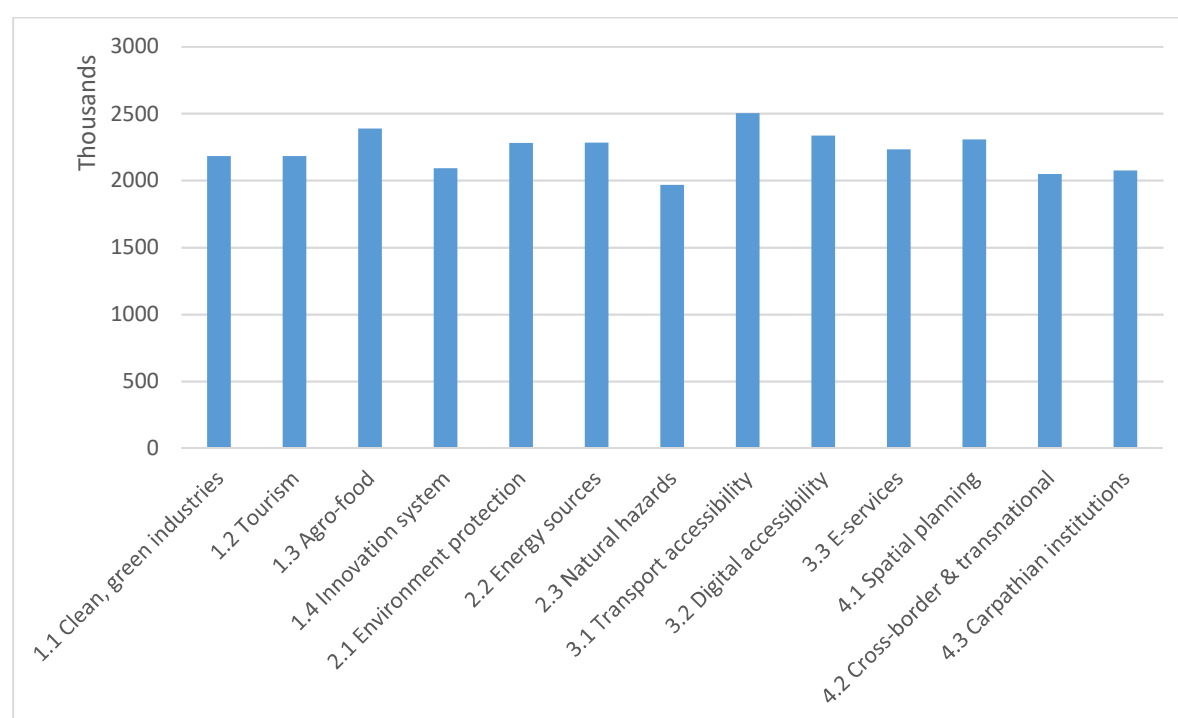
**Fig. 7** Interreg Alpine Space 2014-2020 projects broken down by the Carpathian Strategy actions – method II



Source: own elaboration based on the draft Carpathian Strategy and collected information on EUSALP projects.

In both these methods, the greatest financial potential, in a similar order, was mobilised by Actions: 1.4 *Development of macroregional innovation ecosystem*, 2.2 *Diversification of energy sources*, 4.3 *Programming development and capacity building. Carpathian Institutions*, 2.1 *Protection and sustainable management of natural resources*, and the smallest – by Action 1.2 *Sustainable development of tourism*. This order is associated with the number of projects, and therefore with the project potential. Interestingly, the comparison of the **average project values** (measured using method I) shows considerably fewer differences, with the highest average value of projects being found in Action 3.1 *Increasing transport accessibility of the Carpathian region and within the region*, and the lowest in Action 2.3 *Management of environmental risk and natural threats*, the average value for all projects being about EUR 2.2 million.

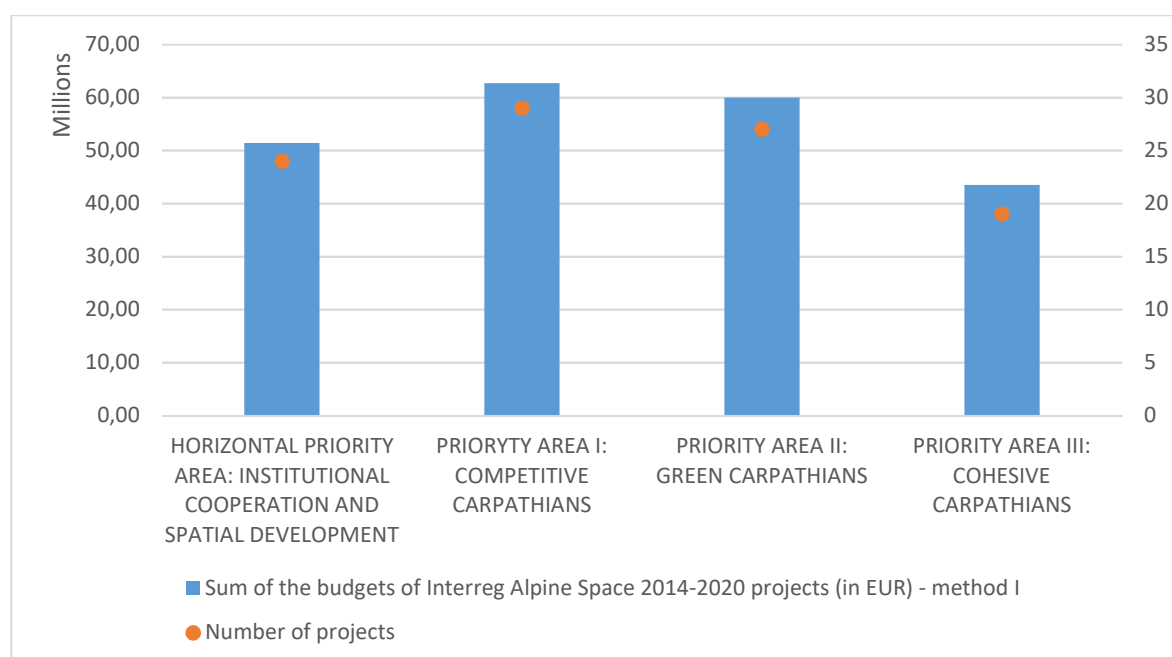
**Fig. 8** Average value of Interreg Alpine Space 2014-2020 projects (in EUR)



Source: own elaboration based on the draft Carpathian Strategy and collected information on EUSALP projects.

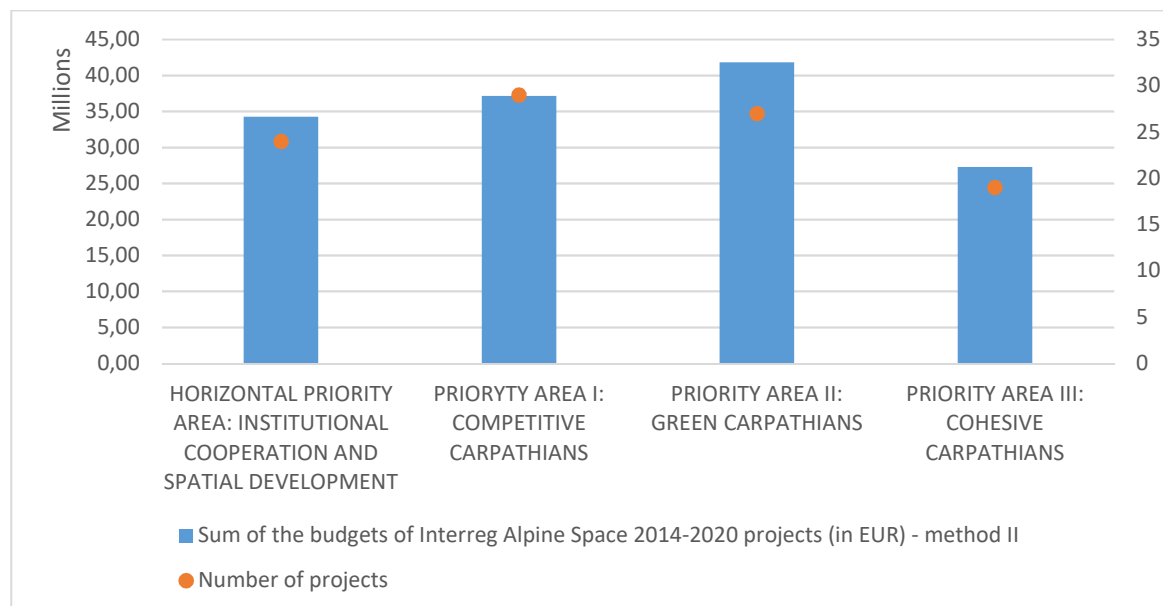
As regards the division into priority areas, the use of method I to calculate the value of projects gives primacy to Priority Area I *Competitive Carpathians* (due to the highest number of projects in that particular priority area), and the use of method II – to Priority Area II *Green Carpathians*.

**Fig. 9** Interreg Alpine Space 2014-2020 projects broken down by the Carpathian Strategy objectives - method I



Source: own elaboration based on the draft Carpathian Strategy and collected information on EUSALP projects.

**Fig. 10** Interreg Alpine Space 2014-2020 projects broken down by the Carpathian Strategy objectives - method II

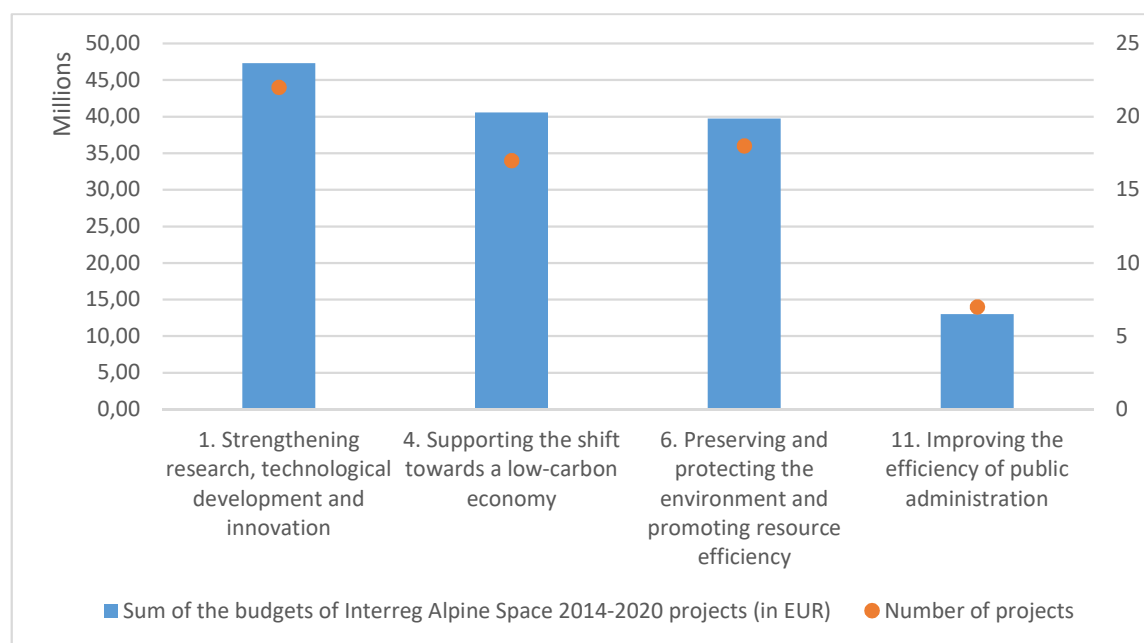


Source: own elaboration based on the draft Carpathian Strategy and collected information on EUSALP projects.

A comparison of these data with the distribution of the Interreg Alpine Space projects with respect to the **European Structural and Investment Funds (ESIF) thematic objectives** (each project was assigned to one area only) shows that objective 1. *Strengthening research,*

*technological development and innovation*, which corresponds with Objective I of the Carpathian Strategy, comes first in terms both of the project and financial potentials.

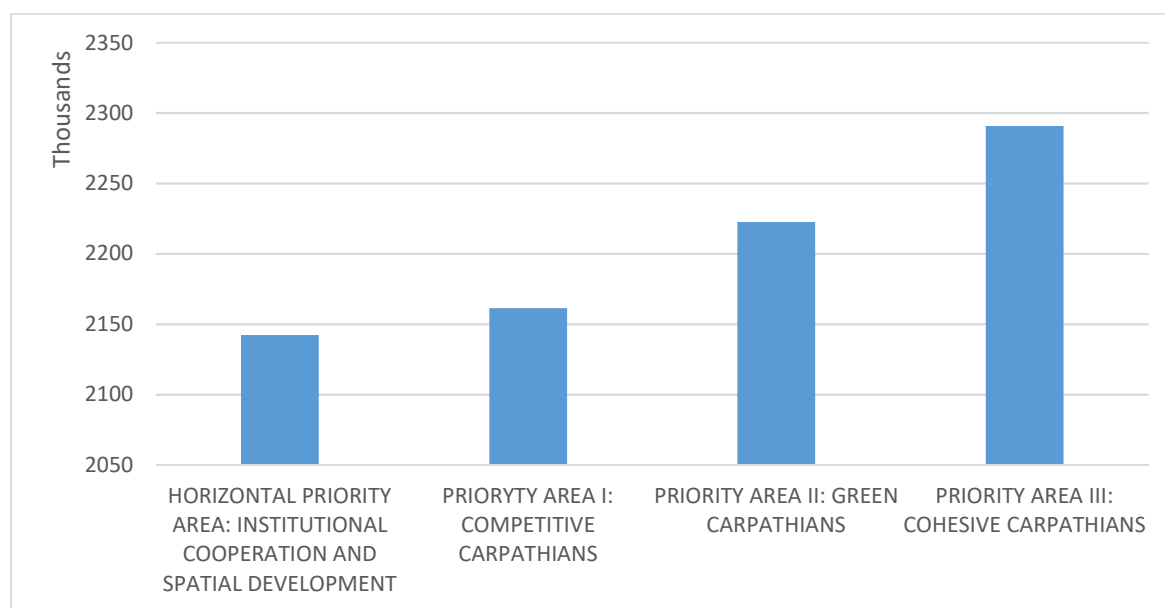
**Fig. 11** Interreg Alpine Space 2014-2020 projects broken down by ESIF thematic objectives



Source: own elaboration based on collected information on EUSALP projects.

In terms of the average project value (calculated using method I), projects in Priority Area III *Cohesive Carpathians* prove the most expensive, and horizontal initiatives – the least expensive.

**Fig. 12** Average value of Interreg Alpine Space 2014-2020 projects (in EUR) by the Carpathian Strategy objectives



Source: own elaboration based on the draft Carpathian Strategy and collected information on EUSALP projects.

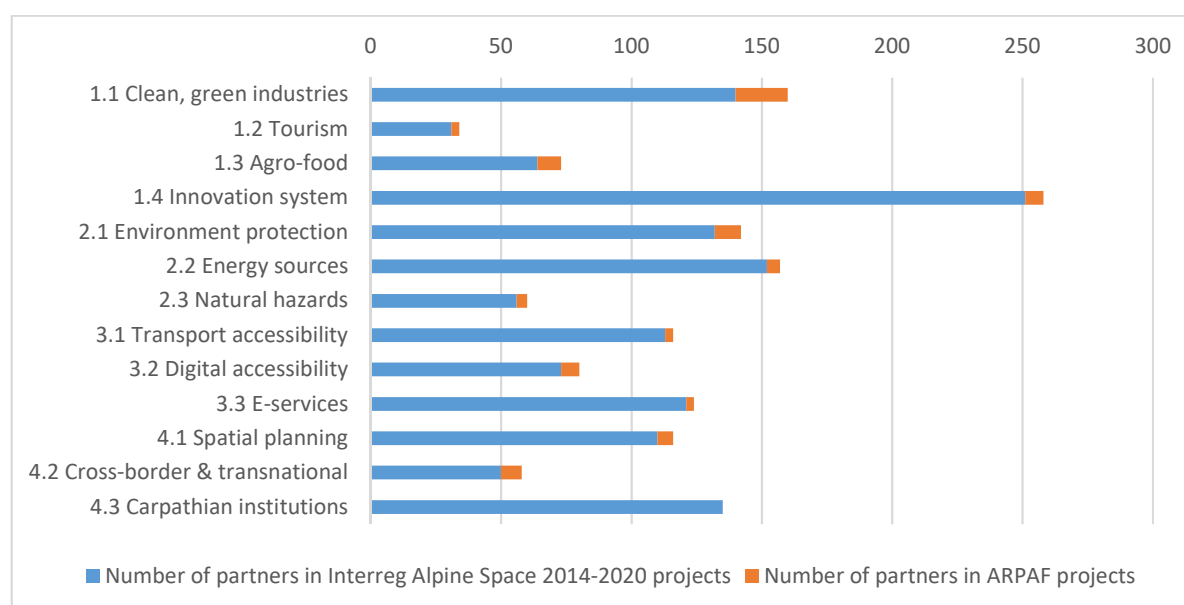
To assess the **institutional potential**, the data on project implementing entities were used; they came from the Interreg Alpine Space 2014-2020 and ARPAF datasets. The data were analysed using two methods:

- 1) regarding the **number of partnerships** – the project implementing entities (partners; observers were not counted), which illustrates the level of interest in cooperation in a given type of action, measured by the total or average number of active entities in the Alpine Region (an entity which participated in more than one project was included in each of them);
- 2) regarding the **countries from which the project implementing entities originated**, which illustrates the potential for international cooperation.

In terms of the **total number of participants** in projects ascribed to the specific actions of the Carpathian Strategy (one project could be ascribed to more than one action; in such an event the number of its partners was counted in full in each of the ascribed actions), Actions: 1.4 *Development of macroregional innovation ecosystem*, 1.1 *Development of the clean, green industries*, and 2.2 *Diversification of energy sources* yielded the greatest potential, overall and as part of Interreg Alpine Space; in the case of ARPAF, these were 1.1

*Development of the clean, green industries*, 2.1 *Protection and sustainable management of natural resources* and 1.3 *Increasing the competitiveness of the agro-food sector*. In contrast, the lowest aggregate number of project participants (overall and as part of Interreg Alpine Space) was found in Actions: 1.2 *Sustainable development of tourism*, 4.2 *Cross-border and transnational cooperation* and 2.3 *Management of environmental risk and natural threats*, which, again, is connected with the number of projects implemented as part of these actions.

**Fig. 13** Number of partners in EUSALP projects broken down by the Carpathian Strategy actions

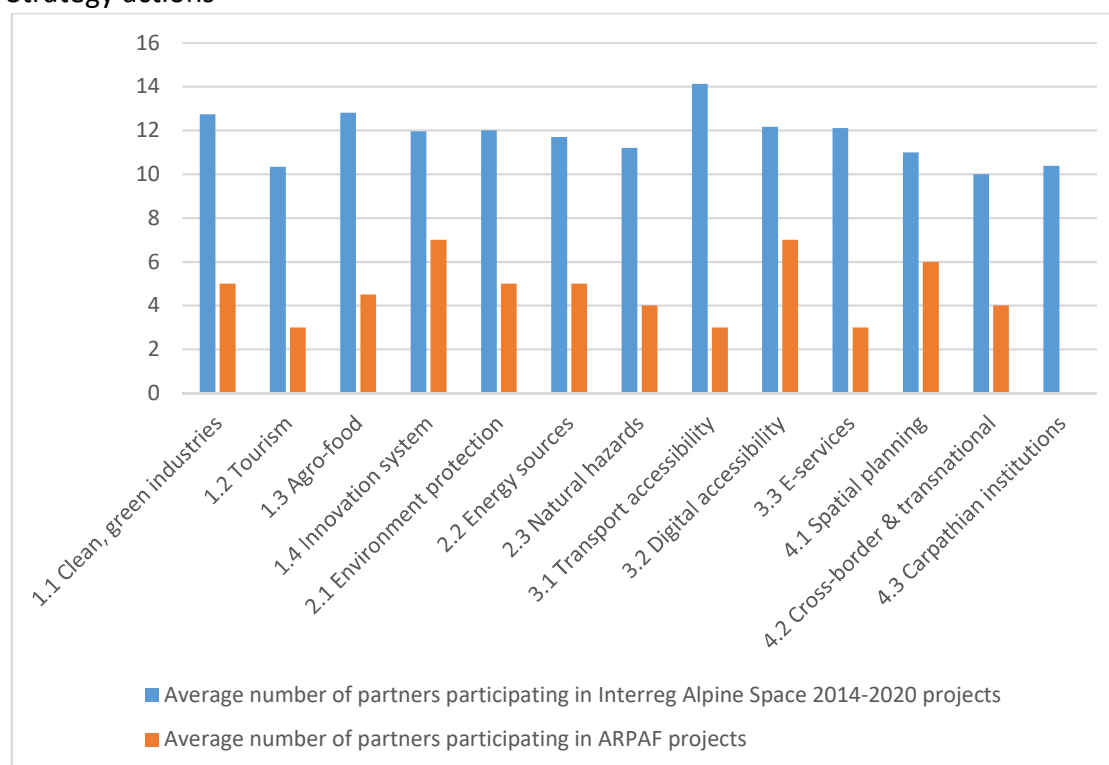


Source: own elaboration based on the draft Carpathian Strategy and collected information on EUSALP projects.



A comparison of the **average numbers of project participants** in Interreg Alpine Space gives primacy to Action 3.1 *Increasing the transport accessibility*, followed by 1.3 *Increasing the competitiveness of the agro-food sector* and 1.1 *Development of the clean, green industries*, with the list closed by Action 4.2 *Cross-border and transnational cooperation*, 1.2 *Sustainable development of tourism* and 4.3 *Programming development and capacity building. Carpathian institutions*. In the case of ARPAF, Actions 1.4 *Development of macroregional innovation ecosystem* and 3.2 *Increasing the digital accessibility* were at the lead.

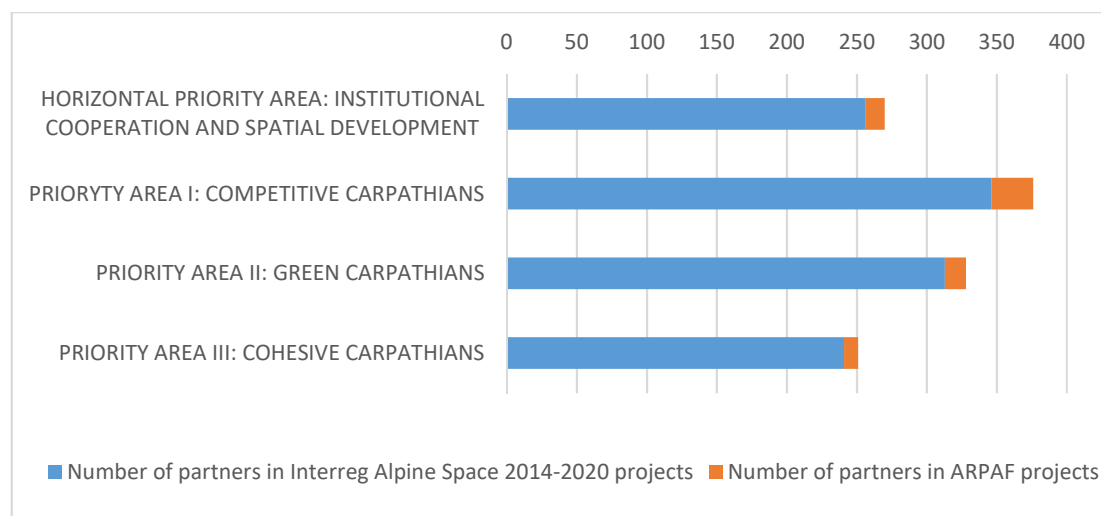
**Fig. 14** Average number of partners participating in EUSALP projects by the Carpathian Strategy actions



Source: own elaboration based on the draft Carpathian Strategy and collected information on EUSALP projects.

As regards the Carpathian Strategy, the highest total number of partners was found in Priority Area I *Competitive Carpathians*, and the lowest – in Priority Area III *Cohesive Carpathians*, which is also a consequence of the number of implemented projects.

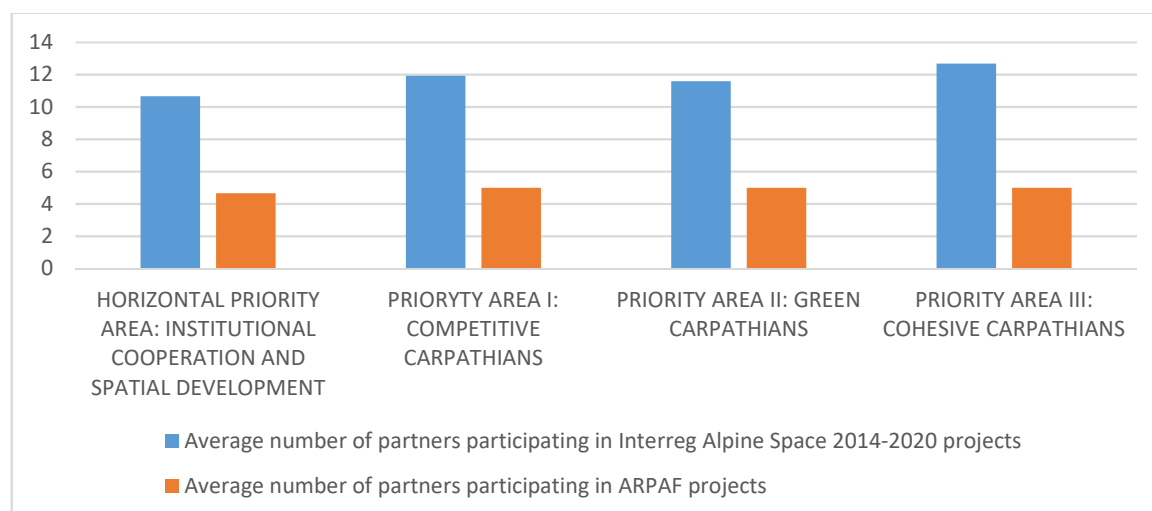
**Fig. 15** Number of partners in EUSALP projects broken down by the Carpathian Strategy objectives



Source: own elaboration based on the draft Carpathian Strategy and collected information on EUSALP projects.

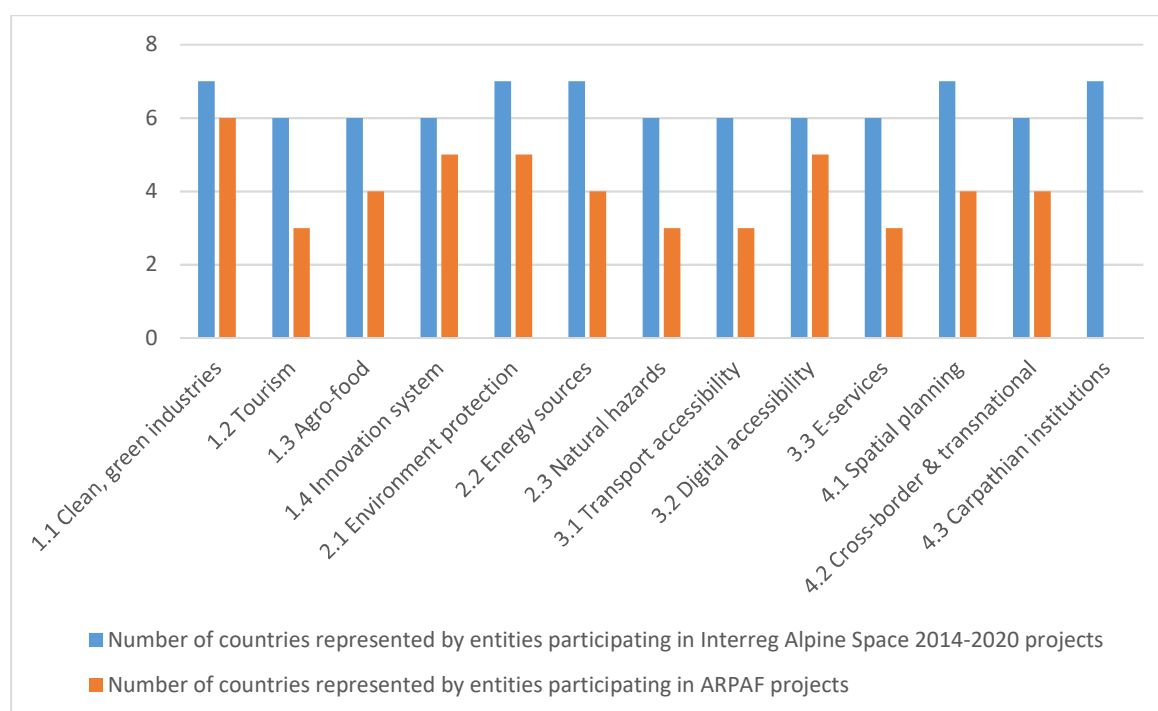
As regards the average number of participants in the projects ascribed to specific objectives of the Carpathian Strategy, the highest number of partnerships was found in Priority Area II *Green Carpathians*, and the lowest – in the horizontal priority area.

**Fig. 16** Average number of partners participating in EUSALP projects, by the Carpathian Strategy objectives



Source: own elaboration based on the draft Carpathian Strategy and collected information on EUSALP projects.

**Fig. 17** Number of countries implementing EUSALP projects broken down by the Carpathian Strategy actions

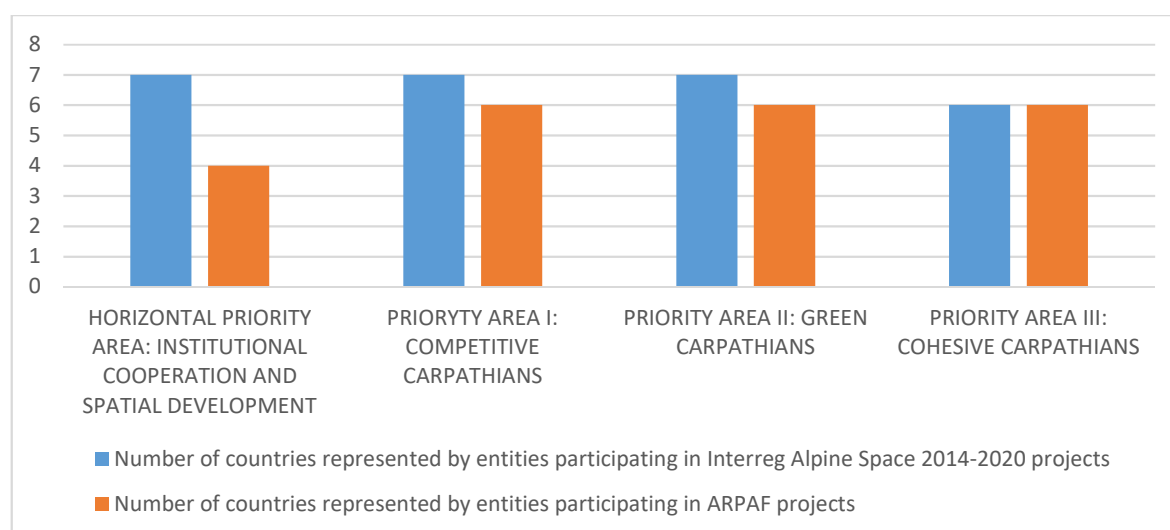


Source: own elaboration based on the draft Carpathian Strategy and collected information on EUSALP projects.

With respect to statistics on the **number of countries** represented by entities participating in the implementation of Interreg Alpine Space projects ascribed to the Carpathian Strategy actions, few significant differences could be observed: the number of countries implementing Interreg projects differs, in comparison to the Carpathian Strategy actions, only in the participation of Liechtenstein. This shows a comparable institutional potential regarding the establishment of international cooperation within individual actions. These differences are wider in the case of ARPAF projects; the number of countries is the highest in Action 1.1 *Development of the clean, green industries* and it is zero (lack of projects) in Action 4.3 *Programming development and capacity building of Carpathian institutions*.

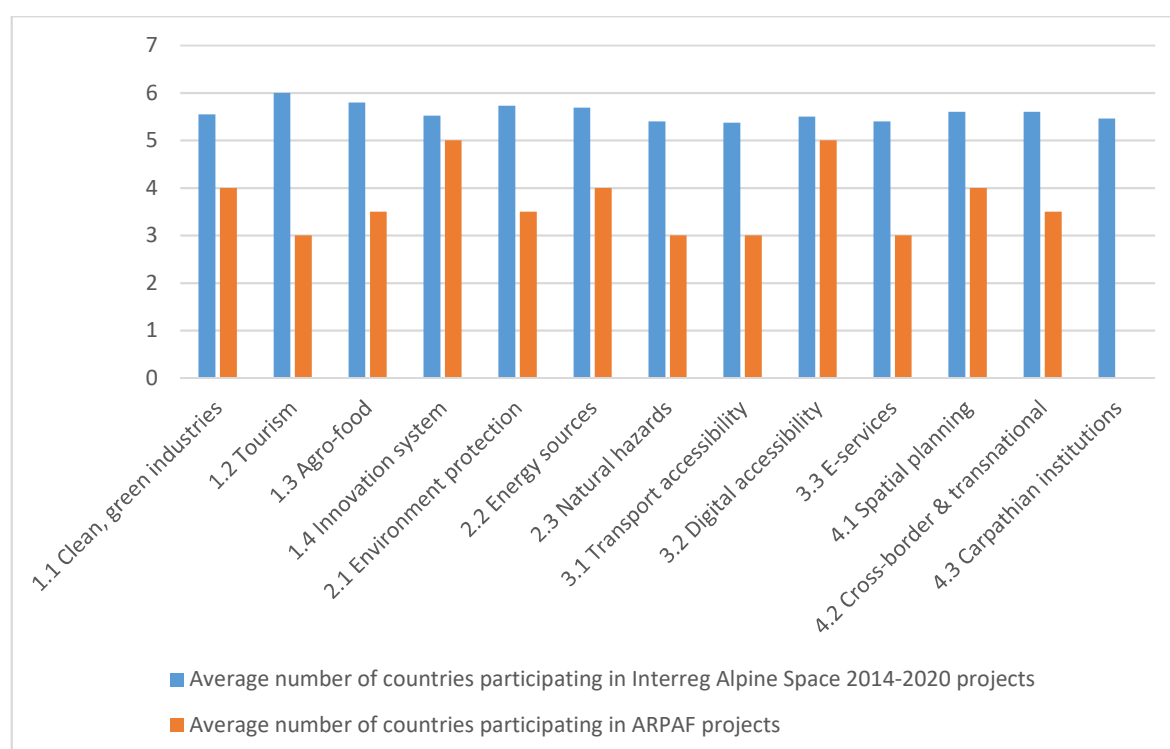
As regards division into the objectives, the sole difference in the number of countries represented by entities participating in the implementation of Interreg Alpine Space projects can be observed in Priority Area III *Cohesive Carpathians*, due to the lack of projects with the participation of Liechtenstein. In the case of ARPAF, the smallest number of countries were involved in the implementation of projects ascribed to the horizontal priority area of the Carpathian Strategy, with an equal share in the remaining priority areas.

**Fig. 18** Number of countries implementing EUSALP projects broken down by the Carpathian Strategy objectives



Source: own elaboration based on the draft Carpathian Strategy and collected information on EUSALP projects.

**Fig. 19** Average number of countries participating in EUSALP projects, by the Carpathian Strategy actions

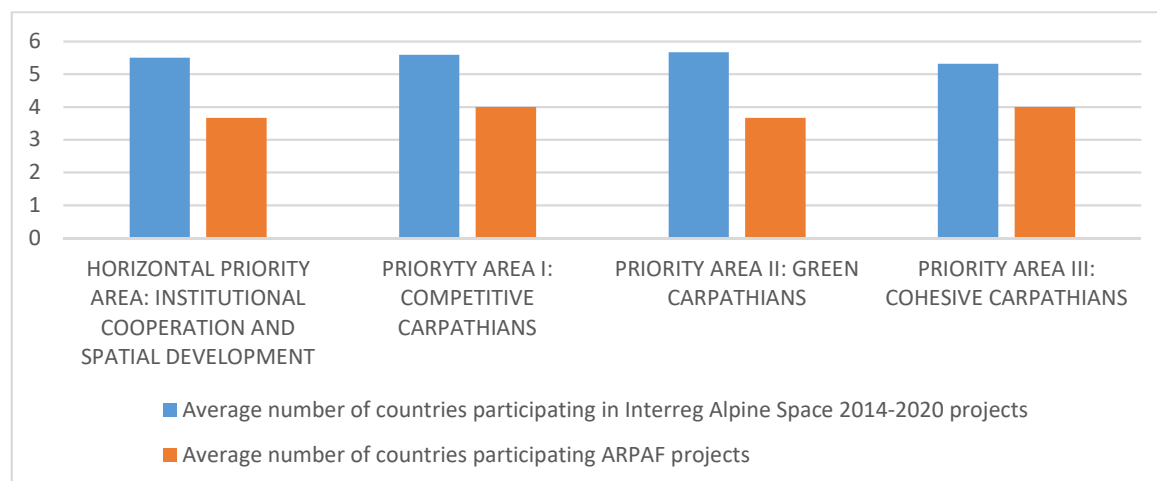


Source: own elaboration based on the draft Carpathian Strategy and collected information on EUSALP projects.

In Interreg, **the highest number of countries on average** was involved in the execution of projects under Action 1.2 *Sustainable development of tourism*, although the differences in that regard are small. In turn, in the case of ARPAF projects, the highest average number of

represented countries could be observed for Action 1.4 *Development of macroregional innovation ecosystem* and Action 3.2 *Increasing the digital accessibility*.

**Fig. 20** Average number of countries participating in EUSALP projects, by the Carpathian Strategy objectives

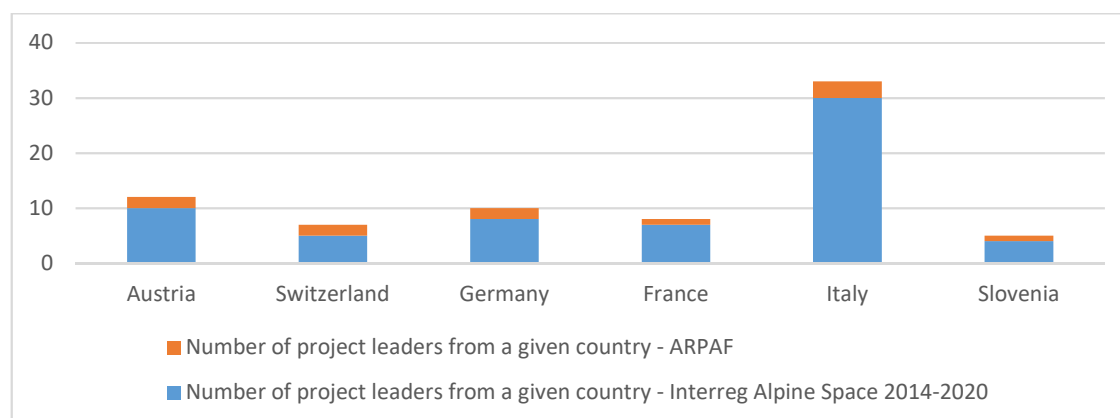


Source: own elaboration based on the draft Carpathian Strategy and collected information on EUSALP projects.

The average number of countries participating in the projects, broken down by the Carpathian Strategy objectives, were also similar. The lowest value was noted in the case of Interreg Alpine Space in Priority Area III *Cohesive Carpathians*, and the highest - in Priority Area II *Green Carpathians*; the latter area in the case of ARPAF was ranked lower.

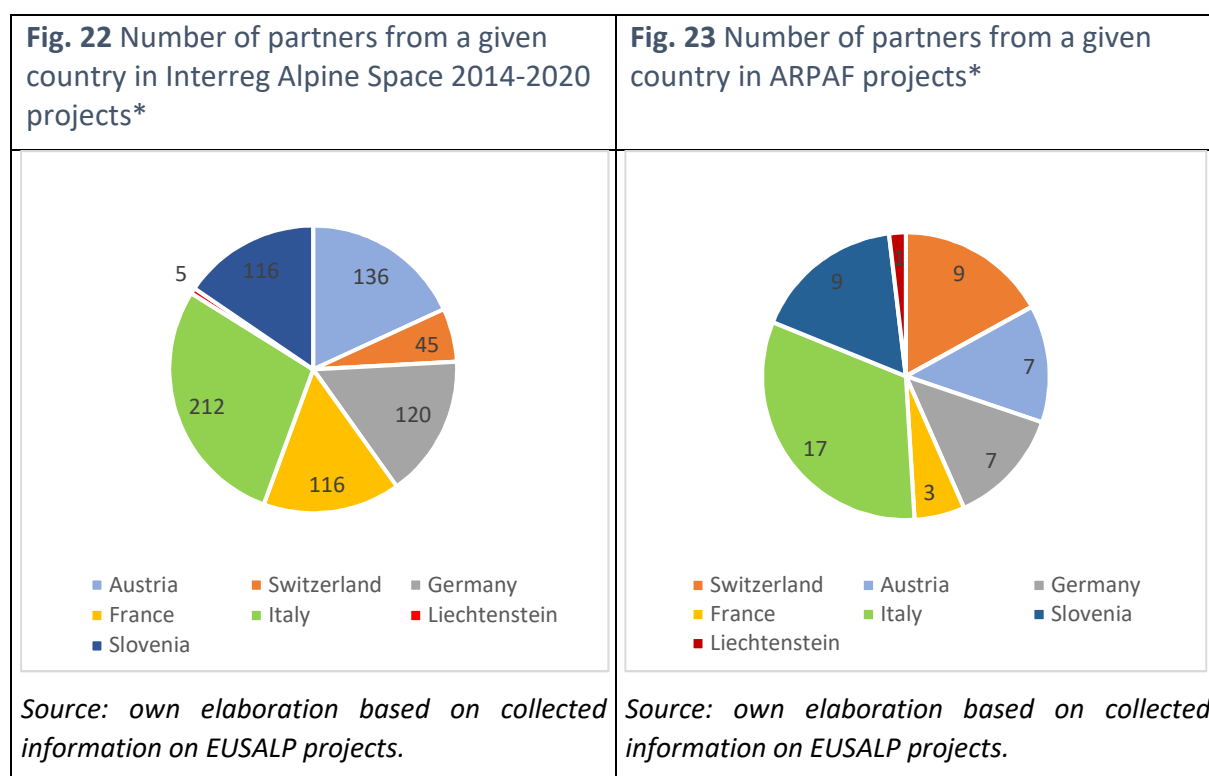
It should be observed that the **share of individual countries** in the implementation of EUSALP projects is more varied; with entities from Italy playing a prominent role both as project leaders and as other project partners.

**Fig. 21** Leaders of EUSALP projects by country\*



\* values counted at project level; for those entities which were leaders in more than one project, every project was included.

Source: own elaboration based on collected information on EUSALP projects.



\* values counted at project level; for those entities which were partners in more than one project, every project was included.

To sum up, it is worth recalling that the Alpine Strategy was designed and is implemented on the basis of a well-developed, already pursued cooperation and a willingness to engage in joint activities by entities from the area of the Alps (from both the national and regional level).<sup>9</sup> The Strategy's added value is that it has provided an organisational framework for such cooperation and created platforms which permeate various levels, both horizontally (sectors) and vertically (governance levels)<sup>10</sup>. Nonetheless, it was the high level of the already functional **political and economic cooperation in the region** which facilitated a speedy rollout of EUSALP<sup>11</sup>. The employed three-phase **model of macroregional strategy development (COWI et al. 2017a)**, which comprises an initial phase when the rules and procedures for governance are established, phase two, when the acquired institutional capacity open up the way for action, also towards external stakeholders, and the maturity phase, when the results obtained through the strategy become visible at the level of indicators, showed that EUSALP reached phase two earlier than the other macroregional strategies, thanks to its reliance on the existing, robust regional cooperation<sup>12</sup>. In 2020, a decision was made to add a technical assistance structure furnished with a stable source of financing.

<sup>9</sup> The presence of the regions at all three levels of governance and the existence of a specific objective focusing on the governance are the EUSALP's innovations, compared to the other macroregional strategies - European Commission (2020h).

<sup>10</sup> European Commission (2020h).

<sup>11</sup> European Commission (2016c), European Commission (2016a).

<sup>12</sup> European Commission (2020h).

It is difficult to assess in a measurable way to what extent the presence of the macroregional Strategy helped redirect the actions being implemented in the Alpine Region within the framework of the already existing instruments. A gradual increase of awareness and coordination can be observed between the EUSALP institutions and the institutions managing the ESIF-funded programmes<sup>13</sup>, although such awareness and cooperation outside of Interreg Alpine Space remains low, and adaptation of other financing sources poses a challenge<sup>14</sup>.

**Added value** could be generated thanks to the dedicated ARPAF<sup>15</sup> and AlpGov i AlpGov2 projects (Interreg Alpine Space 2014-2020), which helped fund the pilot initiatives in individual thematic areas, prepare diagnoses or recommendations, carry out management and communication activities, support an exchange of experiences or improve institutional capacity. Notably, thanks to such exchange of experiences and opportunities for building coalitions (the critical mass) at the macroregional level, issues which are too insignificant (in quantitative terms – share in the total population) at the national level, such as e.g. Internet access in remote and scarcely populated mountain areas or daily commuting to work across the border, may be addressed; they can also be thoroughly diagnosed and comprised by test solutions thanks to organisational and financial frameworks established for the Strategy's implementation. At the present stage, capitalising on the tested pilot initiatives and their dissemination is yet to come<sup>16</sup>.

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<sup>13</sup> European Commission (2020g).

<sup>14</sup> COWI et al (2017a).

<sup>15</sup> *Concerning cross sectoral cooperation and with a view to setting up more implementation activities, the Alpine Region Preparatory Action Fund (ARPAF) proved to be extremely helpful. For some AGs it served as a boost for developing implementation activity, establish horizontal cooperation and making EUSALP work more visible* - European Commission (2019a), s. 40.

<sup>16</sup> European Commission (2020h).

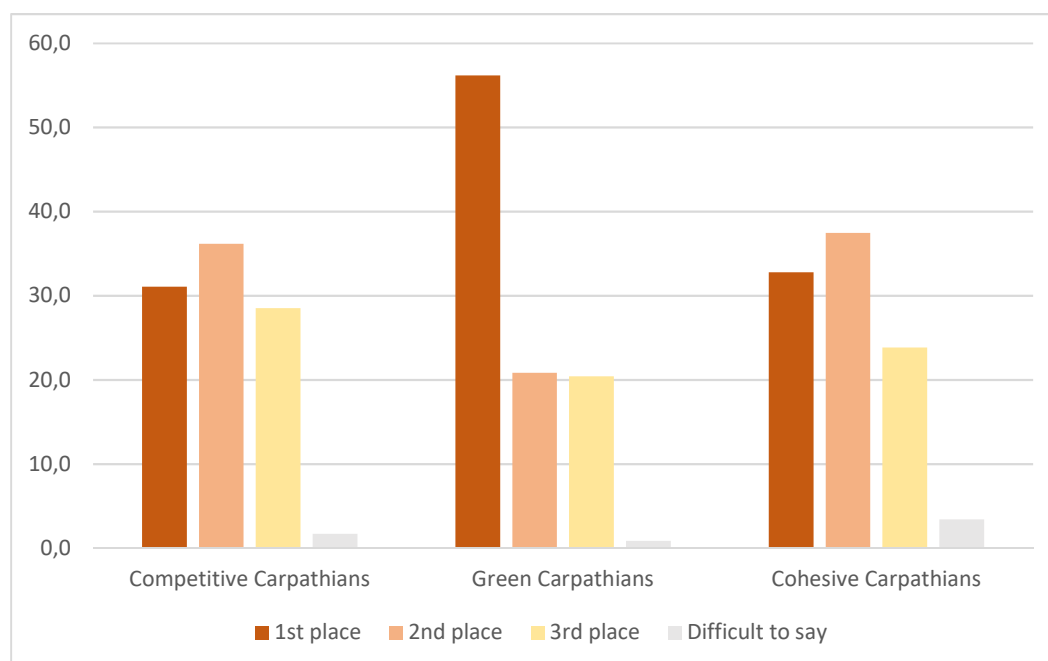
### PART 3. PREFERENCES OF THE STAKEHOLDERS OF THE CARPATHIAN MACROREGIONAL STRATEGY REGARDING OBJECTIVES, ACTIONS, PROJECT TYPES AND TOOLS FOR THEIR IMPLEMENTATION

The methodology and results concerning the selection of the pool of respondents to evaluate the preferences of the stakeholders of the Carpathian macroregional Strategy is discussed in Part 1 above. The key survey findings in terms of the objectives, actions, project types and implementation tools of the Carpathian Strategy are discussed below. Due to the adopted method for sample selection, the results were controlled for the influence of the respondent's country, type of entity and its operation, as well as the territorial level of such operation.

#### 3.1. Main objectives and actions of the Macroregional Strategy for the Carpathian Region

Priority Area 2 *Green Carpathians*, that is pursuit of a high quality of the natural environment, was regarded by the respondents as the overarching objective of the Strategy. This objective was listed as the first one twice as often (60%) as the remaining two, i.e. Priority Area 1 *Competitive Carpathians* and Priority Area 3 *Cohesive Carpathians*. The latter two were relatively similarly evaluated by the respondents, each being placed first by about 30% of the respondents (**Fig. 24**)<sup>17</sup>. Priority Area 4 *Institutional Cooperation* was not evaluated by the stakeholders in this question owing to its horizontal nature and instrumentality of the actions planned in connection with it. That particular priority area and the associated instruments are discussed separately in Part 3.3 of this Study.

**Fig. 24** Priorities of the Carpathian Strategy objectives [% of indications]



<sup>17</sup> The answers do not add up to 100 since some of the respondents listed more than 1 objective as the first (ex aequo).

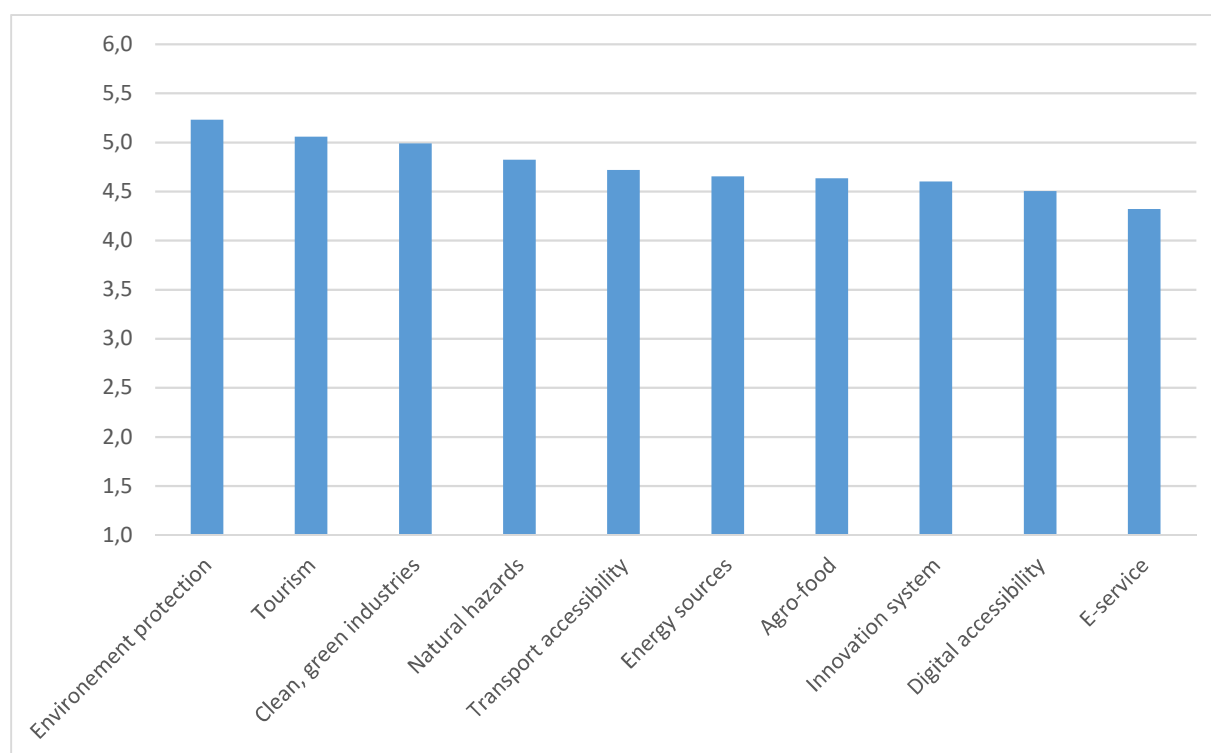


Source: own elaboration based on the questionnaire survey results.

The inclusion of the control variables indicated above for the country, type of organisation, type of activity and territorial level of a given type of action did not significantly affect the survey results in terms of the evaluation of the objectives, which means that they were not affected by the selection of the sample.

Prioritisation of the objectives overlaps with the most important actions which, in the respondents' opinion, should be undertaken during the implementation of the Strategy (Fig. 25). **Protection of natural resources** was definitely ranked first by the respondents (Priority Area *Green Carpathians*), followed by **sustainable tourism** (Priority Area *Competitive Carpathians*), which was slightly ahead of the **development of the clean, green industries** (Priority Area *Competitive Carpathians*). The second action may make a considerable use of the local natural resources, while the latter is by assumption intended to minimise the environmental impact of business activity. The actions which the respondents found important, but to a relatively lesser degree, included the **development of e-services, increasing the digital accessibility** (Priority Area *Cohesive Carpathians*) and the **development of macroregional innovation ecosystem** (Priority Area *Competitive Carpathians*).

Fig. 25 Importance of the Carpathian Strategy actions\*



\* on the scale from 1 to 6, where 6 is 'extremely important', and 1 – 'not at all important'.

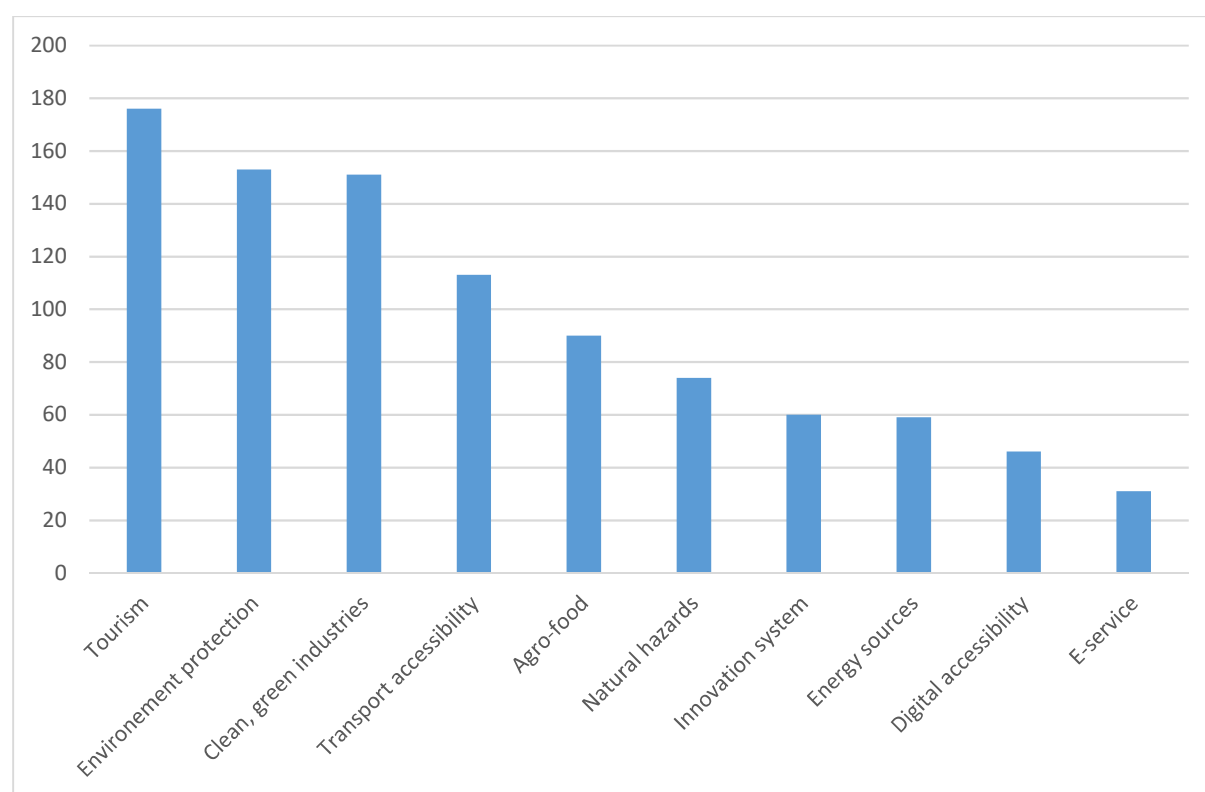
Source: own elaboration based on the questionnaire survey results.

Information economy can serve as a common denominator for these actions. In the respondents' opinion, its lesser role may be due, on the one hand, to the prevalent view on

the macregion's difficulties in competing successfully in that regard with highly developed countries. On the other hand, it can be explained by a greater significance being ascribed to those actions which can better tap into the region's endogenous potentials. These include – in addition to the ones listed above – increasing the competitiveness of the agro-food sector as regards the economy-related objectives, and management of natural resources, crisis management and energy diversification. As regards improving the macregion's competitiveness, external and internal transport accessibility was considered the most significant one, visibly surpassing the digital accessibility.

The assessment of the significance of individual actions was clearly correlated with the readiness to indicate key project types within these actions (Pearson coefficient  $r=0.90$ ). Such an assessment was provided for the three major actions by about 40–50% respondents, while five actions regarded by the respondents as relatively the least important – by about 10–20% respondents (**Fig. 26**).

**Fig. 26** Willingness to assess type of projects within specific actions [number of indications]



*Source: own elaboration based on the questionnaire survey results.*

In terms of preferences for individual activities, the obtained results were only slightly affected by the differences observable between countries and related to the scope of activity of specific stakeholders.

As regards countries, what was significant was that in Romania, and to some extent in Ukraine, the overall evaluation of the significance of specific actions was on average higher than in the remaining countries (5.0 and 4.8, respectively, compared to 4.5 – 4.6). In consequence, especially Romania differed from the other countries in how various actions

were assessed in terms of their role, particularly the agro-food sector, and Ukraine in respect of the role of transport accessibility. Leaving those differences aside, the average ratings indicate the assessment of the significance of a given action in individual countries. In that regard, five countries with the highest number of answers (Romania, Poland, Ukraine, Slovakia, Hungary) can be characterised as follows:

- the relatively greatest role of tourism in the case of Poland,
- a significant role of the agro-food sector in Slovakia and Romania,
- a considerable role of natural hazards and crisis management in Hungary and to a lesser extent in Ukraine,
- an important role of transport accessibility in the case of Ukraine and relatively small – in the case of Slovakia.

With respect to the profile of activity of a given organisation/institution, the orientation of their preferences was as follows:

- organisations in the field of environmental protection were oriented towards activities related to the condition of the natural environment and showed a lesser willingness to appreciate transport accessibility,
- organisations involved in economic development processes were oriented towards activities related to the development of innovation systems,
- organisations in the R&D sectors were oriented towards activities associated with innovation systems, diversification of energy sources, digital accessibility and e-services,
- organisations in the tourism sector were oriented towards activities associated with preventing natural hazards and crisis management (potential effect of the COVID-19 pandemic) and development of e-services,
- organisations providing public services were oriented towards activities increasing the macroregion's transport accessibility,
- organisations with links to EU funds were oriented towards activities improving the macroregion's digital accessibility.

Although statistically significant, these differences were not wide and, due to a considerable sample diversification in terms of the stakeholders' types of activity, this did not affect the overall results in any substantial way.

### **3.2. Most preferable project types**

The results of the evaluation of the project types are shown in **Appendix 1**, while **Table 10** indicates three types of projects for each action, which the stakeholders regarded as the most promising in terms of expected outcomes, and those which could most strongly foster the development of transborder cooperation.

**Tab. 10** The most promising types of project in terms of expected outcomes and the greatest potential for transborder cooperation\*

Action	The 3 most promising type of projects in terms expected outcomes	The 3 types of projects with greatest potential for transborder cooperation
<b>Clean, green industries</b>	Development of technologies to acquire energy from renewable sources	<b>Development of food processing clusters based on local products (e.g. cheese, wine, organic food)</b>
	<b>Development of food processing clusters based on local products (e.g. cheese, wine, organic food)</b>	Development of technology and industry parks
	Transformation of existing industries into the circular economy industries	Carpathian cluster of wood processing
<b>Sustainable tourism</b>	Development of eco-tourism	Long-distance Carpathian Trail
	Clustering and promoting healing mineral water resources and spas in Carpathian region	<b>Creation of common Carpathian brand system promoting Carpathians as a global sustainable tourism destination</b>
	<b>Creation of common Carpathian brand system promoting Carpathians as a global sustainable tourism destination</b>	Organisation of the transborder public transport to support tourism activities
<b>Agro-Food sector</b>	Supporting high quality ecological food production	Joint position of the Carpathian countries concerning regulations on development of the rural areas in the mountainous regions
	<b>Supporting creation of new agro-food sector clusters and producer groups</b>	<b>Supporting creation of new agro-food sector clusters and producer groups</b>
	<b>Building Carpathian food brands and promoting them at international fora.</b>	<b>Building Carpathian food brands and promoting them at international fora.</b>
<b>Innovation systems</b>	Supporting innovative development at local and regional levels based on cooperation between business and scientific centres	Supporting the development of an innovative environment in the Carpathian macro-region

Action	The 3 most promising type of projects in terms expected outcomes	The 3 types of projects with greatest potential for transborder cooperation
	Smart urban development	Cooperation between scientific institutions from the Carpathian Area (and from the outside)
	<b>Supporting the development of an innovative environment in the Carpathian macro-region</b>	<b>Supporting innovative development at local and regional levels based on cooperation between business and scientific centres</b>
<b>Environment protection</b>	Promotion of water saving, water recycling	<b>Cross-border standards for nature conservation and heritage</b>
	New hiking, cycling and skiing trails	New ecological corridors, including the Pan-European Carpathian Corridor
	<b>Cross-border standards for nature conservation and heritage</b>	Cooperation on the protection of animal species, especially large carnivores
Energy sources	Development of new green energy sources	Development of cross-border transmission systems and storage facilities for gas and oil
	Joint programme for energy management	Development of cross-border electricity systems
	<b>Supporting investment in circular economy</b>	<b>Supporting investment in circular economy</b>
Natural hazards	<b>System for monitoring and assessing environmental risks</b>	Cross-border prevention and emergency plans
	<b>Cooperation in information campaigns and mapping of environmental risks</b>	<b>Cooperation in information campaigns and mapping of environmental risks</b>
	Cross-border civic, economic and scientific networks educating on climate issues	<b>System for monitoring and assessing environmental risks</b>
Transport accessibility	<b>Improved road and rail accessibility of tourist attractions</b>	<b>Improved road and rail accessibility of tourist attractions</b>
	Plan for new TEN-T transport infrastructure development	Cross-border public transport

Action	The 3 most promising type of projects in terms expected outcomes	The 3 types of projects with greatest potential for transborder cooperation
	Preference for clean transport modes	Introduction of an integrated ticketing and information system
Digital accessibility	Free access to the ICT technologies	Enhancement of creation of a Carpathian system of public-internet hot spots
	Facilitating the digitalisation of small and medium-sized enterprises	Enhancement of translation of the content of key web-sites into the Carpathian languages.
	Map of the Internet access indicating “white spots”	Creating incentives for developing public-private partnerships in the area of connectivity infrastructure in the mountain regions
E-service	Introduction of e-services in administration	Establishing electronic platforms and cooperation networks, developing ICT tools like interactive customer support system
	Digitalizing culture and knowledge resources	Advertising campaign to encourage people to use advanced digital technologies
	<b>Elaborating and implementing Carpathian Smart Village approach (digitalisation of rural communities)</b>	<b>Elaborating and implementing Carpathian Smart Village approach (digitalisation of rural communities)</b>

\* actions listed among the three most frequent answers both concerning expected outcomes and potential for transborder cooperation are marked in bold.

*Source: own elaboration based on the questionnaire survey results.*

On this basis, it can be concluded that the potentially most favourable outcomes did not go hand in hand with the greatest potential for transborder cooperation. Taking into account these two dimensions simultaneously helped identify those project types which could potentially play the greatest role in the implementation of the Carpathian Strategy. In each action, these included the following – ranked in terms of their significance (cf. Part 3.1):

- Tourism: Creation of a common Carpathian brand system promoting the Carpathians as a global sustainable tourism destination
- Environment: Cross-border standards for nature conservation and heritage
- Clean, green industries: Development of food processing clusters based on local products (e.g. cheese, wine, organic food)

- Natural hazards: System for monitoring and assessing environmental risks and Cooperation in information campaigns and mapping of environmental risks
- Transport accessibility: Improved road and rail accessibility of tourist attractions
- Energy sources: Supporting investment in circular economy
- Agro-food industry: Supporting creation of new agro-food sector clusters and producer groups and Building Carpathian food brands and promoting them at international fora.
- Innovation system: Supporting the development of an innovative environment in the Carpathian macro-region and Supporting innovative development at local and regional levels based on cooperation between business and scientific centres
- Digital accessibility: Free access to the ICT technologies or Enhancement of creation of a Carpathian system of public-internet hot spots
- E-services: Elaborating and implementing Carpathian Smart Village approach (digitalisation of rural communities)

In contrast, based on the analysis of an open question in which the respondents could list the most desirable actions and projects, it can be concluded that the key aspects were environmental protection and sustainable tourism, which fully corroborates the preferences earlier expressed by the respondents (Part 3.1) (**Fig. 27**). The open question also addressed issues related e.g. to culture and transport accessibility. Similarly, actions fostering implementation of joint transborder projects were viewed as very important.

**Fig. 27** Words and phrases most frequently used by respondents to describe desirable activities in the Carpathian macroregion



<http://www.edwordle.net/create.html#>

Source: own elaboration based on the questionnaire survey results.

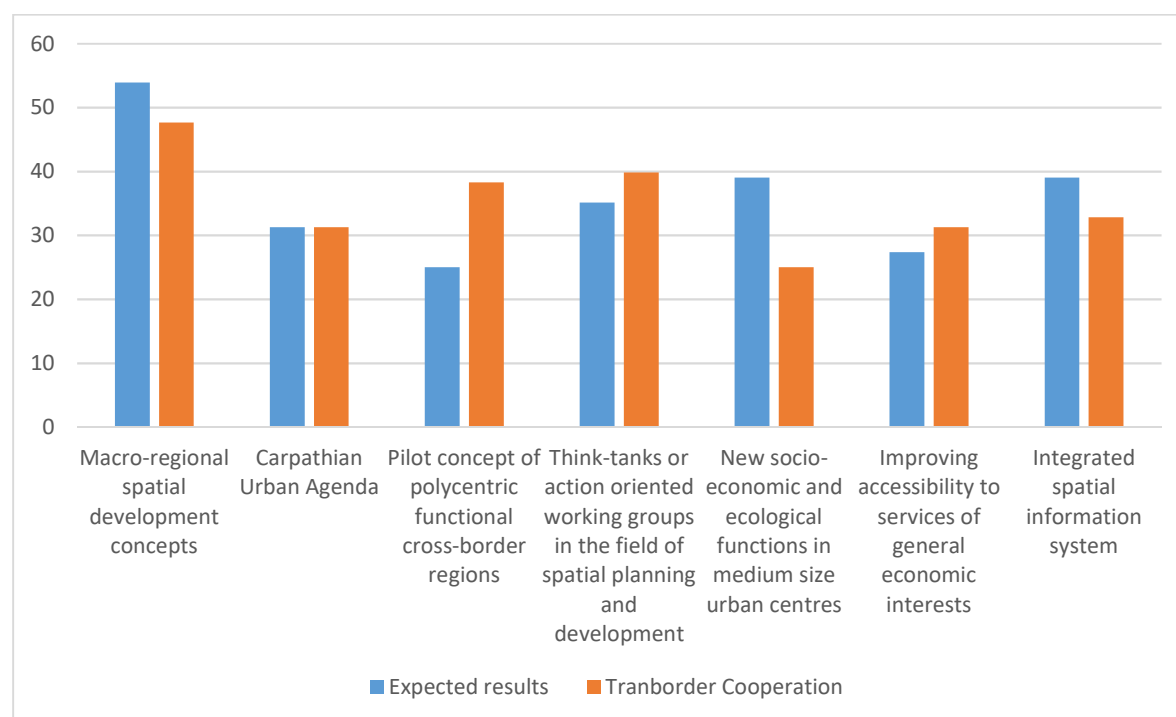
### 3.3. Evaluation of the tools for coordinating and promoting the development of the Carpathian macroregion

The actions/tools under **Priority Area 4 Institutional cooperation and spatial development** were evaluated in terms of their usefulness for coordination and promotion of the development of the Carpathian macroregion. The respondents viewed cross-border and transnational cooperation as the most important tool (5.20). However, it did not receive a much higher score than spatial planning and development programming (4.82 and 4.86, respectively), which quite clearly indicates that all types of tools need to be used to fulfil this horizontal objective.

When evaluating these actions, the respondents also listed the most desirable types of tools in terms of their potential outcomes and potential for transborder cooperation. The types of tools regarded as the most important by the respondents, and which can be used in each of the actions, are listed below.

As regards spatial planning, the respondents mostly pointed to the need to formulate a macroregional spatial development concept and, as the next priority, an integrated Spatial Information System (Błąd! Nie można odnaleźć źródła odwołania.).

**Fig. 28** Evaluation of tools to be used within the spatial planning action [% of indications]



Source: own elaboration based on the questionnaire survey results.

With respect to the remaining tools, attention should be given to:

- testing ways to introduce new socio-economic and ecological functions in medium-sized cities (especially in view of potential effects, but with a relatively low potential for the development of transborder cooperation),



- establishing action groups for designing spatial development concepts and pilot concepts for the operation of polycentric, functional transborder regions (particularly with regard to transborder cooperation).

As regards cross-border and transnational cooperation, in the respondents' opinion two project spheres deserved special attention, viz. **(Fig. 29)** :

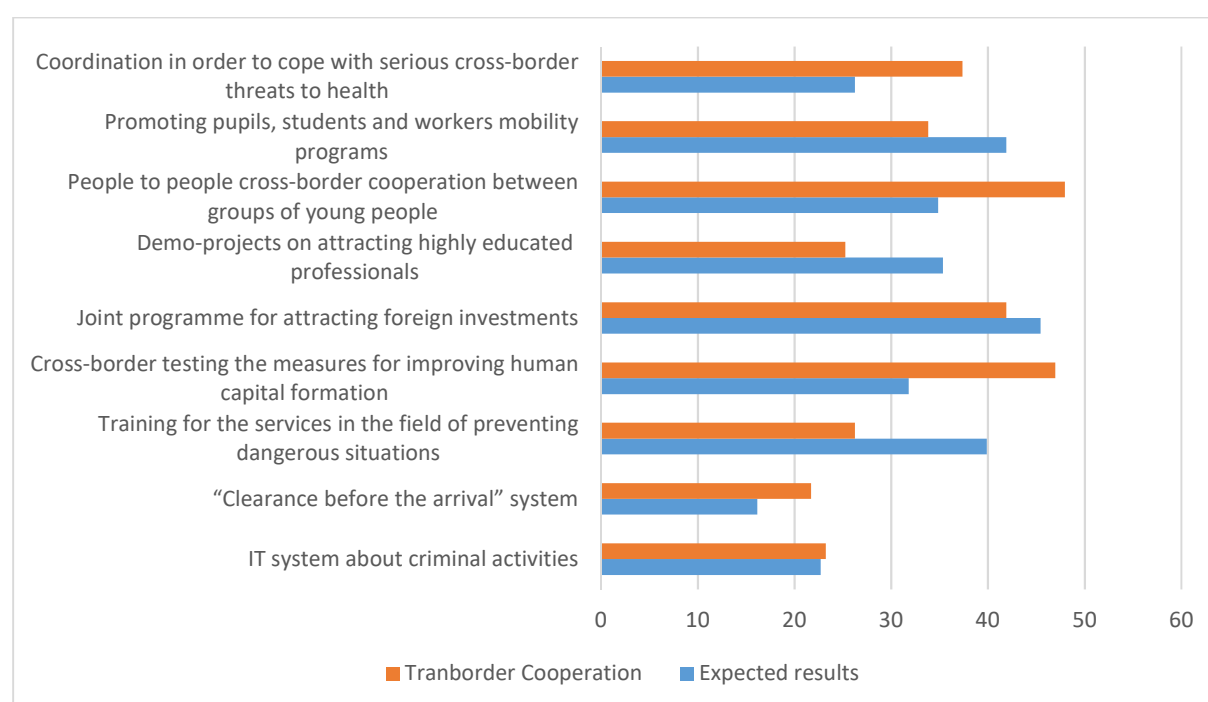
- the social sphere: youth cooperation and exchanges
- the economic sphere: human capital development and attracting inward investment.

With respect to programming macroregional development, the following initiatives were regarded as desirable **(Fig. 30)** :

- Building the capacity of local and regional governments in order for them to better identify and address developmental challenges in the Carpathian macroregion,
- Establishing permanent cooperation platforms for the stakeholders,
- Adapting the existing financial programmes, policies and strategies to the needs and specific nature of the Carpathian macroregion, particularly given the absence of a new transnational programme for the Carpathian macroregion.

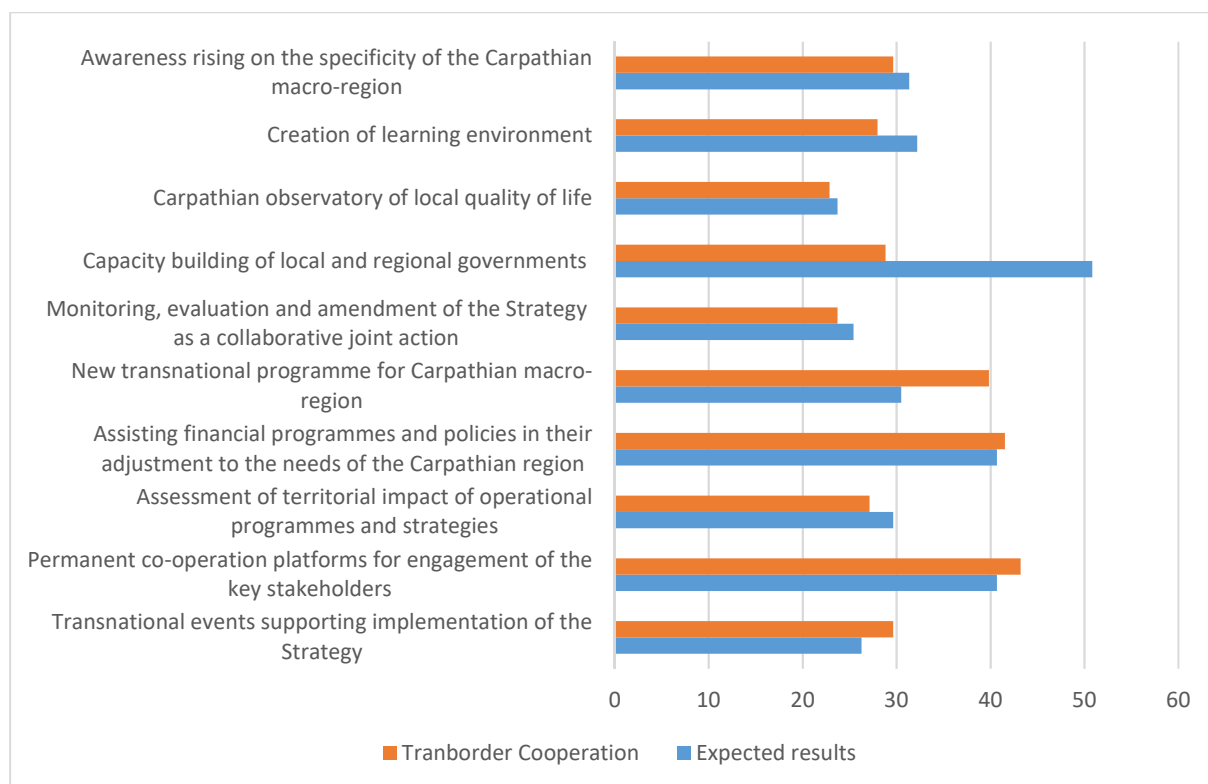
Other pertinent components of the Strategy could also include activities aimed to increase awareness of the public at large, decision makers and the mass media about the specific nature of the Carpathian macroregion.

**Fig. 29** Evaluation of tools to be used within cross-border and transnational cooperation action [% of indications]



Source: own elaboration based on the questionnaire survey results.

**Fig. 30** Evaluation of tools to be used within programming development action [% of indications]



*Source: own elaboration based on the questionnaire survey results.*

## PART 4. RANKING OF PROJECT TYPES AIMED TO FULFIL THE OBJECTIVES OF THE CARPATHIAN STRATEGY

### 4.1. Most relevant project types

This part of the Report identifies those project types as part of individual objectives which can be regarded as the most desirable in terms of their concordance with the external and internal determinants of the macroregion's growth on the one hand, and on the other those which most closely match the preferences of the macroregional development stakeholders. To this end, two baseline rankings were used: a) concordance, and b) preferences, which provided the foundation for a multi-criteria evaluation, which in turn helped produce a ranking of "relevance".

The **compliance ranking** (RC) of the analysed project types based on how closely they address the external and internal determinants was prepared in the following three stages:

- (1) three subindices of concordance with the determinants (Diagnosis, Green Deal and the EU Next Generation/EU digital objectives) were calculated, with each of them assuming a value from 0 to 100% depending on the degree to which it has matched the selected criteria,
- (2) the concordance index was obtained by averaging the values of the three subindices,
- (3) based on the latter index's value, a ranking of project types was prepared, showing how they comply with the determinants in the order from the highest to the lowest degree.

The ranking of projects in terms of **stakeholder preferences (RP)** was also compiled as a two-stage process. First, project types in individual thematic actions were ranked by how often they were listed by the stakeholders. This was done using the product of the answers concerning project types in terms of their expected outcomes multiplied by their potential for the development of transborder cooperation. Then, the number of stakeholders who assessed the significance of project types in individual actions was used to prepare the ranking based on the D'Hondt method (e.g. Flis et al. 2019)<sup>18</sup>. On this basis, the ranking of project types in the order from the most to the least preferred by the Carpathian macroregion stakeholders was compiled.

The multi-criteria evaluation of the significance of project types was conducted by amalgamating the results of the concordance and preference rankings. This process took into account both the sum of these two rankings and their product. The first favours those project types which were ranked high in one of the two rankings, whereas the second reduces the role of those project types which were ranked low in one of the rankings. In effect, two independent rankings were produced; when added up, their results produced the final rank of a given project type in the list of **most relevant projects (RR)**.

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<sup>18</sup> In this method, used in the majority rule voting system, the numbers corresponding to specific actions are divided by consecutive natural numbers, and the types of projects are ranked in the order of the actions with the highest quotient.

The ranking, produced as a result of such an analysis, with the use of the natural breaks method (**Jenks 1967**) helped identify proposals of 51 project types, out of a list of 72 thematic project types, which can be regarded as the most significant (crucial and important) (**Appendix 1**). Also, among them, a group of 10 project types can be indicated in this group which can be regarded as **critical** for the implementation of the Carpathian Strategy. A successive group, which can be termed as **complementary critical**, includes 14 project types. Since the types of projects intended for implementation as part of actions under Priority Area 1 *Competitive Carpathians* (4 project types) and Priority Area 2 *Green Carpathians* (5 project types) prevailed in the former group, a decision was made to add three project types to this group, which were ranked from 12<sup>th</sup> to 14<sup>th</sup><sup>19</sup> and were associated with actions under Priority Area 3 *Cohesive Carpathians*. As a result, the list of project types which seem to be particularly well suited for pilot activities, is the following (**Tab. 11**):

**Tab. 11** Types of projects particularly well suited for pilot activities in the Carpathian Strategy

Number	Name	Carpathian Brand	Green economy
<b>Objective 1</b>	<b>Competitive Carpathians</b>		
1.1.1.	Development of technologies to acquire energy from renewable sources		X
1.1.4.	Development of food processing clusters based on local products (e.g. cheese, wine, organic food)	X	
1.1.7	Transformation of existing industries into the circular economy industries		X
1.2.8.	Development of eco-tourism	X	X
<b>Objective 2</b>	<b>Green Carpathians</b>		
2.1.1.	Cross-border standards for nature conservation and heritage	X	
2.1.4.	New ecological corridors, including the Pan-European Carpathian Corridor	X	
2.1.6.	Promotion of water saving, water recycling		X
2.2.3.	Development of new green energy sources		X
2.3.2.	System for monitoring and assessing environmental risks		X

<sup>19</sup> The project type 2.2.4. *Supporting investment in circular economy* was ranked 11<sup>th</sup>; it is convergent with 1.1.7. *Transformation of existing industries into the circular economy industries*, which was included in the group of critical project types.

<b>Objective 3</b>	<b>Cohesive Carpathians</b>		
3.1.5.	Introduction of an integrated ticketing and information system	X	
3.1.2.	Cross-border public transport	X	
3.2.3.	Free access to the ICT technologies		
3.1.6.	Preference for clean transport modes	X	X

Source: own elaboration.

In the context of the preferences expressed by the stakeholders (Part 3.2), it can be said that the following types of projects have a strong potential to **build the Carpathian Brand**: (1) local products and eco-tourism, (2) environmental protection standards and building a pan-European ecological Carpathian corridor, and, potentially (3) an integrated system of ecological transborder public transport. In addition, many project types identified as the most desirable tally with the development of a **green economy**, ranging from (1) the development of renewable energy generation and diversification of energy sources, to (2) circular economy, particularly with regard to water resources protection, to (3) implementation of ecological solutions in such areas as tourism or public transport, and monitoring of environmental hazards. As regards the development of **digital economy**, special attention ought to be paid to projects enhancing access to technologies facilitating the digital transformation of the economy and of the public at large.

#### 4.2. Proposals of good practices

Unquestionably, a number of good practices can be found for the project types outlined above, associated with the actions undertaken in various programmes and strategies, including those pertaining to transborder cooperation. Such examples can also be found in transborder cooperation programmes being already implemented in the Carpathian macroregion; projects delivered as part of the Alpine Strategy can also be a source of inspiration in that regard. On the basis of the latter Strategy, analysed as part of this study, the following types of good practices can be proposed for the selected project types (**Tab. 12**):

**Tab. 12** Types of pilot projects and EUSALP good practices

No. of project type	Project type	Example of an EUSALP project/initiative
1.1.1.	Development of technologies to acquire energy from renewable sources	<b>Carbon Neutral Alpine Region</b> - Strategic Priority Policy Area 2020-2022  ( <a href="https://www.alpine-space.eu/projects/alpgov/alpgov2/deliverables/wpt3/carbon-neutral.pdf">https://www.alpine-space.eu/projects/alpgov/alpgov2/deliverables/wpt3/carbon-neutral.pdf</a> )

No. of project type	Project type	Example of an EUSALP project/initiative
1.1.4.	Development of food processing clusters based on local products (e.g. cheese, wine, organic food)	<b>Boosting the Alpine local agro-food traditional value chains with the "100% local!" approach</b> - Alpine Region Preparatory Action Fund (ARPAF)  ( <a href="https://www.alpine-region.eu/sites/default/files/uploads/event/2411/attachments/100_local_model_eventssummary.pdf">https://www.alpine-region.eu/sites/default/files/uploads/event/2411/attachments/100_local_model_eventssummary.pdf</a> )
1.1.7	Transformation of existing industries into the circular economy industries	<b>CirculAlps: Innovation to foster sustainability and circular economy in Alpine forestry value chain</b> - Alpine Region Preparatory Action Fund (ARPAF)  ( <a href="https://www.alpine-region.eu/projects/circulalps-innovation-foster-sustainability-and-circular-economy-alpine-forestry-value">https://www.alpine-region.eu/projects/circulalps-innovation-foster-sustainability-and-circular-economy-alpine-forestry-value</a> )
1.2.8.	Development of eco-tourism	<b>HEALPS 2: Healing Alps: Tourism based on natural health resources as strategic innovation for the development of Alpine regions</b> - Interreg Alpine Space 2014-2020  ( <a href="https://www.alpine-space.eu/projects/healps-2/en/about/the-project">https://www.alpine-space.eu/projects/healps-2/en/about/the-project</a> )
2.1.1.	Cross-border standards for nature conservation and heritage	<b>INNsieme: a cross-border cooperation for the River Inn</b> - Interreg-Programme Austria-Bavaria 2014-2020  ( <a href="https://www.innsieme.org/projektziele/uebergeordnete-projektziele/">https://www.innsieme.org/projektziele/uebergeordnete-projektziele/</a> )
2.1.4.	New ecological corridors, including the Pan-European Carpathian Corridor	<b>ALPBIONET2030: Integrative Alpine wildlife and habitat management for the next generation</b> - Interreg Alpine Space 2014-2020  ( <a href="https://www.alpine-space.eu/projects/alpbionet2030/en/project-results">https://www.alpine-space.eu/projects/alpbionet2030/en/project-results</a> )
2.2.3.	Development of new green energy sources	<b>Carbon Neutral Alpine Region</b> - Strategic Priority Policy Area 2020-2022  ( <a href="https://www.alpine-space.eu/projects/alpgov/alpgov2/deliverables/wpt3/carbon-neutral.pdf">https://www.alpine-space.eu/projects/alpgov/alpgov2/deliverables/wpt3/carbon-neutral.pdf</a> )
2.3.2.	System for monitoring and assessing	<b>GreenRisk4ALPs: Development of ecosystem-based risk governance concepts with respect to natural hazards and climate impacts – from ecosystem-based solutions to integrated risk assessment</b> - Interreg Alpine Space 2014-2020

No. of project type	Project type	Example of an EUSALP project/initiative
	environmental risks	<p>(<a href="https://www.alpine-space.eu/projects/greenrisk4alps/en/outputs/reports-downloads">https://www.alpine-space.eu/projects/greenrisk4alps/en/outputs/reports-downloads</a>)</p> <p><b>ADO: Alpine Drought Observatory</b> - Interreg Alpine Space 2014-2020</p> <p>(<a href="https://www.alpine-space.eu/projects/ado/en/project-results/deliverables-overview">https://www.alpine-space.eu/projects/ado/en/project-results/deliverables-overview</a>)</p>
3.1.5.	Introduction of an integrated ticketing and information system	<p><b>LinkingAlps: Innovative tools and strategies for linking mobility information services in a decarbonised Alpine Space</b> - Interreg Alpine Space 2014-2020</p> <p>(<a href="https://www.alpine-space.eu/projects/linkingalps/en/project-results">https://www.alpine-space.eu/projects/linkingalps/en/project-results</a>)</p>
3.1.2.	Cross-border public transport	<p><b>CrossBorder: Cross-border mobility in the Alpine Region</b> - Alpine Region Preparatory Action Fund (ARPAF)</p> <p>(<a href="https://www.alpine-region.eu/projects/arpaf-crossborder">https://www.alpine-region.eu/projects/arpaf-crossborder</a>)</p>
3.1.6.	Preference for clean transport modes	<p><b>MELINDA: Mobility Ecosystem for Low-carbon and INnovative moDal shift in the Alps</b> - Interreg Alpine Space 2014-2020</p> <p>(<a href="https://www.alpine-space.eu/projects/melinda/en/about">https://www.alpine-space.eu/projects/melinda/en/about</a>)</p>

Source: own elaboration based on collected information on EUSALP projects.

## PART 5. TERRITORIAL ORIENTATION OF ACTIONS AND PROJECT TYPES IN THE CARPATHIAN MACROREGION STRATEGY

Actions in the macroregional strategies are undertaken in a specific spatial context. Transborder cooperation is a particularly significant issue, especially when it goes beyond the border bilateral systems. Therefore, development of cooperation in tri-border areas (of which there are seven in the Carpathian macroregion) can produce special added value. At the same time, drawing on such areas, new partners from the remaining countries can potentially be included in the cooperation. Furthermore, cooperation in the tri-border areas does not necessarily have to involve only stakeholders from the neighbouring regions; such areas should rather serve as a platform for further development and expanding cooperation within the Carpathian macroregion, also at transnational and interregional level.

What also plays a role is the territorial orientation of the Carpathian Strategy actions associated with the natural and socio-economic and natural environmental characteristics of the territorial systems. In effect, public intervention at the macroregional level may help unlock some potentials or solve some specific problems which are territorial in nature and connected e.g. with mountain or rural areas. The significant role of those actions which can be implemented in all types of areas making up the Carpathian macroregion should also be borne in mind.

### 5.1. Potential for trilateral cooperation

On the basis of the stakeholders' interest in taking part in the questionnaire survey, it was assessed which trilateral arrangements offer the greatest potential for implementing joint transborder projects. Three indicators were used in the process. The first presented an aggregate number of answers given for a specific trilateral arrangement. The second indicator relativised these answers against the number of the population of the regions making up the Carpathian macroregion, while the third compared the interest expressed by the stakeholders from individual countries using the Herfindahl index. On the basis of these values, three rankings were compiled, the results of which, after summing up, produced the overall ranking of the potential for implementing pilot projects within the framework of the Carpathian transborder cooperation (**Tab. 13**).

In light of these results, three border areas can be identified which have the greatest potential for pilot activities involving at least three countries. The first is the Polish-Slovakian-Ukrainian border area, the second – Hungarian-Romanian-Ukrainian, and the third – Hungarian-Slovakian-Ukrainian. A lesser though still significant potential for implementing pilot initiatives can be diagnosed for the Czech-Polish-Slovakian, Hungarian-Romanian-Serbian and Czech-Hungarian-Slovakian border areas. It should be stressed, however, that these findings do not necessarily indicate the actual range of interest in multilateral cooperation given an appropriate institutional and financial framework, but only identify those transborder regions where potential pilot activities stand the best chance of success in the present circumstances.



**Tab. 13** Potential for transborder cooperation in trilateral arrangements

Transborder area	Number of questionnaires	Questionnaires per 10 000 inhabitants	Herfindahl Index*	Total ranking
CZ-PL-SK	117	48,1	0,46	5
CZ-HU-SK	74	37,1	0,42	7
PL-SK-UA	168	67,9	0,35	1
HU-SK-UA	125	61,4	0,37	3
HU-RO-UA	184	53,6	0,41	2
HU-RO-SRB	126	37,8	0,66	6
MO-RO-UA	162	55,9	0,51	4

\* the higher the value, the greater the imbalance in the interest in cooperation.

Source: own elaboration based on the questionnaire survey results.

## 5.2. Territorial orientation of the projects

The macroregion's specific geographical characteristics are associated e.g. with the settlement network (large, medium-sized and small cities as well as rural areas), topography (mountainous areas), forms of nature protection and conservation, as well as location vis-à-vis the state borders. In the total set of the analysed project types (72), slightly over one-third did not have any territorial orientation, and those with a territorial orientation were mostly border areas (about 20%). The types of projects oriented towards specific elements of the settlement network were similarly represented, although with a slight predominance of rural areas over a) large cities, and b) medium-sized and small cities (viewed separately). On the other hand, the number of project types addressed to mountainous areas or protected areas was relatively small, about 10% in each case (**Tab. 14**).

When the project types were reduced to the most important ones (51), the number of projects which were not territorially oriented relatively increased. Among those projects for which such an orientation could be observed, those oriented to rural areas were more visible than those oriented to large cities. The role of projects dedicated to border and mountainous areas also relatively decreased, whereas the role of rural areas and of small and medium-sized cities as intervention areas visibly increased. On the other hand, reducing the list of projects to those which could potentially be objects of pilot activities increases the territorial orientation of actions, especially those targeted at rural areas, medium-sized and small cities, as well as border and protected areas.

**Tab. 14** Territorial orientation of types of projects in the Carpathian Strategy

	Lack of territorial orientation	Mountain areas	Protected areas	Transborder areas	Large cities	Small and medium cities	Rural areas
Types of projects - total (N=72)	26	9	7	16	13	13	15
%	36	13	10	22	18	18	21
Types of projects - selected (N=51)	22	5	5	9	8	10	12
%	43	10	10	18	16	20	24
Types of projects – pilot actions (N=13)	5	1	3	4	1	4	5
%	38	8	23	31	8	31	38

Source: own elaboration.

## CONCLUSIONS AND RECOMMENDATIONS

The multi-criteria analyses conducted as part of the study identified those types of projects in the Carpathian Strategy the implementation of which best corresponds to the present determinants of the macroregion's development and the preferences of the macroregional stakeholders. As a result, the initial list of 72 types of thematic projects (composed of undertakings proposed in the draft strategy and expert proposals developed on the basis of the review of strategic documents) was verified and limited to 51 types in 10 actions. Of these, 13 project types were identified which have the greatest potential for implementation and which will also help fulfil the three overarching objectives of the Carpathian Strategy.

**Tab. 15** Project types best suited for pilot activities in the Carpathian Strategy

Number	Name	Ranking of compliance with preconditions*	Ranking of stakeholders preferences	Ranking of implementation relevance
<b>Objective 1</b>	<b>Competitive Carpathians</b>			
1.1.1.	Development of technologies to acquire energy from renewable sources	1	7	1
1.1.4.	Development of food processing clusters based on local products (e.g. cheese, wine, organic food)	26	2	5
1.1.7	Transformation of existing industries into the circular economy industries	6	14	6
1.2.8.	Development of eco-tourism	20	1	4
<b>Objective 2</b>	<b>Green Carpathians</b>			
2.1.1.	Cross-border standards for nature conservation and heritage	26	3	8
2.1.4.	New ecological corridors, including the Pan-European Carpathian Corridor	14	15	10
2.1.6.	Promotion of water saving, water recycling	5	8	2
2.2.3.	Development of new green energy sources	6	12	3
2.3.2.	System for monitoring and assessing environmental risks	11	9	7

<b>Objective 3</b>	<b>Cohesive Carpathians</b>			
3.1.5.	Introduction of an integrated ticketing and information system	20	11	12
3.1.2.	Cross-border public transport	4	26	9
3.2.3.	Free access to the ICT technologies	6	36	14
3.1.6.	Preference for clean transport modes	14	17	13

\* ex aequo if the same score.

Source: own elaboration.

In a cross-sectional approach, the types of projects stipulated for pilot implementation can facilitate the creation of the **Carpathian Brand** based on the following three pillars: (1) local products and eco-tourism, (2) quality of the natural environment, and, potentially, (3) integrated ecological transborder public transport system. Also, these types of initiatives will foster the development of a **green economy**, one of the major pillars of the European Union policies. It should also be underlined that the stakeholders considered Objective 2 "Green Carpathians" to be the most important among the main objectives of the strategy, which is to improve the quality of the natural environment.

The evaluation of the concordance of the project types with the European Green Deal and the EU Next Generation/EU digital objectives, which was aimed to identify the projects most convergent with them, should facilitate the mobilising of EU funds for the financing of such ventures in the Carpathian macroregion. In turn, the carried out ranking of importance of particular types of projects will be favourable to implementation of those projects, which to the greatest extent may serve the use of development potentials connected among others with natural and cultural values of the macroregion, as well as overcoming development barriers concerning inter alia underdevelopment of technical infrastructure, as well as not very modern economic structure.

A review of actions and projects implemented as part of the **Alpine Strategy** identified some examples of good practices related to pilot project types recommended for implementation under the Carpathian Strategy on the one hand, and on the other hand showed the popularity of projects convergent with 10 thematic actions of the Carpathian Strategy. In comparison with the preferences of the Carpathian macroregion, the Alpine Strategy revealed a higher number of projects/funds allocated to the creation of an innovation system, development of e-services and diversification of energy sources. In contrast, a relatively smaller number of projects – in comparison to the preferences of the Carpathian stakeholders – were pursued in the sphere of tourism, system for prevention against natural hazards and crisis management, and environmental protection. These differences can be explained by differences in the advancement of development processes relating to the socio-economic sphere and institutional cooperation in both macroregions. In particular, the funds in the Alpine macroregion could to a larger extent be earmarked for the financing of innovative actions aimed to fulfil the needs associated with e.g. development of tourism infrastructure, as well as natural environment protection and management.

It is worth emphasising that in the light of the analyses carried out, all of the proposed measures of the Carpathian Strategy have significant implementation potential. Therefore, there is no need to resign from or modify the measures proposed in the draft Carpathian Strategy. However, it is important to select appropriate projects for their implementation, especially taking into account the degree of innovation of the projects envisaged for implementation. At the same time, the implementation of these activities should involve the territorially wide cross-border cooperation networks. On the basis of the experience of the Alpine Strategy, there should be no obstacles to greater involvement of beneficiaries from one country in the management of implemented projects.

The survey revealed a varied potential for implementing pilot projects in a **territorial approach**. In particular, the greatest potential was diagnosed in tripartite structures including Ukraine, Hungary, Slovakia, Poland and Romania, which also represent the geographical centre of the Carpathian macroregion. Moreover, initially the pilot activities would be more oriented to the fulfilment of rural, border and protected areas, in addition to the development of small and medium-sized cities. It should also be noted that large cities and mountainous areas are not overlooked, as they can also choose from among the largest group of such types of projects which have no clear territorial orientation.

As regards the **tools for coordination, cooperation and programming** the development of the Carpathian macroregion, the following were listed by the stakeholders as those of primary importance: a) in spatial planning: macroregional spatial development strategy; b) in cross-border and transnational cooperation: youth cooperation and exchanges, and c) in programming: building the capacity of local and regional governments needed for the bottom-up execution of joint projects and programmes.

## LITERATURE AND DOCUMENTS

### Literature

Dołzbłasz S., Raczyk A. (2010) *Współpraca transgraniczna w Polsce po akcesji do Unii Europejskiej*, Warszawa: Wolters Kluwer Polska.

Flis J., Słomczyński W., Stolicki D., 2019, Kociołek i chochelka: formuła szacowania rozkładu mandatów metodą Jeffersona-D'Hondta, *Decyzje* 32.

Gorzelak G., Krok K. (eds.) (2006) *Nowe granice Unii Europejskie – współpraca czy wykluczenie*, Warszawa: Wydawnictwo Naukowe Scholar.

Gorzelak G., Zawalińska K. (eds.) (2013) *European Territories: From Cooperation to Integration?* Warszawa: Wydawnictwo Naukowe Scholar.

Jabłońska K., Sobieraj A. (2013) Metodyka dobierania próby badawczej w naukach społecznych, *BITP*. Vol. 32(4), p. 31-36.

Jenks G. F. (1967), The Data Model Concept in Statistical Mapping, *International Yearbook of Cartography* No 7, p. 186-190.

Medeiros E. (red.) (2018) *European Territorial Cooperation. Theoretical and Empirical Approaches to the Process and Impacts of Cross-Border and Transnational Cooperation in Europe*, Springer.

Smętkowski M. (2013) *Rozwój regionów i polityka regionalna w krajach Europy Środkowo-Wschodniej w okresie transformacji i globalizacji*, Warszawa: Wydawnictwo Naukowe Scholar.

Sielker F., Rauhut D. (2018) The Rise of Macro-Regions in Europe, in: Medeiros E. (eds.) (2018) *European Territorial Cooperation. Theoretical and Empirical Approaches to the Process and Impacts of Cross-Border and Transnational Cooperation in Europe*, Springer, p. 153-169.

Stead D., Sielker F., Chilla T. (2016) Macro-regional Strategies: Agents of Europeanization and Rescaling?, in: Gänzle S., Kern K. (eds.) *A 'Macro-regional' Europe in the Making*, Palgrave Studies in European Union Politics. Palgrave Macmillan, London, p. 99-120.

### Documents

ARPAF Managing Body (2019) *ARPAF projects. Cooperation for the Alps of the Future! Alpine Region Preparatory Action Fund – ARPAF*. <https://www.alpine-region.eu/publications/alpine-region-preparatory-action-fund-arpaf>

Council conclusions on the implementation of EU macro-regional strategies, 3 December 2020. <https://data.consilium.europa.eu/doc/document/ST-13424-2020-INIT/en/pdf>

COWI et al (2017a) *Study on macro-regional strategies and their links with cohesion policy. Data and analytical report for the EUSALP*, European Commission. [https://ec.europa.eu/regional\\_policy/sources/cooperate/alpine/eusalp\\_links\\_cohesion\\_policy.pdf](https://ec.europa.eu/regional_policy/sources/cooperate/alpine/eusalp_links_cohesion_policy.pdf)

COWI et al (2017b) *Study on macro-regional strategies and their links with cohesion policy. Final report*, European Commission. [https://ec.europa.eu/regional\\_policy/en/information/publications/studies/2017/macro-regional-strategies-and-their-links-with-cohesion-policy](https://ec.europa.eu/regional_policy/en/information/publications/studies/2017/macro-regional-strategies-and-their-links-with-cohesion-policy)

European Commission (2013) *Report from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions concerning the added value of macro-regional strategies* (COM/2013/0468 final). <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52013DC0468>

European Commission (2014) *Report from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions concerning the*

*governance of macro-regional strategies* (COM/2014/284 final). <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:52014DC0284>

European Commission (2015a) *Commission Staff Working Document: Action Plan Accompanying the Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions concerning the European Union Strategy for the Alpine Region* (SWD/2015/147 final). [https://ec.europa.eu/regional\\_policy/sources/cooperate/alpine/eusalp\\_action\\_plan.pdf](https://ec.europa.eu/regional_policy/sources/cooperate/alpine/eusalp_action_plan.pdf)

European Commission (2015b) *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions concerning a European Union Strategy for the Alpine Region* (COM/2015/366 final). [https://ec.europa.eu/regional\\_policy/sources/cooperate/alpine/eusalp\\_communication\\_en.pdf](https://ec.europa.eu/regional_policy/sources/cooperate/alpine/eusalp_communication_en.pdf)

European Commission (2016a) *Commission Staff Working Document Accompanying the document Report from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on the implementation of EU macro-regional strategies* (SWD/2016/0443 final). <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52016SC0443>

European Commission (2016b) *Komunikat Komisji do Parlamentu Europejskiego, Rady, Europejskiego Komitetu Ekonomiczno-Społecznego, Komitetu Regionów oraz Europejskiego Banku Inwestycyjnego: Czysta energia dla wszystkich Europejczyków* (COM/2016/0860 final/2). <https://eur-lex.europa.eu/legal-content/PL/TXT/?uri=CELEX%3A52016DC0860%2801%29>

European Commission (2016c) *Sprawozdanie Komisji dla Parlamentu Europejskiego, Rady, Europejskiego Komitetu Ekonomiczno-Społecznego i Komitetu Regionów z realizacji strategii makroregionalnych UE* (COM/2016/805 final). <https://eur-lex.europa.eu/legal-content/PL/TXT/PDF/?uri=CELEX:52016DC0805&from=EN>

European Commission (2019a) *Commission Staff Working Document Accompanying the document Report from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on the implementation of EU macro-regional strategies* (SWD/2019/6 final). <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52019SC0006&from=EN>

European Commission (2019b) *Komunikat Komisji do Parlamentu Europejskiego, Rady, Europejskiego Komitetu Ekonomiczno-Społecznego i Komitetu Regionów: Europejski Zielony Ład* (COM/2019/640 final), wraz z załącznikiem (COM/2019/640 final ANNEX). <https://eur-lex.europa.eu/legal-content/pl/TXT/?uri=CELEX%3A52019DC0640>

European Commission (2019c) *Sprawozdanie Komisji dla Parlamentu Europejskiego, Rady, Europejskiego Komitetu Ekonomiczno-Społecznego i Komitetu Regionów z realizacji strategii makroregionalnych UE* (COM/2019/21 final). [https://ec.europa.eu/regional\\_policy/sources/cooperate/macro\\_region\\_strategy/pdf/2\\_implementation\\_pl.pdf](https://ec.europa.eu/regional_policy/sources/cooperate/macro_region_strategy/pdf/2_implementation_pl.pdf)

European Commission (2020a) *Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions: Europe's moment: Repair and Prepare for the Next Generation* (COM/2020/456 final). <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020DC0456&from=EN>

European Commission (2020b) *Digital Economy and Society Index (DESI) 2020. Thematic chapters*. <https://digital-strategy.ec.europa.eu/en/policies/desi>

European Commission (2020c) *Draft General Budget of the European Union for the Financial Year 2021. Working Document Part IV: Pilot Projects and Preparatory Actions* (COM(2020) 300). [https://ec.europa.eu/info/sites/default/files/about\\_the\\_european\\_commission/eu\\_budget/db2021\\_wd4\\_pppa.pdf](https://ec.europa.eu/info/sites/default/files/about_the_european_commission/eu_budget/db2021_wd4_pppa.pdf)

European Commission (2020d) *Komunikat Komisji do Parlamentu Europejskiego, Rady, Europejskiego Komitetu Ekonomiczno-Społecznego i Komitetu Regionów: Nowy plan działania UE dotyczący gospodarki o obiegu zamkniętym na rzecz czystszej i bardziej konkurencyjnej Europy* (COM/2020/98 final). <https://eur-lex.europa.eu/legal-content/PL/TXT/?uri=COM:2020:98:FIN>

European Commission (2020e) *Komunikat Komisji do Parlamentu Europejskiego, Rady, Europejskiego Komitetu Ekonomiczno-Społecznego i Komitetu Regionów: Plan inwestycyjny na rzecz zrównoważonej Europy. Plan inwestycyjny na rzecz Europejskiego Zielonego Ładu* (COM/2020/21 final). <https://eur-lex.europa.eu/legal-content/PL/TXT/PDF/?uri=CELEX:52020DC0021&from=EN>

European Commission (2020f) *Shaping Europe's Digital Future*. [https://ec.europa.eu/info/sites/default/files/communication-shaping-europes-digital-future-feb2020\\_en\\_4.pdf](https://ec.europa.eu/info/sites/default/files/communication-shaping-europes-digital-future-feb2020_en_4.pdf)

European Commission (2020g) *Sprawozdanie Komisji dla Parlamentu Europejskiego, Rady, Europejskiego Komitetu Ekonomiczno-Społecznego i Komitetu Regionów z realizacji strategii makroregionalnych UE* (COM/2020/578 final). <https://eur-lex.europa.eu/legal-content/PL/TXT/HTML/?uri=CELEX:52020DC0578&from=EN>

European Commission (2020h) *Commission Staff Working Document Accompanying the document Report from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on the implementation of EU macro-regional strategies* (SWD/2020/186 final). <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52020SC0186>

European Commission (2021) *2030 Digital Compass. The European Way for the Digital Decade*. <https://digital-strategy.ec.europa.eu/en/policies/digital-compass>

European Council Conclusions, 17-21 July 2020. <https://www.consilium.europa.eu/media/45109/210720-euco-final-conclusions-en.pdf>

EUSALP (2017a) *Joint declaration on the EU Strategy for the Alpine Region*. [https://www.alpine-region.eu/sites/default/files/uploads/news/478/attachments/17\\_02\\_13\\_joint\\_declaration\\_rottache-germ\\_en.pdf](https://www.alpine-region.eu/sites/default/files/uploads/news/478/attachments/17_02_13_joint_declaration_rottache-germ_en.pdf)

EUSALP (2017b) *"State of the art" of funding instruments at EU level*. <https://www.alpine-region.eu/p/strategic-funding/reports>

EUSALP (2018a) *Joint declaration on the EU Strategy for the Alpine Region wraz z Annex: Evolving list of political priorities for the implementation of Objectives 1-3 of the EU Strategy for the Alpine Region*. [https://www.alpine-region.eu/sites/default/files/uploads/page/24/attachments/joint\\_declaration\\_innsbruck\\_20\\_november\\_2018\\_4.pdf](https://www.alpine-region.eu/sites/default/files/uploads/page/24/attachments/joint_declaration_innsbruck_20_november_2018_4.pdf)

EUSALP (2018b) *"State of the art" of funding instruments at National level*. <https://www.alpine-region.eu/p/strategic-funding/reports>

EUSALP (2018c) *"State of the art" of funding instruments at regional level*. <https://www.alpine-region.eu/p/strategic-funding/reports>

EUSALP (2019a) *Joint Declaration, wraz z ANNEX to the 2019 Eusalp Joint Declaration*. <https://www.alpine-region.eu/news/eusalp-3rd-annual-forum-2019-joint-declaration-and-annex-published>



EUSALP (2019b) *Study on Available Funding Opportunities for Bioeconomy in the Alpine Region*. [https://www.alpine-region.eu/sites/default/files/uploads/result/2240/attachments/final\\_available\\_funding\\_bioeconomy\\_final\\_report\\_anteja\\_ecg\\_.pdf](https://www.alpine-region.eu/sites/default/files/uploads/result/2240/attachments/final_available_funding_bioeconomy_final_report_anteja_ecg_.pdf)

EUSALP (2020a) *An Alpine Macro Regional Strategy at the heart of the future EU funding programmes. Concrete recommendations to managing authorities and EUSALP representatives*. <https://www.alpine-region.eu/news/eusalp-heart-future-eu-funding-programmes>.

EUSALP (2020b) *List of Projects labelled by the EUSALP AG4 Assessment Methodology in 2020*. <https://www.alpine-region.eu/news/labelling-14-projects-macroregional-added-value-fostering-sustainable-mobility-solutions>

EUSALP (2020c) *Manifesto of the States and Regions involved in the European Union Strategy for the Alpine Region "Together to shape a sustainable and resilient Alpine region"*. <https://www.alpine-region.eu/news/eusalp-manifesto>

EUSALP (2021a) *Policy Brief*. <https://www.alpine-region.eu/policybrief2021>

EUSALP (2021b) *Rules of Procedure for the Action Groups of the EU Strategy for the Alpine Region*. [https://www.alpine-region.eu/sites/default/files/uploads/page/24/attachments/21-01-12\\_action\\_group\\_rops.pdf](https://www.alpine-region.eu/sites/default/files/uploads/page/24/attachments/21-01-12_action_group_rops.pdf).

Interreg Alpine Space programme (2018) *Alpine cooperation stories. Alpine Space programme and the EU strategy for the Alpine region – EUSALP*. [https://www.alpine-space.eu/about/cooperation\\_stories\\_web.pdf](https://www.alpine-space.eu/about/cooperation_stories_web.pdf)

Proposal for a Regulation of the European Parliament and of the Council establishing the Just Transition Fund (COM/2020/22 final). <https://eur-lex.europa.eu/legal-content/PL/TXT/?uri=CELEX:52020PC0022>

Regulation (EU) 2021/241 of the European Parliament and of the Council of 12 February 2021 establishing the Recovery and Resilience Facility. <https://eur-lex.europa.eu/legal-content/PL/TXT/?uri=CELEX%3A32021R0241>

Schuh B. et al (2015) *New role of macro-regions in European Territorial Cooperation. ANNEX*, European Parliament.

[https://www.europarl.europa.eu/RegData/etudes/STUD/2015/540349/IPOL\\_STU%282015%29540349%28ANN01%29\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2015/540349/IPOL_STU%282015%29540349%28ANN01%29_EN.pdf)

*Territorial Agenda 2030. A future for all places. Informal meeting of Ministers responsible for Spatial Planning and Territorial Development and/or Territorial Cohesion* (2020). [https://www.territorialagenda.eu/files/agenda\\_theme/agenda\\_data/Territorial%20Agenda%20documents/TerritorialAgenda2030\\_201201.pdf](https://www.territorialagenda.eu/files/agenda_theme/agenda_data/Territorial%20Agenda%20documents/TerritorialAgenda2030_201201.pdf)

t33, Spatial Foresight (2020) *Programme Impact Assessment: Interreg Alpine Space programme 2014-2020*. [https://www.alpine-space.eu/about/programme-documents/impact-evaluation\\_phase-1\\_final-report-approved-w26-.pdf](https://www.alpine-space.eu/about/programme-documents/impact-evaluation_phase-1_final-report-approved-w26-.pdf)

von der Leyen U., *A Union that strives for more. My agenda for Europe: political guidelines for the next European Commission (2019–2024)*. [https://ec.europa.eu/info/sites/default/files/political-guidelines-next-commission\\_pl.pdf](https://ec.europa.eu/info/sites/default/files/political-guidelines-next-commission_pl.pdf)

Work Plans and other documents of the EUSALP Action Groups.

## Websites

EUSALP and keep.eu websites

Individual project websites

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## APPENDICES

### Appendix 1 Detailed results of the evaluation of thematic project types

Action	Number	Type of projects	Ranking of compliance *	Ranking of preferences *	Ranking of relevance	Project groups 1 – key 2 – key 3 – important 4 – important 5-auxiliary	Pilot actions
1.1. DEVELOPMENT OF THE CLEAN, GREEN INDUSTRIES	1.1.1.	Development of technologies to acquire energy from renewable sources	1	7	1	1	YES
	1.1.2.	Development of technology and industry parks	62	32	53	5	
	1.1.3.	Development of bio-science industries based on Carpathian bio-endowment (e.g. pharmaceutical industry)	54	20	37	3	
	1.1.4.	Development of food processing clusters based on local products (e.g. cheese, wine, organic food)	26	2	5	1	YES
	1.1.5.	Carpathian cluster of wood processing – cooperation of the organisations from the industry, construction and industrial design sectors	59	25	42	4	
	1.1.6.	Elaboration of Carpathian reindustrialisation strategy	50	37	48	4	
	1.1.7	Transformation of existing industries into the circular economy industries	6	14	6	1	YES
1.2. SUSTAINABLE DEVELOPMENT OF TOURISM	1.2.1.	Networking and cooperation system of economic entities operating in the sector of services and tourism - Carpathian Guest Card	66	18	41	4	
	1.2.2.	Long-distance Carpathian Trail	66	13	35	3	
	1.2.3.	Carpathian wooden architecture trail	65	45	67	5	

Action	Number	Type of projects	Ranking of compliance *	Ranking of preferences *	Ranking of relevance	Project groups 1 – key 2 – key complementary 3 – important 4 – important complementary 5-auxiliary	Pilot actions
	1.2.4.	Carpathian cross border agrotourism cluster	66	30	54	5	
	1.2.5.	Clustering and promoting healing mineral water resources and spas in Carpathian region	51	23	38	3	
	1.2.6.	Organisation of the transborder public transport to support tourism activities	35	34	36	3	
	1.2.7.	Integration of the ski stations in neighbouring countries	66	41	63	5	
	1.2.8.	Development of eco-tourism	20	1	4	1	YES
	1.2.9	Transformation of post-industrial sites into tourist attractions	59	63	71	5	
	1.2.10	Creation of common Carpathian brand system promoting Carpathians as a global sustainable tourism destination	54	6	24	2	
1.3. INCREASING THE COMPETITIVENESS OF THE AGRO-FOOD SECTOR	1.3.1.	Supporting creation of new agro-food sector clusters and producer groups	45	5	18	2	
	1.3.2.	Development of cooperation between R&D units and agro-food sector	28	47	40	4	
	1.3.3.	Supporting high quality ecological food production	30	29	25	3	
	1.3.4.	Building Carpathian food brands and promoting them at international fora	54	16	31	3	
	1.3.5.	Maintenance of traditional sheep grazing in the hills and support of pastoral tradition	52	51	59	5	

Action	Number	Type of projects	Ranking of compliance *	Ranking of preferences *	Ranking of relevance	Project groups 1 – key 2 – key complementary 3 – important 4 – important complementary 5-auxiliary	Pilot actions
	1.3.6.	Joint position of the Carpathian countries concerning regulations on development of the rural areas in the mountainous regions	46	39	47	4	
1.4. DEVELOPMENT OF MACROREGIONAL INNOVATION ECOSYSTEM	1.4.1.	Supporting innovative development at local and regional levels based on cooperation between business and scientific centres	62	24	44	4	
	1.4.2.	Supporting development of start-ups and laboratories	58	60	69	5	
	1.4.3.	Supporting the development of an innovative environment in the Carpathian macro-region	36	10	21	2	
	1.4.4.	Development of innovative tourist services	46	38	43	4	
	1.4.5.	Development of ICT products connected with the Carpathian industry specialisation	34	65	56	5	
	1.4.6.	Strategy and monitoring of Social Economy Development	59	64	72	5	
	1.4.7	Dissemination of traditional knowledge on preservation of landscape and other natural values of the Carpathian macro-region	48	57	61	5	
	1.4.8	Smart urban development	37	48	46	4	
	1.4.9.	Cooperation between scientific institutions from the Carpathian Area (and from the outside)	43	54	57	5	
2.1. PROTECTION AND SUSTAINABLE MANAGEMENT OF	2.1.1.	Cross-border standards for nature conservation and heritage	26	3	8	1	YES
	2.1.2.	Conferences and training to promote the region's nature	49	42	52	5	

Action	Number	Type of projects	Ranking of compliance *	Ranking of preferences *	Ranking of relevance	Project groups 1 – key 2 – key complementary 3 – important 4 – important complementary 5-auxiliary	Pilot actions
NATURAL RESOURCES	2.1.3.	New hiking, cycling and skiing trails	66	27	49	4	
	2.1.4.	New ecological corridors, including the Pan-European Carpathian Corridor	14	15	10	1	YES
	2.1.5.	Cooperation on the protection of animal species, especially large carnivores	29	33	29	3	
	2.1.6.	Promotion of water saving, water recycling	5	8	2	1	YES
	2.1.7.	Education and proposals for common water management	14	21	17	2	
2.2. DIVERSIFICATION OF ENERGY SOURCES	2.2.1.	Development of cross-border transmission systems and storage facilities for gas and oil	62	59	70	5	
	2.2.2.	Development of cross-border electricity systems	52	56	65	5	
	2.2.3.	Development of new green energy sources	6	12	3	1	YES
	2.2.4.	Supporting investment in circular economy	6	28	11	2	
	2.2.5.	Exchange of good practice on energy saving in the public sector	20	49	33	3	
	2.2.6.	Joint programme for energy management	19	44	26	3	
2.3. MANAGEMENT OF ENVIRONMENTAL RISK AND NATURAL THREATS	2.3.1.	Virtual Observatory and Climate Change Adaptation Strategy	3	55	16	2	
	2.3.2.	System for monitoring and assessing environmental risks	11	9	7	1	YES
	2.3.3.	Emergency services training	66	50	68	5	
	2.3.4.	Cross-border prevention and emergency plans	66	35	58	5	
	2.3.5.	Cross-border civic, economic and scientific networks educating on climate issues	20	46	30	3	

Action	Number	Type of projects	Ranking of compliance *	Ranking of preferences *	Ranking of relevance	Project groups 1 – key 2 – key complementary 3 – important 4 – important complementary 5-auxiliary	Pilot actions
	2.3.6.	Cooperation in information campaigns and mapping of environmental risks	12	22	15	2	
3.1. INCREASING TRANSPORT ACCESSIBILITY OF THE CARPATHIAN REGION AND WITHIN THE REGION	3.1.1.	Plan for new TEN-T transport infrastructure development	20	19	20	2	
	3.1.2.	Cross-border public transport	20	11	12	2	YES
	3.1.3.	Demand responsive bus transport	12	43	22	2	
	3.1.4.	Improved road and rail accessibility of tourist attractions	54	4	19	2	
	3.1.5.	Introduction of an integrated ticketing and information system	4	26	9	1	YES
	3.1.6.	Preference for clean transport modes	6	36	14	2	YES
3.2. INCREASING THE DIGITAL ACCESSIBILITY	3.2.1.	System of vouchers for the broadband Internet access in the most distant areas	37	70	60	5	
	3.2.2.	Map of the Internet access indicating “white spots”	43	66	66	5	
	3.2.3.	Free access to the ICT technologies	14	17	13	2	YES
	3.2.4.	Enhancement of creation of a Carpathian system of public-internet hot spots	14	52	27	3	
	3.2.5.	Digital literacy programmes	14	62	34	3	
	3.2.6.	Enhancement of translation of the content of key web-sites into the Carpathian languages.	37	58	55	5	
	3.2.7.	Creating incentives for developing public-private partnerships in the area of connectivity infrastructure in the mountain regions	2	68	23	2	

Action	Number	Type of projects	Ranking of compliance *	Ranking of preferences *	Ranking of relevance	Project groups 1 – key 2 – key complementary 3 – important 4 – important complementary 5-auxiliary	Pilot actions
	3.2.8.	Facilitating the digitalization of small and medium-sized enterprises	30	40	39	3	
3.3. DEVELOPING E-SERVICES SYSTEM	3.3.1.	Introduction of e-services in administration	10	67	32	3	
	3.3.2.	Establishing electronic platforms and cooperation networks, developing ICT tools like interactive customer support system	30	61	51	4	
	3.3.3.	Common platform for electronic public administration services	20	69	45	4	
	3.3.4.	Digitalizing culture and knowledge resources	37	53	50	4	
	3.3.5.	Advertising campaign to encourage people to use advanced digital technologies	37	71	62	5	
	3.3.6.	Establishing safe database systems and safe channels for the exchange of information on-line	37	72	64	5	
	3.3.7.	Elaborating and implementing Carpathian Smart Village approach (digitalization of rural communities)	30	31	28	3	

\* ex aequo if the same score

Source: own elaboration based on the survey results.



## Appendix 2 Territorial orientation of types of projects within Carpathian Strategy

Action	Number	Type of projects	Areas particularly suitable for the implementation of a given type of projects:					
			Mountain areas	Protected areas	Cross-border areas	Large cities	Medium and small cities	Rural areas
1.1. DEVELOPMENT OF THE CLEAN, GREEN INDUSTRIES	1.1.1.	Development of technologies to acquire energy from renewable sources						
	1.1.2.	Development of technology and industry parks				x	x	
	1.1.3.	Development of bio-science industries based on Carpathian bio-endowment (e.g. pharmaceutical industry)				x		
	1.1.4.	Development of food processing clusters based on local products (e.g. cheese, wine, organic food)	x		x			x
	1.1.5.	Carpathian cluster of wood processing – cooperation of the organisations from the industry, construction and industrial design sectors			x			
	1.1.6.	Elaboration of Carpathian reindustrialisation strategy						
	1.1.7.	Transformation of existing industries into the circular economy industries						
1.2. SUSTAINABLE DEVELOPMENT OF TOURISM	1.2.1.	Networking and cooperation system of economic entities operating in the sector of services and tourism - Carpathian Guest Card						
	1.2.2.	Long-distance Carpathian Trail	x					
	1.2.3.	Carpathian wooden architecture trail						x
	1.2.4.	Carpathian cross border agrotourism cluster			x			x
	1.2.5.	Clustering and promoting healing mineral water resources and spas in Carpathian region						
	1.2.6.	Organisation of the transborder public transport to support tourism activities			x			
	1.2.7.	Integration of the ski stations in neighbouring countries	x		x			

Action	Number	Type of projects	Areas particularly suitable for the implementation of a given type of projects:					
			Mountain areas	Protected areas	Cross-border areas	Large cities	Medium and small cities	Rural areas
	1.2.8.	Development of eco-tourism		x				x
	1.2.9	Transformation of post-industrial sites into tourist attractions				x	x	
	1.2.10	Creation of common Carpathian brand system promoting Carpathians as a global sustainable tourism destination						
1.3. INCREASING THE COMPETITIVENESS OF THE AGRO-FOOD SECTOR	1.3.1.	Supporting creation of new agro-food sector clusters and producer groups						
	1.3.2.	Development of cooperation between R&D units and agro-food sector				x		
	1.3.3.	Supporting high quality ecological food production						x
	1.3.4.	Building Carpathian food brands and promoting them at international fora						
	1.3.5.	Maintenance of traditional sheep grazing in the hills and support of pastoral tradition	x					
	1.3.6.	Joint position of the Carpathian countries concerning regulations on development of the rural areas in the mountainous regions	x					x
1.4. DEVELOPMENT OF MACROREGIONAL INNOVATION ECOSYSTEM	1.4.1.	Supporting innovative development at local and regional levels based on cooperation between business and scientific centres				x		
	1.4.2.	Supporting development of start-ups and laboratories				x		
	1.4.3.	Supporting the development of an innovative environment in the Carpathian macro-region						
	1.4.4.	Development of innovative tourist services						x
	1.4.5.	Development of ICT products connected with the Carpathian industry specialisation				x		

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			Mountain areas	Protected areas	Cross-border areas	Large cities	Medium and small cities	Rural areas
	1.4.6.	Strategy and monitoring of Social Economy Development					x	
	1.4.7	Dissemination of traditional knowledge on preservation of landscape and other natural values of the Carpathian macro-region		x				
	1.4.8	Smart urban development				x	x	
	1.4.9.	Cooperation between scientific institutions from the Carpathian Area (and from the outside)				x		
2.1. PROTECTION AND SUSTAINABLE MANAGEMENT OF NATURAL RESOURCES	2.1.1.	Cross-border standards for nature conservation and heritage		x	x			
	2.1.2.	Conferences and training to promote the region's nature		x				
	2.1.3.	New hiking, cycling and skiing trails	x	x				
	2.1.4.	New ecological corridors, including the Pan-European Carpathian Corridor		x				
	2.1.5.	Cooperation on the protection of animal species, especially large carnivores		x				
	2.1.6.	Promotion of water saving, water recycling				x	x	x
	2.1.7.	Education and proposals for common water management				x	x	x
2.2. DIVERSIFICATION OF ENERGY SOURCES	2.2.1.	Development of cross-border transmission systems and storage facilities for gas and oil			x			
	2.2.2.	Development of cross-border electricity systems			x			
	2.2.3.	Development of new green energy sources						
	2.2.4.	Supporting investment in circular economy						
	2.2.5.	Exchange of good practice on energy saving in the public sector						
	2.2.6.	Joint programme for energy management						

Action	Number	Type of projects	Areas particularly suitable for the implementation of a given type of projects:					
			Mountain areas	Protected areas	Cross-border areas	Large cities	Medium and small cities	Rural areas
2.3. MANAGEMENT OF ENVIRONMENTAL RISK AND NATURAL THREATS	2.3.1.	Virtual Observatory and Climate Change Adaptation Strategy						
	2.3.2.	System for monitoring and assessing environmental risks						
	2.3.3.	Emergency services training						
	2.3.4.	Cross-border prevention and emergency plans			x			
	2.3.5.	Cross-border civic, economic and scientific networks educating on climate issues			x			
	2.3.6.	Cooperation in information campaigns and mapping of environmental risks						
3.1. INCREASING TRANSPORT ACCESSIBILITY OF THE CARPATHIAN REGION AND WITHIN THE REGION	3.1.1.	Plan for new TEN-T transport infrastructure development				x	x	
	3.1.2.	Cross-border public transport			x		x	
	3.1.3.	Demand responsive bus transport					x	
	3.1.4.	Improved road and rail accessibility of tourist attractions			x		x	x
	3.1.5.	Introduction of an integrated ticketing and information system			x		x	x
	3.1.6.	Preference for clean transport modes						
3.2. INCREASING THE DIGITAL ACCESSIBILITY	3.2.1.	System of vouchers for the broadband Internet access in the most distant areas	x		x			x
	3.2.2.	Map of the Internet access indicating "white spots"	x		x			x
	3.2.3.	Free access to the ICT technologies					x	x
	3.2.4.	Enhancement of creation of a Carpathian system of public-internet hot spots						
	3.2.5.	Digital literacy programmes						x

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	3.2.6.	Enhancement of translation of the content of key web-sites into the Carpathian languages.						
	3.2.7.	Creating incentives for developing public-private partnerships in the area of connectivity infrastructure in the mountain regions	x		x			
	3.2.8.	Facilitating the digitalization of small and medium-sized enterprises				x	x	
3.3. DEVELOPING E-SERVICES SYSTEM	3.3.1.	Introduction of e-services in administration						
	3.3.2.	Establishing electronic platforms and cooperation networks, developing ICT tools like interactive customer support system						
	3.3.3.	Common platform for electronic public administration services						
	3.3.4.	Digitalizing culture and knowledge resources						
	3.3.5.	Advertising campaign to encourage people to use advanced digital technologies						
	3.3.6.	Establishing safe database systems and safe channels for the exchange of information on-line						
	3.3.7.	Elaborating and implementing Carpathian Smart Village approach (digitalization of rural communities)						x

Source: own elaboration.