



# Linkages between climate change, human mobility and security in South-Eastern Europe



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# Foreword



(Photo credits: (OSCE/Micky Kroell))

## Bakyt Dzhusupov

Co-ordinator of OSCE Economic and Environmental Activities Organization for Security and Co-operation in Europe

South-Eastern Europe is at a pivotal moment. Climate change is no longer a distant prospect, its impacts are already highly visible across the region. Extreme weather events – particularly floods and droughts – are straining health, infrastructure, and access to water, food, and energy. These pressures, in turn, are increasingly shaping patterns of human mobility, with far-reaching implications for social cohesion, economic development and security in the region.

The interlinkages between climate change, human mobility and security are complex and context-specific, varying between and even within jurisdictions. Yet South-Eastern Europe also shares socio-economic, political and demographic characteristics that heighten vulnerability to the impacts of climate change. These dynamics are particularly pronounced in rural and mountainous areas, where declining opportunities leave behind ageing populations with reduced coping capacities; and in urban centres, where rapid population growth puts pressure on infrastructure and public services. However,

the precise nature, scale, and trajectories of these linkages, as well as their implications for security and stability, remain insufficiently understood.

This comprehensive report, developed in a collaborative effort with adelphi research and the International Institute for Applied System Analysis (IIASA), and made possible through the OSCE's extra-budgetary project "Strengthening Responses to Security Risks from Climate Change", contributes to closing existing knowledge gaps and raising awareness about the linkages between climate change, human mobility, and security. It underscores the need for evidence-based, integrated policy responses that manage the challenges linked to mobility while also maximizing the opportunities of mobility as a source of resilience. The report provides data-driven insights to inform such efforts, making the case for co-operative approaches and highlighting where joint action can yield tangible results – from investment in rural areas and strengthening the workforce, to improving urban planning and enhancing disaster preparedness.

The OSCE's comprehensive and inclusive framework puts the organisation in a unique position to support participating States in these efforts, as recognized in several OSCE commitments, including the 2007 Madrid Declaration on Environment and Security (MC.DOC/4/07), the Athens 2009 Ministerial Council Decision on Migration Management and the 2021 Stockholm Ministerial Council Decision on Strengthening Co-operation to Address the Challenges Caused by Climate Change (MC.DEC/3/21).

The OSCE's ability to convene its participating States in dialogue and cooperation around shared challenges remains a key strength. Guided by the insights presented in this report, we can transform the challenges of climate-related mobility into opportunities for confidence building, partnership and resilience, as well as for regional stability.



# Key Takeaways

## Climate risks are intensifying across South-Eastern Europe

South-Eastern Europe (SEE) is increasingly exposed to climate-related hazards, including more frequent and severe heatwaves, droughts, floods and wildfires. These escalating risks are amplifying existing socio-economic vulnerabilities and contributing to more complex patterns of internal displacement, rural-to-urban migration, and transborder movements. These dynamics highlight the need for integrated approaches to climate adaptation, disaster risk reduction (DRR), migration governance and security frameworks in order to effectively address the region's evolving challenges.

## Droughts and land degradation drive human mobility

Droughts and land degradation are undermining agriculture and tourism, prompting youth out-migration and leaving behind ageing populations with reduced adaptive capacity. These trends are deepening regional inequalities. Evidence shows that increased drought exposure is closely linked to a notable rise in internal migration, with rural communities particularly vulnerable owing to their heavy reliance on agriculture. This highlights the need to promote climate-resilient livelihoods and provide targeted support for at-risk populations in order to reduce climate-driven mobility and strengthen community resilience.

## Rural depopulation creates vulnerabilities

High levels of urbanization, as well as high emigration rates, are leaving rural areas increasingly vulnerable to environmental degradation, inadequate services and deteriorating infrastructure. These conditions also create opportunities for illicit activities and the criminal exploitation of abandoned lands. Such dynamics contribute to governance vacuums and heightened security risks, underscoring the need for targeted rural development, effective land management and robust security interventions.

## Rapid urbanization strains the infrastructure

Rapid rural-to-urban migration is placing a significant strain on the urban infrastructure across South-Eastern Europe, leading to undersized drainage systems, deteriorating air quality and increased vulnerability to flooding. Several of the region's capitals bear the brunt of these challenges and are among the world's most polluted urban centres. This highlights the urgent need for integrated climate adaptation and urban planning, substantial investment in resilient infrastructure, and targeted environmental policy interventions to safeguard public health and enhance urban sustainability.



### **Shortcomings in disaster risk governance further erode public trust in institutions**

Institutional shortcomings in disaster risk governance – such as inadequate early warning and response mechanisms, and a lack of transparency in the allocation of relief funds – have eroded public trust in the authorities. Recent flood events across South-Eastern Europe have highlighted critical gaps in co ordination, accountability and long-term resilience planning. These underscore the need for reforms that strengthen institutional capacity, embed robust anti-corruption safeguards, and integrate DRR into national development and climate adaptation strategies.

### **Green transition faces labour shortage constraints**

While high levels of emigration may temporarily ease urban population pressures and reduce social tensions, they also drive a long-term brain drain and critical labour shortages – including in sectors essential for climate adaptation and the green transition. The ongoing loss of skilled professionals undermines the region's ability to design, implement, and sustain green technologies and effective environmental policies. Acute shortages in expertise, particularly in renewable energy, environmental management and climate-resilient infrastructure, threaten to delay progress towards decarbonization targets, as well as towards EU accession and alignment with the European Green Deal.

### **Policies addressing climate-mobility-security interlinkages remain fragmented**

In South-Eastern Europe, climate policies and migration strategies remain largely siloed, with climate frameworks rarely addressing human mobility, and migration policies often overlooking environmental drivers. Security strategies remain predominantly focused on traditional threats, thus failing to address the complex interlinkages between climate change, migration and security. This sectoral disconnect results in fragmented policy responses that limit the region's ability to leverage adaptive migration as a resilience-building mechanism. To strengthen policy coherence and effectiveness, there is a need for integrated, cross-sectoral approaches that mainstream human mobility into climate adaptation, migration management and security planning. This will foster more holistic strategies that build resilience, reduce vulnerabilities and proactively address emerging climate-related security risks.

### **Regional co-operation is essential for a resilient future, but underdeveloped**

Despite facing common challenges related to climate change, mobility and security, the region still lacks sufficiently developed transboundary, integrated responses. This report underscores the need for comprehensive regional strategies, improved data sharing and harmonized adaptation measures. A co ordinated regional approach is critical to effectively tackle cross-border climate risks, promote the exchange of best practices, and implement joint initiatives in disaster risk reduction, the green transition and sustainable mobility. Robust, collaborative policy frameworks are essential for building resilience, reducing vulnerabilities and proactively managing emerging climate-related security risks across South-Eastern Europe.



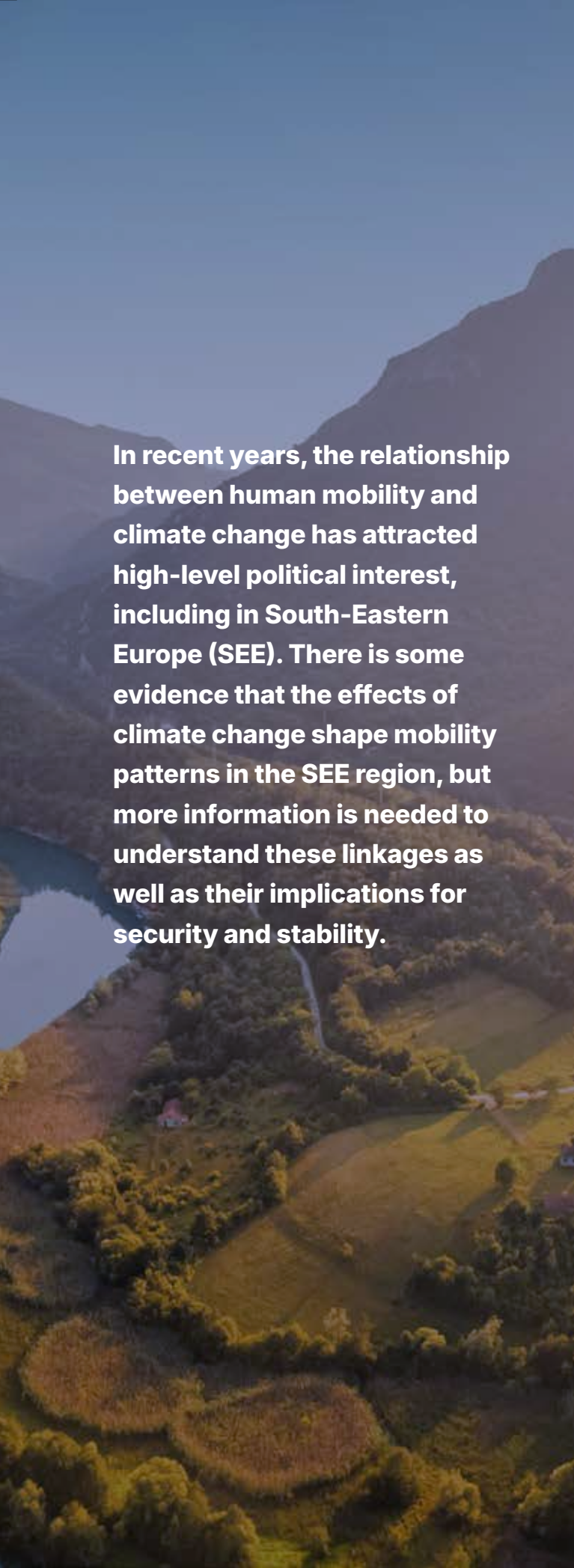


An aerial photograph of a river valley. The river flows through a lush green forested valley. In the background, there are steep, rocky mountains. A large, semi-transparent white number '1' is overlaid on the center of the image.

# 1

## 1. Introduction





**In recent years, the relationship between human mobility and climate change has attracted high-level political interest, including in South-Eastern Europe (SEE). There is some evidence that the effects of climate change shape mobility patterns in the SEE region, but more information is needed to understand these linkages as well as their implications for security and stability.**

This study seeks to fill this knowledge gap through a detailed, mixed methods assessment of the relationship between human mobility, climate change and security in South-Eastern Europe.

## **1.1. Background**

This study was conducted in the context of the OSCE project, "Strengthening Responses to Security Risks from Climate Change in South-Eastern Europe, Eastern Europe, the South Caucasus and Central Asia" (see Box 1.1), carried out by the Office of the Co-ordinator of OSCE Economic and Environmental Activities (OCEEA). It builds on the findings of "Regional Assessment for South-Eastern Europe: Security implications of climate change" (Rüttinger et al. 2021), a report that identified mixed movement (of asylum seekers and migrants) and emigration as one of several regional climate-related challenges. In particular, it pointed out that high rates of emigration cause permanent depopulation of large parts of the region.





### Box 1.1. Strengthening responses to security risks arising from climate change: the OSCE approach

Building on its foundational mandate in environmental co-operation, the Organization for Security and Co-operation in Europe (OSCE) has been addressing the security implications of climate change since 2007. Over the past two decades, the OSCE has provided an inclusive platform for political dialogue on climate-related security risks and, jointly with partners, implemented several activities in vulnerable settings. These range from participatory risk assessments and capacity building to support for transboundary adaptive measures, always aimed at fostering co-operation and good neighbourly relations.

Under the umbrella of its flagship project, “Strengthening responses to security risks from climate change in South-Eastern Europe, Eastern Europe, the South Caucasus and Central Asia”, implemented from 2018 to 2026 in partnership with adelphi and in close col-

laboration with OSCE field operations, the OSCE brings together national and local governments, as well as other relevant stakeholders, to look for joint solutions to shared climate change and security-related challenges. The project’s activities promote collaboration across borders and sectors while placing a strong emphasis on inclusive approaches that actively engage women and young people.

In South-Eastern Europe, the OSCE is conducting a series of pilot projects aimed at addressing climate and security challenges through a joint co-operative approach. This study is part of this effort and seeks to strengthen the evidence-based understanding of the climate change, human mobility and security nexus, along with identifying areas for collaborative action among regional stakeholders.

While socio-economic factors and conflicts remain the main drivers of human mobility, it is still insufficiently understood, in South-Eastern Europe as in many oth-

er settings worldwide, how and to what extent climate change and environmental degradation intersect with these drivers and shape human mobility (see Box 1.2).

### Box 1.2. Climate change and human mobility: a complex relationship

Drawing on evidence from grey literature, there is a growing recognition that climate change influences human mobility and security. Climate-related hazards – such as droughts, floods, and storms – may prompt people to move, whether through displacement, migration, or planned relocation. Climate shocks often intersect with existing social and economic vulnerabilities, compounding the challenges faced by affected communities and heightening security risks. This is particularly evident in regions like East Africa and the Horn of Africa (IOM 2024e).

Climate-induced mobility is rarely the result of environmental factors alone. Instead, it emerges from a complex interplay between environmental, economic, social and political drivers (UBA 2020; CMS 2021). In some situations, mobility can help individuals and communities reduce their exposure to climate risks and build resilience. In others, however, it may lead to increased competition for resources, urban overcrowding, or even heightened conflict. As a result, the secu-

rity implications of climate-related mobility are highly context-specific and can vary significantly across settings (Panebianco 2022).

This suggests that effectively addressing these challenges requires integrating human mobility considerations into climate and development policies. Preventive and adaptive measures that respond to both immediate humanitarian needs and longer-term development concerns can help avoid exacerbating insecurity at local, national and regional levels (UNFCCC 2024; GFMD 2024).

Research also points out that the ability to move in response to climate change is not evenly distributed. Access to resources, social networks and supportive policy environments all influence who can relocate and who may be left behind. This selectivity shapes vulnerability and security outcomes, making it crucial for policy responses to consider the diverse experiences and needs of affected populations (e.g. Garip and Reed 2025).



To this end, OSCE-OCEEA partnered with adelphi and the International Institute for Applied Systems Analysis (IIASA) to strengthen the evidence-based understanding of the climate change, human mobility and security nexus in South-Eastern Europe which, for the purposes of this study, comprises Albania, Bosnia and Herzegovina, Kosovo,<sup>1</sup> Montenegro, North Macedonia and Serbia.

**This report draws on desk research, stakeholder consultations and data analysis to present new evidence on the interlinkages between climate change, human mobility and security in South-Eastern Europe.**

The goal of this study is to provide evidence-based considerations that raise awareness and increase knowledge among regional stakeholders as regards these complex interconnections, and to identify areas for concrete co-operation and networking among these stakeholders.

## 1.2. Structure of the report

The report is structured as follows: section 2 reports on the findings regarding climate risks, patterns of vulnerability and key trends in human mobility across South-Eastern Europe; section 3 explores how climate change and environmental stressors interact with mobility patterns and security outcomes, highlighting key pathways and case examples; section 4 reviews current policy frameworks, initiatives and institutional responses addressing climate change, human mobility, and the latter two's security implications in South-Eastern Europe, noting progress and persistent gaps; finally, section 5 offers practical recommendations for strengthening resilience and integrated action on climate, mobility and security, with an emphasis on regional co-operation and policy alignment.

The research informing this report was conducted using a **mixed methods approach** combining desk research, data analysis, expert informant interviews and stakeholder consultations to identify vulnerabilities, prevailing trends and patterns specific to South-Eastern Europe. A combination of quantitative and qualitative data was considered essential to capture the complex, context-specific pathways linking climate change impacts to socio-economic and security dynamics. The applied analytical framework builds on the OSCE's comprehensive approach to security as expressed through its three dimensions: politico-military, economic and environmental, and human.

The Annex section includes a detailed note (Annex 1) about the methodology applied to carry out the empirical analysis as well as a full discussion of its limitations. Specific caveats to bear in mind when reading the empirical findings are that the study's time frame and data availability limited the regional and demographic coverage to some extent. Nevertheless, the study's findings underscore how important it is to make further progress in enhancing co-ordination, standardization and transparency in migration data systems in order to support even more robust and policy-relevant research in the future. The Annex section continues with a comprehensive inventory of: climate actors, frameworks and initiatives (Annex 2); and mobility actors, frameworks and initiatives (Annex 3). It concludes with an overview of integrated climate and mobility initiatives (Annex 4).

<sup>1</sup> All references to Kosovo, whether to the territory, institutions or population, should be understood in compliance with United Nations Security Council Resolution 1244.





A large, multi-arched stone bridge spans a river. The bridge is made of grey stone and has several large arches. The river is calm, reflecting the bridge and the sky. In the background, there are green hills and some buildings. A large, semi-transparent white number '2' is overlaid in the center of the image.

# 2

## 2. Climate and mobility trends







**This chapter outlines key climate trends and associated risks in South-Eastern Europe, emphasizing the role of non-climatic factors as critical drivers of vulnerability. It also examines major patterns of human mobility in the SEE region, including immigration, internal migration, internal displacement, and emigration.**

The analysis shows that mobility in South-Eastern Europe is shaped by multiple, overlapping drivers that result in sustained high emigration, ongoing internal migration, and growing challenges for demographic sustainability and the retention of human capital.

## 2.1. Climate trends

**Key message: South-Eastern Europe faces mounting, overlapping climate and environmental risks – including rising temperatures, extreme weather, water scarcity, floods, wildfires, and pollution – that threaten communities, economies and ecosystems, and are intensified by legacies of unsustainable development and inadequate infrastructure.**

**South-Eastern Europe is facing multiple, overlapping climate risks that increasingly affect local communities.** These risks include more frequent and intense heatwaves, rising temperatures, unstable precipitation patterns, and a growing incidence of extreme weather events (EEA 2024a). The trends and spatial distribution of environmental hazards in South-Eastern Europe are shown in Figure 2.1 and Figure 2.2. For example, average temperatures have already risen by 1.2°C compared to 1970 (Knez et al. 2022; Trifonova and Dangova 2023) and are projected to increase further – by approximately 1.8°C under a medium-emissions scenario (RCP4.5) and 5.1°C under a high-emissions scenario (RCP8.5) by the end of this century.<sup>2</sup> Warming is expected to be ac-

<sup>2</sup> CMIP6 ensemble models. Representative Concentration Pathways (RCPs) are scenarios that include time series of emissions and concentrations of the full suite of greenhouse gases and aerosols and chemically active gases, as well as land use / land cover. Here, we compare the estimated average temperature levels between the 2020s and 2090s under the RCP4.5 and RCP8.5 scenarios.



accompanied by an overall decline in annual precipitation, alongside greater variability and unpredictability in rainfall distribution (IPCC 2021, EEA 2024b).

**These climatic shifts are expected to intensify as the century progresses, with droughts becoming more frequent, prolonged and severe** (UNESCO 2023). In particular, northern parts of South-Eastern Europe were affected by drought in the past years, with the most severe drought incidents reported in northern Serbia (Figure 2.2). Increasing dryness across South-Eastern Europe is already raising the risk of water scarcity, with serious implications for public health, agricultural productivity, and energy generation. In particular, reduced water availability threatens irrigation-dependent farming systems and hydropower output – both of which are critical sectors in many SEE economies. As climate pressures mount, these challenges are likely to exacerbate existing socio-economic vulnerabilities and require co-ordinated adaptation responses both at the local and regional levels (EEA 2024b).

**The SEE region has been repeatedly affected by extreme weather events, including heatwaves, floods and wildfires** (Figure 2.1). Especially flooding poses major health risks and can severely impact local economies, agriculture and ecosystems, often resulting in displacement and significant damage to infrastructure and property. River floods are considered a high-risk hazard across nearly all jurisdictions in the region. Between 2010 and 2020, 390 out of 431 local districts in South-Eastern Europe were affected by at least one flooding event (Figure 2.1). Many cities lack adequate drainage systems; these are unable to handle the growing volume of precipitation, leading to frequent flash floods.<sup>3</sup> Urban flooding has become an increasing challenge, compounded by growing urbanization and outdated infrastructure. There is also evidence of deforestation, including illegal logging, exacerbating flood risks in peri-urban and rural settings by disrupting ecosystems and reducing the land's natural ability to absorb rainfall, thereby intensify-

ing the effects of heavy rains and leading to more severe flooding events (World Bank 2024).<sup>4</sup>

**In South-Eastern Europe, Bosnia and Herzegovina is one of the most disaster-prone jurisdictions**, with over 80% of its municipalities at risk from floods and landslides (Scissa 2024). This was evident during the major flooding events of 2014 and 2024, which displaced large numbers of people and highlighted long-standing weaknesses in infrastructure and urban planning. Informal settlements, such as those on the hills of Sarajevo, were shown to be particularly vulnerable, with inadequate protections making these communities disproportionately affected.<sup>5</sup>

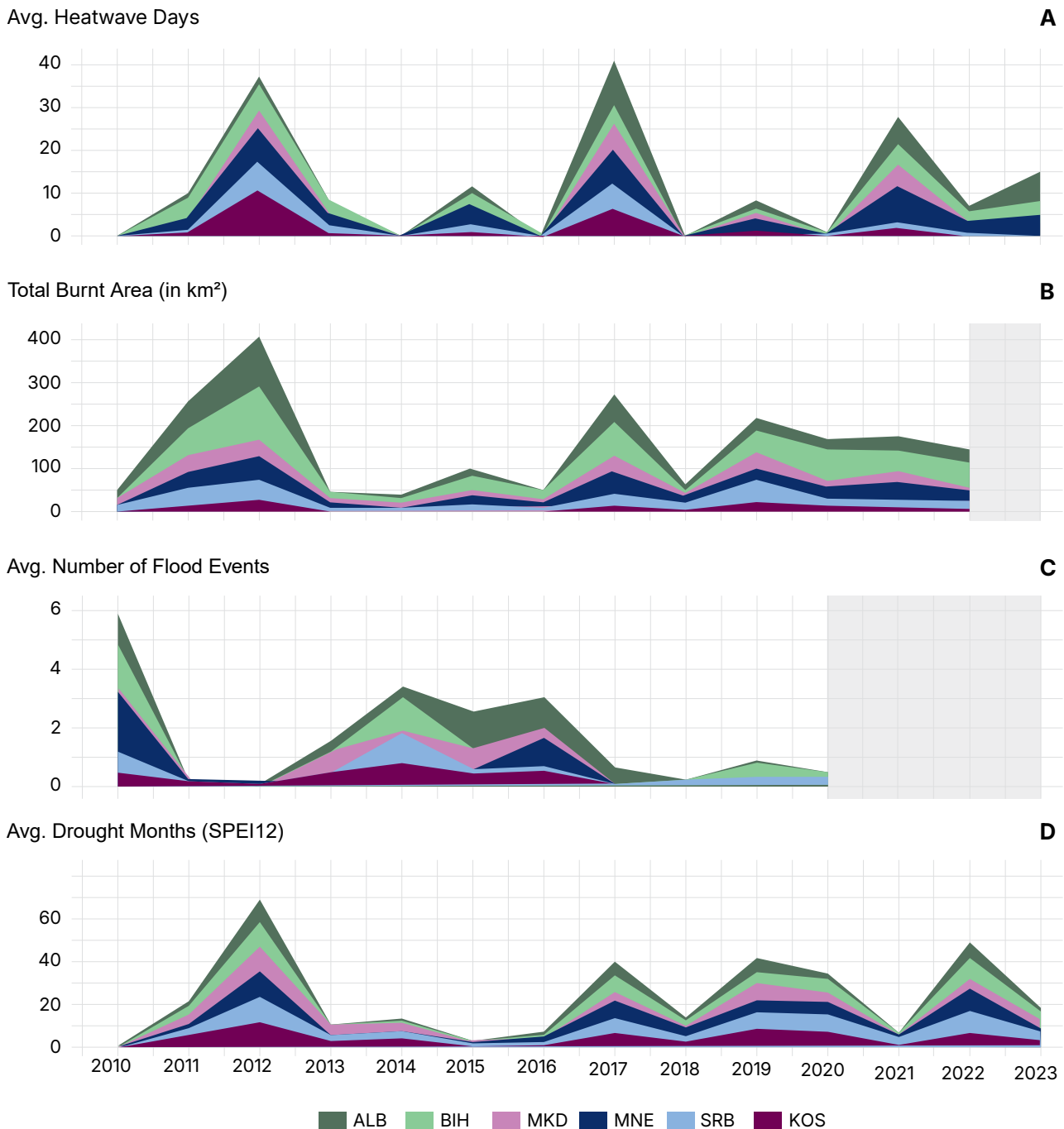
**In addition to risks from riverine flooding, coastal communities in South-Eastern Europe also face growing threats from sea level rise.** These include flooding, coastal erosion, beach loss, and saline intrusion, all of which jeopardize freshwater availability for both agriculture and human consumption (Trifonova and Dangova 2023). In low-lying coastal zones, rising seas can intensify storm surges and lead to permanent inundation of land. Coastal tourism, which is a key economic sector in many parts of the region, is also at risk, because shoreline retreat and habitat degradation undermine both environmental integrity and economic stability (Amelung and Moreno 2011; Tierolf et al. 2023).

3 Key expert interview with representative of international organization working on development, climate/environment and migration, Serbia, 06.03.2025.

4 Key expert interview with representative of international organization working on development, climate/environment and migration, Bosnia and Herzegovina, 26.05.2025.

5 Key expert interview with representative of international organization working on development, climate/environment and migration, Bosnia and Herzegovina, 26.05.2025.



**Figure 2.1. Exposure to four climatic hazards in South-Eastern Europe (2010–2023).**

Panel A of this figure shows the stacked number of average heatwave days per country over time. Panel B shows the stacked number of burned area (excluding agricultural fires, in km<sup>2</sup>) per country over time. Panel C shows the stacked number of flood events per country over time (no data available from 2020 onwards). Panel D shows the average number of drought months (based on SPEI12) per country over time.

Source: ERA5 (heatwave days), GFED5 (area burned), HANZE (flood events), GSD (drought months).

**Extreme heat and prolonged dryness significantly increase the risk of wildfires.** Forested areas are estimated to make up a substantial proportion of the land across the region: 28.8% in Albania, 32.4% in Serbia,

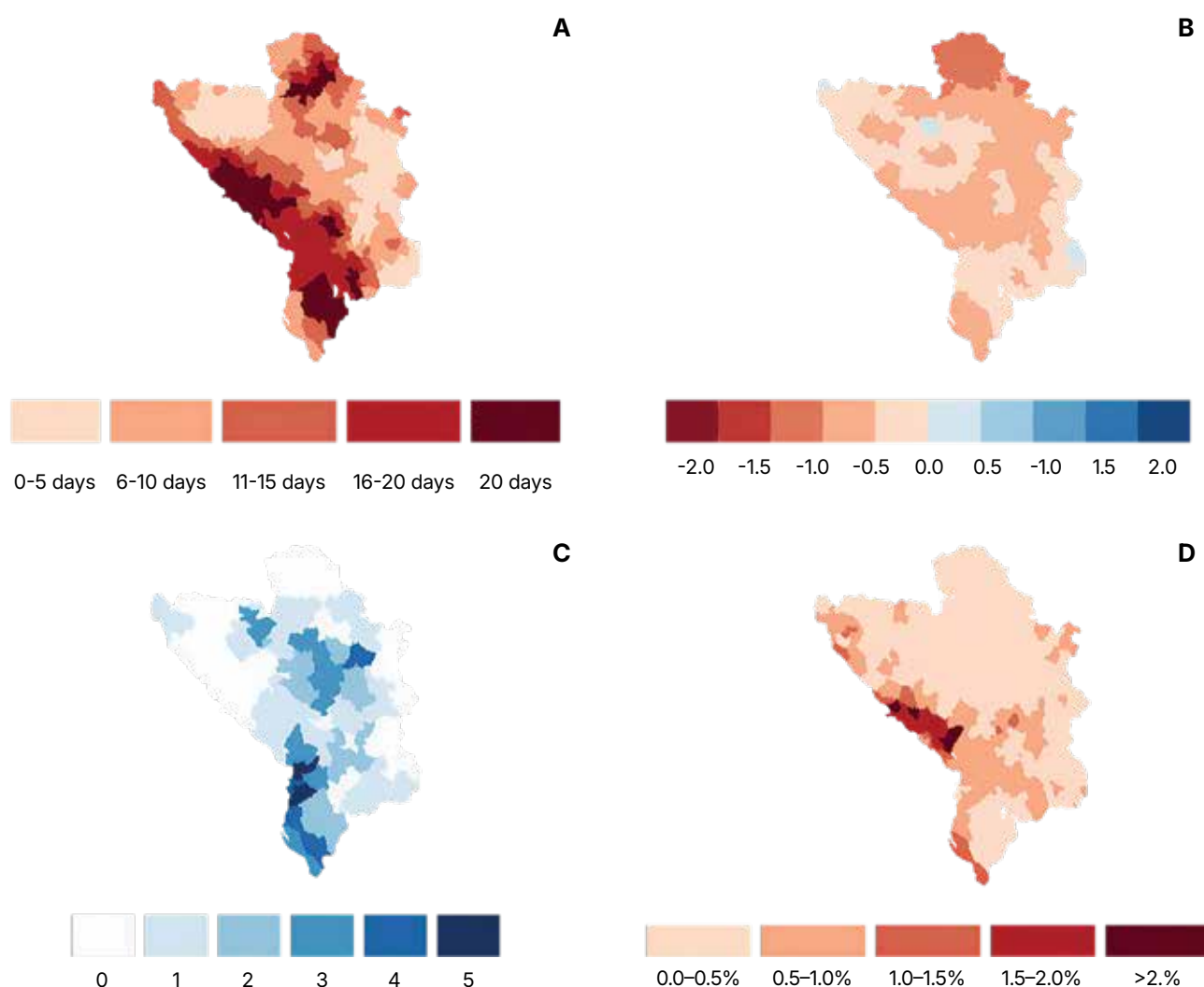
34.0% in Kosovo, 39.7% in North Macedonia, 42.7% in Bosnia and Herzegovina, and 61.5% in Montenegro (Global Forest Watch 2025 for Kosovo, FAO 2025 for all other jurisdictions). Some regions in Bosnia and Her-



zegovina (e.g., Čapljina) and Montenegro (e.g., Central Region) suffered particularly severe wildfires from 2015 to 2020, with more than 2% of their land cover burnt in this period. This is visible on the map (Figure 2.2, Panel D), where areas with more severe wildfires are shown in dark red. These areas typically correspond to high forest cover, confirming that they are particularly susceptible

to wildfire outbreaks, especially during the summer months. While climatic conditions exacerbate wildfire risks, human activity plays a critical role. In many cases, wildfires are triggered by human actions, such as deliberate forest clearing for construction, pastures, or grazing, as has been reported in Albania.<sup>6</sup>

**Figure 2.2. Spatial differences in climatic hazards in South-Eastern Europe (2015–2020).**



The figure shows the number of heatwave days (Panel A), drought intensity as average SPEI48 (Panel B), number of flood events (Panel C), and share of burnt area owing to wildfires (Panel D) at the National Statistical Offices (NSO) regional level. The SPEI is a drought index that measures the water balance in a region, with smaller values indicating greater average dryness and larger values greater average humidity in a given area.

Sources: ERA5, SPEIbase, HANZE, GFED5.

<sup>6</sup> Key expert interview with representatives of civil society organization working on human rights, Albania, 25.03.2025.





**Aside from climate change impacts, South-Eastern Europe is also confronted with compounding human-made environmental challenges, including environmental degradation and pollution.** These are partly a specific legacy of the region's past trajectory of post-socialist development, including environmental burdens from intensive industrialization, and high energy-consuming and unsustainable infrastructure, coupled with profit-oriented private developments (investor urbanism) and the mushrooming of foreign-owned highly polluting plants (World Bank 2021; for considerations on the Serbian case, see Petrović 2022, 207–209). Especially in cities, waste and air pollution are posing major health risks, including those resulting from high traffic volumes, industrial pollution, illegal waste dumping and the contamination of water supplies (Belis et al. 2021; Cvetkovska et al. 2021).<sup>7</sup> Furthermore, infrastructure development, especially for tourism, has led to the loss of biodiversity and natural habitats such as lagoons, particularly in coastal areas, for example in Albania.<sup>8</sup>

## 2.2. Assessing vulnerability to climatic hazards

**Key message: climate risks in South-Eastern Europe are unevenly distributed, shaped by the interplay between hazards, exposure, and deep-rooted demographic, social and economic vulnerabilities – especially in rural, ageing and agriculturally dependent communities – underscoring the need for locally tailored adaptation strategies.**

**Risk arises from the interplay between hazard, exposure and vulnerability**, the latter referring to the degree to which individuals or groups are susceptible to harm, and their capacity to cope, adapt, or recover (IPCC 2022; Muttarak 2022). The same climatic event can produce drastically different outcomes depending on whom it affects and under what conditions (IPCC 2022). Cli-

mate change impacts are, in fact, deeply embedded in local social structures and conditions, which shape not only who is exposed to climate-related hazards but also who is most vulnerable to their effects. Understanding these uneven effects also requires to recognize that demographic factors, such as age, gender, ethnicity, or education play a critical role in shaping climate vulnerabilities, alongside socio-economic and political factors.

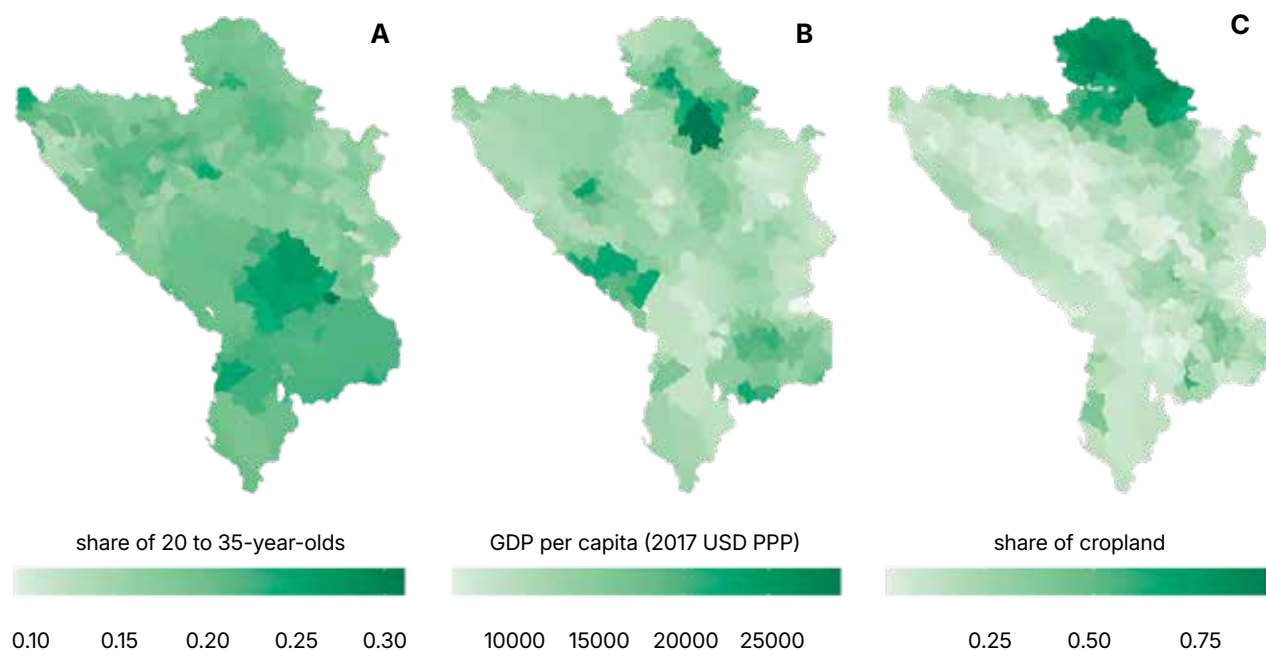
**Demographic factors, especially age-related dynamics, are particularly influential in shaping climate vulnerabilities in South-Eastern Europe.** Figure 2.3. shows the geographical distribution of key drivers of vulnerability to climatic stress. The maps report **differences in the age distribution, wealth and agricultural dependency of local populations in South-Eastern Europe.** Older populations, for instance, are disproportionately affected by extreme heat, floods and other climatic stressors owing to age-related health concerns, reduced mobility, and often limited access to support networks such as family members, neighbours, or organized care services (Muttarak 2021). At the same time, older adults may lack the economic means or social support to relocate or adjust their livelihoods in response to changing environmental conditions (Malak and Lina 2024). These challenges are exacerbated in regions experiencing youth out-migration, such as rural areas across South-Eastern Europe, where the departure of younger generations leaves behind an ageing population with fewer caregivers, diminished community resilience, and less adaptive capacity. This demographic imbalance reinforces the cycle of vulnerability, particularly in rural or economically marginal regions (Biella et al 2022).

<sup>7</sup> Key expert interview with representative of international organization working on sustainable development and climate/environment, North Macedonia, 27.03.2025; and key expert interview with representative of civil society organization working on environment and climate change, Albania, 07.04.2025.

<sup>8</sup> Key expert interview with representative of civil society organization working on environment and climate change, Albania, 07.04.2025.



**Figure 2.3. Differential vulnerability to climatic stress at the National Statistical Offices' level in South-Eastern Europe.**



The figure shows the distribution of key vulnerabilities in South-Eastern Europe. Panel A shows the 2015–2020 average share of 20 to 35-year-olds, Panel B the 2015–2020 average GDP per capita (in 2017 US dollars PPP), and Panel C the 2015–2019 average share of cropland across South-Eastern Europe.

Sources: WorldPop, Kummu et al (2025), GDLC.

**In South-Eastern Europe, many rural areas still largely depend on farming activities, which means that climate variability poses acute challenges.** This is evident on the map in Figure 2.3, Panel C, which shows that the northern and eastern parts of South-Eastern Europe, in particular, are characterized by heightened agricultural activity and a large share of cropland. There are also indications that rising temperatures are reshaping agricultural patterns. In Bosnia and Herzegovina, for example, traditional crops are struggling in their long-established growing zones, prompting a change in cultivation areas, for instance vineyards moving from southern to northern locations.<sup>9</sup> Meanwhile, increasingly frequent and severe droughts have been reducing yields, and contributing to land abandonment and further economic decline.<sup>10</sup>

These environmental and economic shifts reinforce vulnerabilities and can drive further mobility.

**Across the SEE region, demographic and economic vulnerabilities are not evenly distributed, which also affects how climate impacts are felt.** Across population groups and sectors, wealth and access to resources determine the extent to which individuals or communities can anticipate, prepare for, and recover from climatic events. Rural, agriculturally dependent areas tend to exhibit a dual challenge of lower income levels and higher proportions of elderly residents; this renders them particularly susceptible to climate-related stress. As visible in Figure 2.3, some rural areas in northern Serbia feature relatively high agricultural productivity but a low GDP, making them especially vulnerable to disruptions in envi-

<sup>9</sup> Key expert interview with representatives of regional organization, Bosnia and Herzegovina, 04.03.2025.

<sup>10</sup> Key expert interview with representative of international organization working on development, climate/environment and migration, Bosnia and Herzegovina, 26.05.2025.





ronmental conditions.<sup>11</sup> As both the geographically granular quantitative evidence and qualitative sources reveal, spatial inequalities are often masked by macro-level averages; this highlights the need for a local perspective to understand the geography of climate vulnerability, and targeted, context-sensitive adaptation strategies (EEA 2024b; Pietrapertosa et al. 2018).

## 2.3. Human mobility trends

**Key message: human mobility in South-Eastern Europe is shaped by a complex mix of economic, demographic and institutional drivers – exacerbated by climate and labour shortages – that results in high emigration, persistent internal migration, and mounting challenges for demographic sustainability and human capital retention.**

**As in many other regions around the world, human mobility in South-Eastern Europe is a complex phenomenon linked to several interconnected drivers.** These are related to the social, economic, cultural, political and institutional contexts (ICMPD 2020; Rosinska 2024). Climate-related factors can exacerbate existing drivers of mobility and contribute to more migration and displacement (see Chapter 3). However, not everyone becomes mobile, as differences in aspirations and capabilities to migrate may render some immobile. Indeed, demographic and economic factors play an important role in shaping differential mobility patterns, a trend observed both in South-Eastern Europe and globally.

**South-Eastern Europe is predominantly characterized by high levels of emigration** driven largely by economic and political factors. In parallel, **internal migration remains a constant feature**, often driven by urbanization and regional disparities. Intra-regional mobility is relatively limited and largely seasonal in nature; it is particularly linked to temporary labour migration. In recent years, especially since 2018, the region has been experiencing significant labour shortages in the sectors of hospitality, construction, agriculture and transport, leading to a growth in the number of work permits issued to

foreign workers. Additionally, South-Eastern Europe is a corridor for transit migration, with mixed flows of asylum seekers and migrants fleeing conflict or seeking better livelihoods in Western Europe. Transit migration peaked in 2015 but has remained relatively low since, though higher numbers were recorded again in 2022 and 2023.

## Emigration

**Emigration continues to be a dominant feature of human mobility in South-Eastern Europe, driven primarily by economic factors.** The region has one of the highest emigration rates globally, with an estimated proportion of emigrants amounting to around a quarter of the total population. This phenomenon is particularly acute in Albania, Bosnia and Herzegovina, and North Macedonia, where estimated emigration rates between 2007 and 2020 ranged from 22% to 45% of the population (OECD 2022). Emigration from the region (Figure 2.4) has historically headed for Greece and Italy. More recently, Germany, France and the UK have become frequent destinations, while flows towards Croatia, Slovenia, Slovakia, Czechia, Hungary and Bulgaria (Mara and Landesmann 2022) have also increased. Intra-regional migration remains limited and mostly circular, with workers temporarily relocating for seasonal jobs in neighbouring jurisdictions such as Croatia, Serbia and Montenegro, particularly in tourism and construction (Mara and Landesmann 2022).

**Emigration is disproportionately concentrated among the younger and more educated segments of the population, raising concerns about brain drain across the region.** More than half of SEE migrants in the OECD region are employed in mid-skilled jobs, with notable gender differences as regards occupational sectors (OECD 2022). Student mobility is also growing rapidly, with a 150% increase in international students from the region recorded between 2013 and 2018 (OECD 2022). Brain drain is especially acute in Albania, where 40% of the cumulative outflow is highly educated (Mara and Landesmann 2022; Gedeshi and King 2018), and in Kosovo, where a medical brain drain has led to facility closures and reduced care availability (Hajdari and Krasniqi 2021). These trends reflect a complex interplay

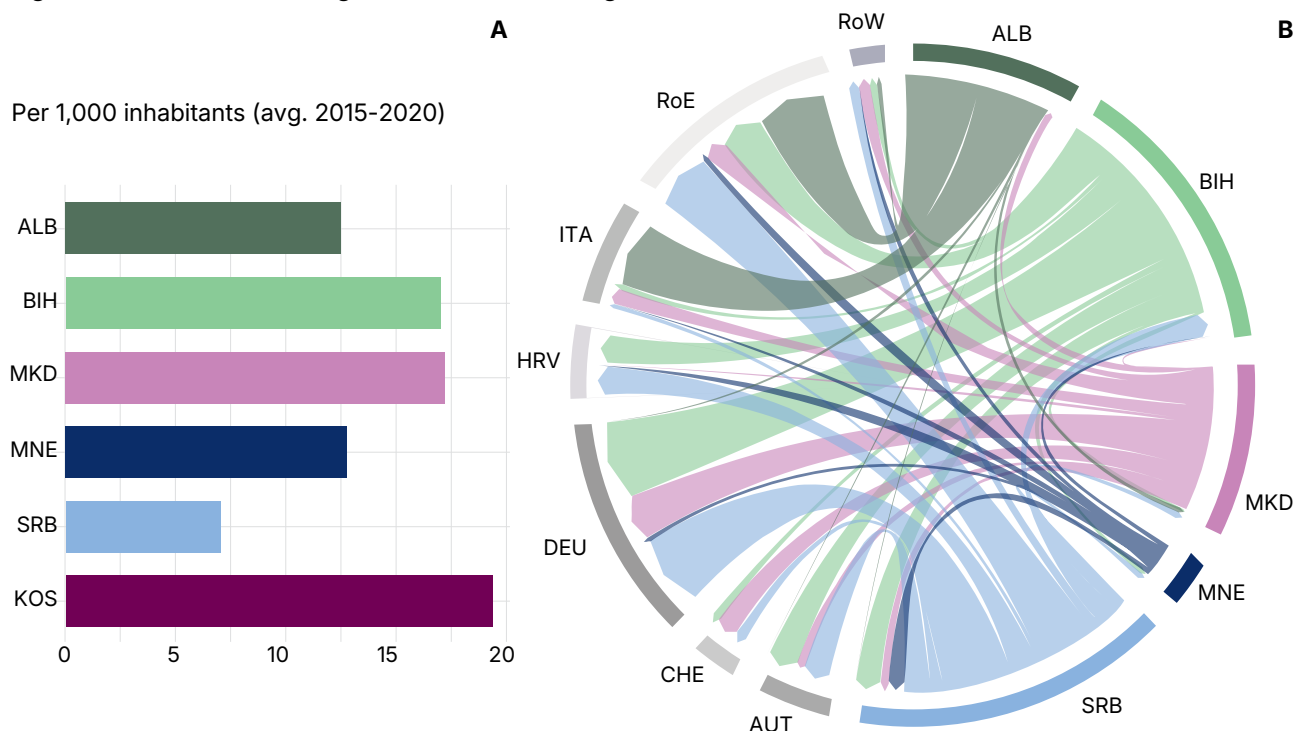
<sup>11</sup> Key expert interview with representative of international organization working on development, climate/environment and migration, Serbia, 06.03.2025.



of factors, including economic opportunity, quality of education and changing migration policies in destination countries, primarily in the EU. Overall, while emigration can offer remittances and skill development abroad,

the scale and structure of these flows pose significant challenges for the demographic future, sustainable development and human capital retention of South-Eastern Europe.

**Figure 2.4. International emigration from the SEE region.**



The figure shows the emigration rate from the SEE region per 1,000 inhabitants in the period 2015–2020 (Panel A) and migration flows, showing the origins and destinations of migrants, for the same time period (Panel B). Estimation method: demographic accounting, pseudo-Bayesian average of migrant transitions and stayers, closed accounting system.

Sources: Abel and Cohen 2022, UN WPP 2019. Please note that data for Kosovo (KOS) are not available in the Abel and Cohen dataset and were estimated on the basis of information provided by National Statistical Offices. RoW: rest of the world; RoE: rest of Europe.

## Immigration

**In recent years, mixed flows of asylum seekers and migrants have transited through South-Eastern Europe** (Figure 2.5). Many of these have passed through or settled temporarily in the region as part of broader migration routes towards the EU, reflecting the region's role as both a transit point and a destination within complex global mobility patterns (UNHCR 2025). This trend is also evident in the fluctuating numbers of asylum applications across the region, which reached a peak in Serbia in 2014 following the arrival of many refugees from Syria. Since 2010, and for most years, Serbia has hosted the largest number of refugees in the SEE region.

However, this pattern changed after 2022, as the arrival of refugees from Ukraine led to a shift in regional dynamics.

**At the same time, return migration has been gaining attention.** Jurisdictions in the region have adjusted their local strategies in order to better manage return migration and the reintegration of their citizens from abroad. For instance, Albania's response to the return of migrants is increasingly proactive (Mara and Landesmann 2022). Similarly, Montenegro and Kosovo have also adjusted their local strategies for facilitating the return and reintegration of returnees. Returnees often bring back new skills, savings and international experience, but may also



face challenges reintegrating into local labour markets, particularly in areas with a weak economic infrastructure or limited services. These dual trends of incoming migrants and returning expatriates are contributing to

a more dynamic and complex mobility landscape in the region; this has implications for social cohesion, public services and policy planning (Gemi and Triandafyllidou 2021; Martin and Dragos 2012).

**Figure 2.5. Number of refugees and asylum applications in South-Eastern Europe.<sup>12</sup>**



Panel A of this figure shows the stock of refugees by jurisdiction over time. Panel B shows the number of new asylum applications by jurisdiction over time.

Source: UNHCR. Please note that the UNHCR collects data for Serbia and Kosovo (S/RES/1244, 1999) together as part of its regional data collection and operations in the SEE situation data).

<sup>12</sup> A refugee is a person who is outside their country of origin because they face serious threats—such as persecution, conflict, or violence—and their own country's authorities cannot or will not provide them protection. As a result, they require international protection. An application for asylum is the formal process through which a person who fears persecution, conflict, violence, or other serious harm if they return home—and is therefore in need of international protection—asks another country or authority to be recognized and protected as a refugee (UNHCR 2025).



**Some parts of the region – such as Serbia, Montenegro and North Macedonia – are seeing signs of brain gain** (Mara and Landesmann 2022). Students are the main contributors to brain gain, with the highest rates found among people in their twenties – the typical age for completing tertiary education. This indicates that many young, highly educated individuals return to their home countries after studying abroad, mainly to be employed in sectors such as ICT, tourism and higher education (OECD 2022). Serbia and Montenegro have also started to attract immigrants and students from neighbouring countries such as Bosnia and Herzegovina owing to their sustained economic growth (e.g., the tourism sector in Montenegro or the ICT sector in Serbia) and differences in the quality of higher education (Statistical Office of the Republic of Serbia; Mara and Landesmann 2022).

## Internal migration

**Internal migration patterns in South-Eastern Europe are shaped by persistent regional disparities in demographic, economic and social development, and reflect a complex interplay between economic opportunity, environmental conditions and shifting lifestyle preferences.** For 2022, the average internal migration rate (proportion of population relocating from one administrative unit to another without crossing international borders) was 10.8% across the SEE region (not including Bosnia and Herzegovina and North Macedonia) (Figure 2.6).

**In a context of overall population decline, the SEE region has continued to urbanize, with populations increasingly concentrated in capital cities and a few other urban hubs** (World Bank 2024). Movement from rural to urban areas is a long-standing pattern driven by limited access to employment, education, healthcare and infrastructure in peripheral regions (Temova 2017). Internal mobility remains limited beyond these primary urban destinations. Inter-urban migration is relatively weak, in part owing to the lack of affordable housing and

of economic assets required to relocate for job-related reasons (ETF 2021).

**Many residents, especially younger adults and women, face significant barriers to mobility**, including limited incomes and an uneven development of regional labour markets (Mara and Landesmann 2022). In Serbia, urban centres continue to attract rural populations, while also seeking to draw labour migrants from neighbouring Bosnia and Herzegovina to address domestic labour shortages, an effort supported by legal and policy reforms.<sup>13</sup> The result is increasing urban concentration alongside rural depopulation, with implications for service delivery, land use and local economies.

**In some cases, internal migration is also shaped by poor or unregulated urban development.** In one SEE capital, a large housing development project built without any proper environmental assessment destabilized land in adjacent areas and forced the relocation of nearby residents.<sup>14</sup> These examples underscore how internal mobility in South-Eastern Europe is rarely the result of a single factor.

There is also anecdotal evidence of a **more recent trend, namely a reverse movement from urban to rural areas, particularly among wealthier and more educated individuals**. Interviews in Serbia and Montenegro suggest that early signs of this trend, the so-called lifestyle migration (Benson and O'Reilly 2016), are emerging, although it is on a small scale and further research is needed to assess its drivers and implications (see Box 2.1).<sup>15</sup> Motivated by environmental concerns, quality-of-life considerations and a desire to escape urban stress, some urban dwellers are resettling into rural areas.

**Together, these contrasting mobility trends underscore growing spatial polarization within South-Eastern Europe.** On the one hand, continued depopulation of rural and mountainous areas is leaving behind ageing,

13 Key expert interview with representatives of international organization working on migration and refugees, Bosnia and Herzegovina, 05.03.2025.

14 Key expert interview with representatives of international organization working on migration, Bosnia and Herzegovina, 05.03.2025.

Key expert interview with representatives of regional organization, Bosnia and Herzegovina, 04.03.2025.

Key expert interview with representative of international organization working on development, climate/environment and migration, Bosnia and Herzegovina, 26.05.2025.

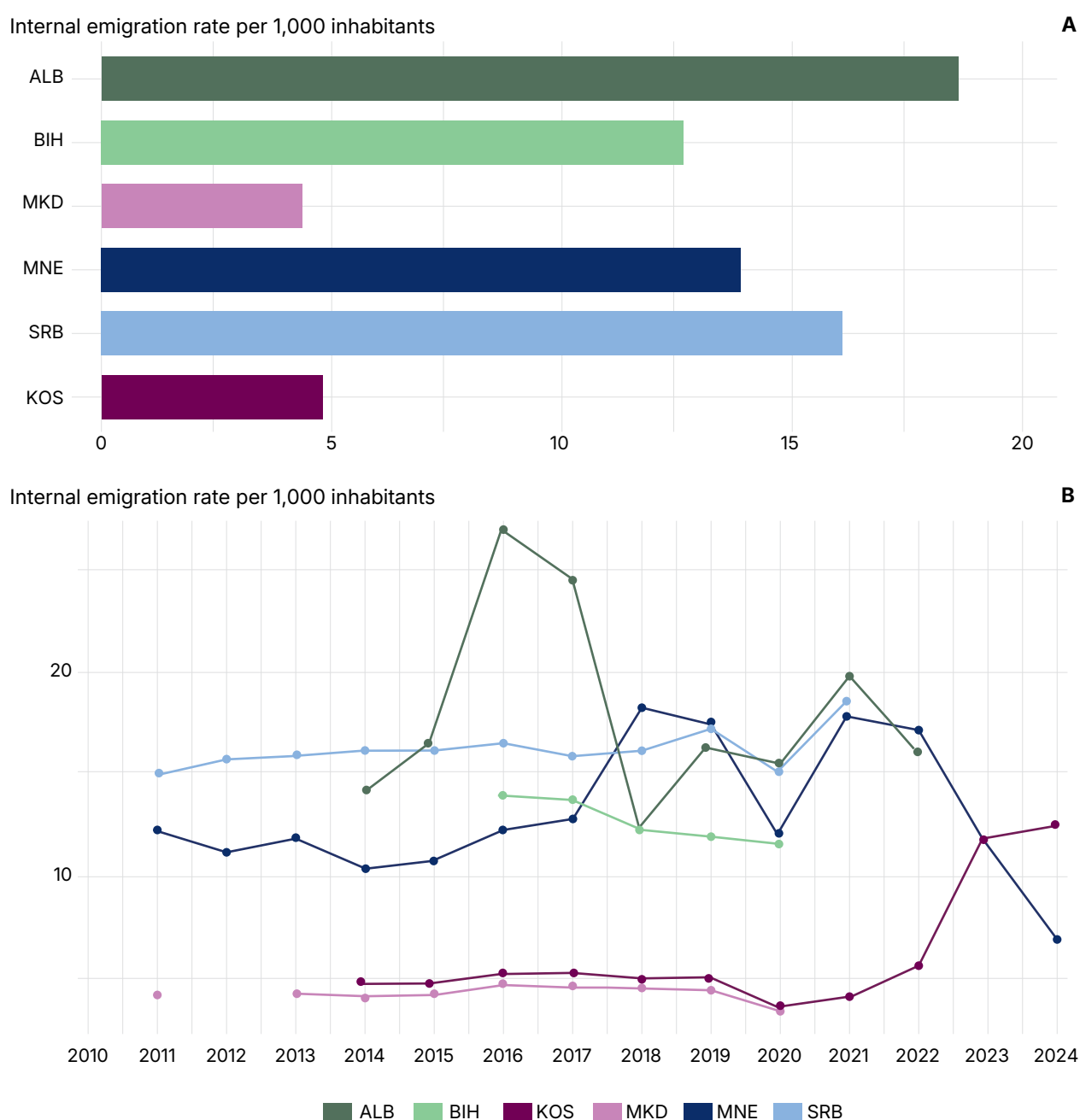
15 Key expert interview with representatives of civil society organization working on migration, Serbia, 07.03.2025; and key expert interview with representatives of international organization working on sustainable development and climate/environment, Montenegro, 28.05.2025.



sometimes economically vulnerable populations, while increasing the pressure on public services and infrastructure in urban areas. On the other hand, selective re-ruralization by often more affluent groups may re-shape rural development narratives, land-use patterns

and environmental governance. These dynamics carry important implications for spatial planning, sustainability policies and equitable access to services; they merit close monitoring in the context of broader demographic and environmental transitions.

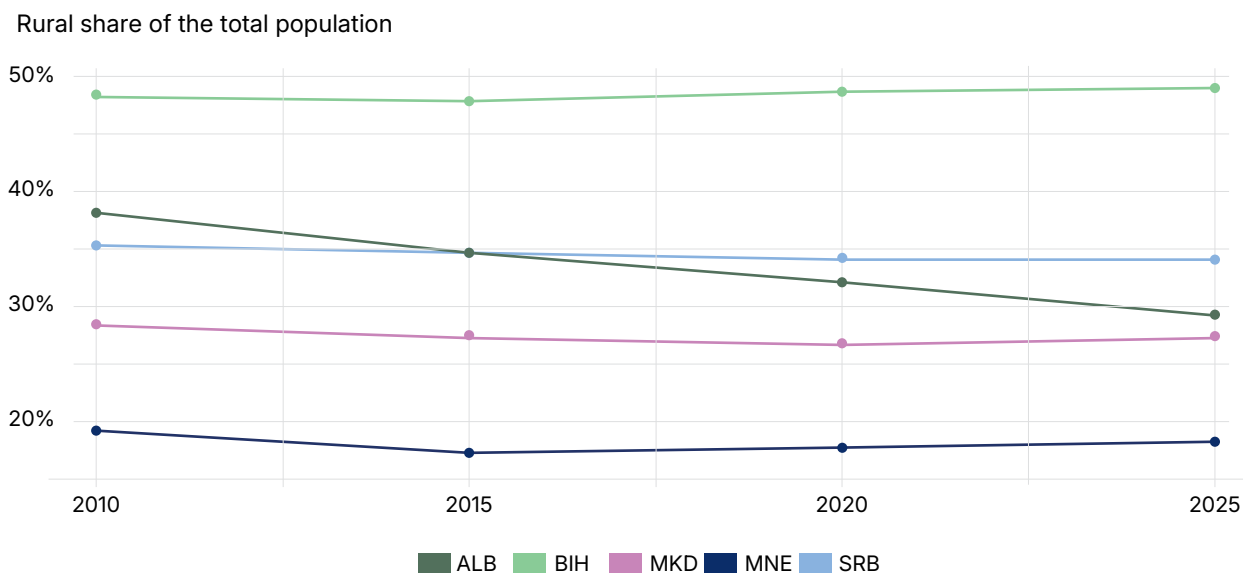
**Figure 2.6. Internal migration patterns and trends in the SEE region.**



The figure shows the internal out-migration rate per 1,000 inhabitants to other National Statistical Offices (NSO) regions within the jurisdictions (Panel A), and changes in the internal out-migration rate over time (Panel B) across the SEE region.

Source: data provided by the National Statistical Offices (NSOs).



**Figure 2.7. Changes in rural population shares in the SEE region from 2010 to 2025.**

*In the figure, urban/rural areas were classified according to the Global Human Settlement Layer – Degree of Urbanization classification. No data was available for Kosovo.*

Source: JRC/GHS-DUC.

### Box 2.1. Lifestyle migration

The term “lifestyle migration” refers to a type of migration that is often motivated by environmental concerns and quality-of-life aspirations, and involves movement from polluted, overcrowded, or climatically stressed cities to more attractive rural or peri-urban areas (Benson and O’Reilly 2016).

In South-Eastern Europe, seasonal migration patterns are becoming visible, particularly in cities like Sarajevo, where severe winter air pollution drives temporary relocation to cleaner rural environments.<sup>16</sup> In Albania, booming urban construction, inadequate green infrastructure, and intensifying heat island effects have prompted some residents to seek refuge in peri-urban zones offering a more favourable climate and environment.<sup>17</sup> This has emerged as a significant aspect of internal mobility, warranting more in-depth analysis at the national level.

In Serbia, lifestyle migration is typically expressed through the acquisition of secondary homes in environmentally attractive areas, complementing primary residences in urban centres (Petrović 2022). Similar patterns can be observed in North Macedonia, where a limited number of individuals – often retirees – are moving to rural areas in search of cleaner air and a more tranquil lifestyle.<sup>18</sup> Although still modest in scale, these weak trends signal a need to consider environmental quality and planning in both urban and rural development strategies.

It is important to note, however, that lifestyle migration is not accessible to everyone; it tends to be reserved for those with sufficient financial resources, social capital and the flexibility to relocate – often wealthier urbanites, retirees, or those with remote work opportunities (McAreevey and Argent 2018).

<sup>16</sup> Key expert interview with representatives of regional organization, Bosnia and Herzegovina, 04.03.2025.

<sup>17</sup> Key expert interview with representatives of civil society organization working on sustainable development, Albania, 04.04.2025.

<sup>18</sup> Key expert interview with representative of civil society organization working on climate/environment, North Macedonia, 27.03.2025



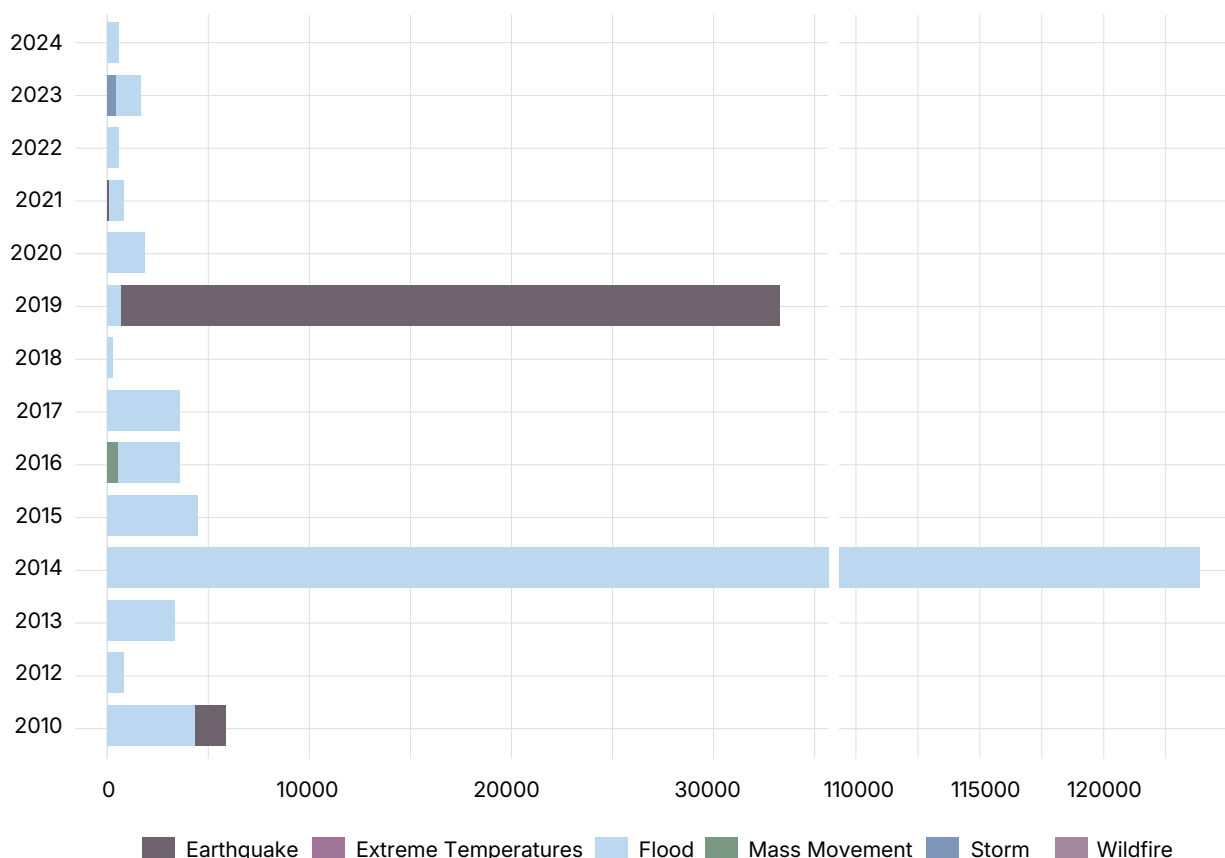
## Internal Displacement

**Displacement triggered by extreme weather events, particularly floods, is a growing issue in South-Eastern Europe.** While historically, displacement in the region had been linked to conflicts, recent years have seen a high volume of environmentally driven internal displacement, especially in Bosnia and Herzegovina, Albania and Serbia (UNESCO 2023). As shown in Figure 2.8, more than 30,000 displacements were recorded in

2019 following an earthquake and more than 120,000 displacements in 2014 were due to flooding. The 2014 flood was the most devastating in over a century, affecting over 3 million people in the region and causing damages exceeding €2 billion (Filho et al. 2019; UNESCO 2023). In Bosnia and Herzegovina, the floods also had long-term implications in areas where homes were built on unstable ground or affected by landslides, such as the hills around Sarajevo (IOM 2024b; Associated Press 2024).

**Figure 2.8. Internal displacement risks posed by different types of disaster across the SEE region.**

Disaster Internal Displacements  
Purce: IDMC



The figure shows the total number of internal displacements by different type of event in the period 2010–2024 and the temporal evolution of displacements in the SEE region.

Source: Internal Displacement Monitoring Centre (IDMC).





**The interaction between climate risks and weak disaster preparedness further compounds other mobility dynamics.** As interviews in Bosnia and Herzegovina and Albania reveal, people often feel that they cannot rely on the authorities to provide adequate protection or post-disaster support.<sup>19</sup> Against this background, displacement following extreme events is not only a response to environmental stress but also to governance failure, corruption and the erosion of public trust (see Chapter 3). In some cases, temporary internal displacement has turned into longer-term international relocation, especially among individuals with existing family networks abroad. Some of the population affected by the floods that hit Kosovo in 2021, for example, reportedly opted not to return owing to ongoing risks and inadequate institutional support.<sup>20</sup> Germany and Austria have been key destinations, particularly for those displaced from rural or high-risk regions lacking state support or viable options for return and recovery (UNESCO 2023). Legal insecurity – such as unclear property rights or informal housing arrangements – further increase vulnerability and the likelihood of displacement becoming permanent (UNECE 2020).

## 2.4. Drivers of human mobility in the region: evidence from the Balkan Barometer

**Key message: emigration intentions in South-Eastern Europe remain high especially among young, educated and working-age populations. These are driven by a mix of economic insecurity, governance challenges, dissatisfaction with public services, and growing climate and environmental pressures, making migration an increasingly normal life strategy across the region.**

**Migration intentions vary across the region, with high levels recorded in Kosovo and Albania** (Figure 2.9). According to the 2023 Public Opinion Balkan Barometer, 44% of the population in the region have considered migrating to another country; moreover, over 23% of the region's population is already in contact with recruitment agencies abroad according to SecuriMeter data from 2024 (RCC 2025). The intention to migrate is particularly pronounced among the better educated, working age population; men are more inclined to consider emigration than women.

<sup>19</sup> Key expert interview with representative of international organization working on migration, Bosnia and Herzegovina, 04.03.2025; and key expert interview with independent advisor on sustainable development, migration and climate/environment, Albania, 07.04.2025.

<sup>20</sup> Key expert interview with representative of civil society organization working on human rights, migration and climate change and environment, Kosovo, 21.05.2025. On the institutional response to the 2021 floods in Kosovo, see also Haxha 2023.



### Box 2.2. The Balkan Barometer and SecuriMeter

The Balkan Barometer is an annual survey initiated in 2015 by the Regional Cooperation Council (RCC) to capture public and business perspectives across South-Eastern Europe. Initially developed to assess the impact of the SEE 2020 Strategy, it has since become a key source of independent and comprehensive data on socio-economic, political, and integration-related issues in the region. A stratified sampling approach is used to ensure proportional representation based on settlement size and population distribution within each jurisdiction. With its consistent methodology and evolving relevance, the Balkan Barometer offers unique insights into regional developments.

The Balkan Barometer Public Opinion Survey is carried out using a quantitative method, with Computer-Assisted Personal Interviewing (CAPI) involving face-to-face interviews. The questionnaire, originally developed in English and translated into local languages, covers a range of topics, including demographics and key socio-economic issues; it tracks changing attitudes towards regional co-op-

eration and EU integration, alongside other critical policy areas that shape daily life, including migration. Insights gained thanks to the Balkan Barometer are widely used by the media, civil society, businesses, and policymakers.

Complementing the Balkan Barometer Public Opinion Survey, the SecuriMeter was launched by the RCC in 2021. With security emerging as a top priority for South-Eastern Europe and its international partners, the goal of the SecuriMeter is to provide a comprehensive analysis of the evolving regional security environment. By capturing public attitudes and perceptions of current security challenges, as well as trends, both at the regional and individual levels, SecuriMeter offers valuable insights to policymakers and stakeholders. Its findings support informed decision-making and contribute to a deeper understanding of the complex security dynamics shaping the region.

See: <https://www.rcc.int/balkanbarometer/home> and <https://www.rcc.int/securimeter/home>.

**Figure 2.9. Patterns and drivers of intention to emigrate.**

Share of those that consider living and working abroad

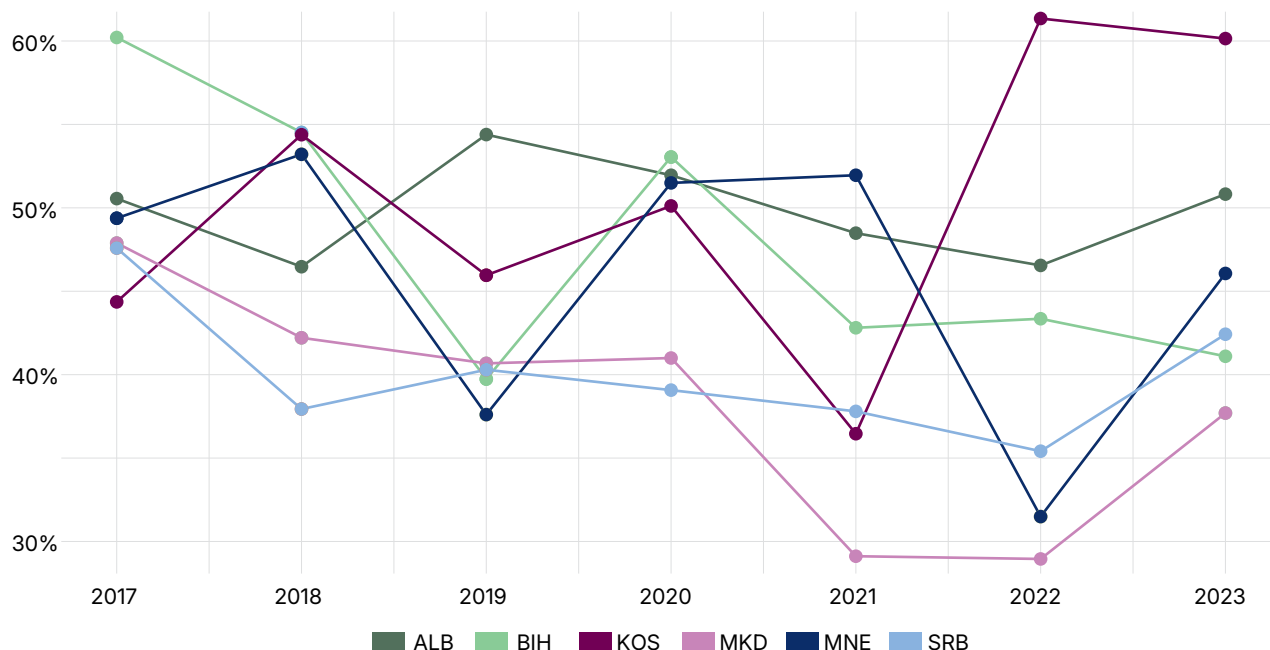


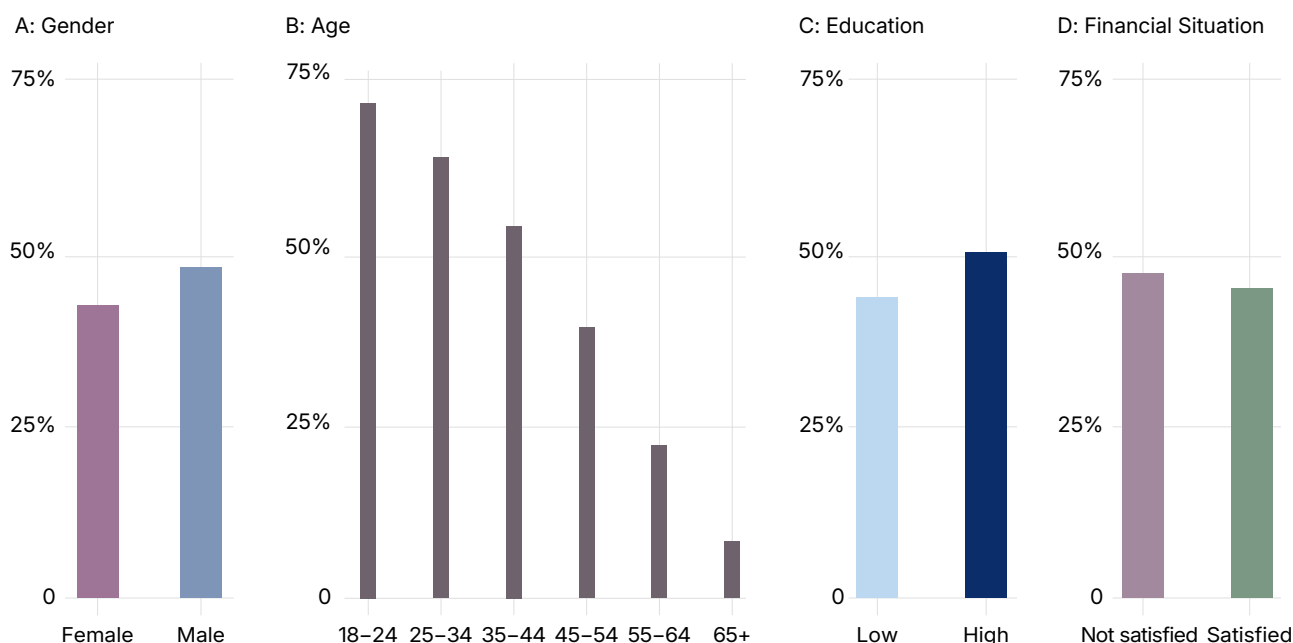
Figure 2.9 shows the temporal trends in migration aspirations across jurisdictions (Panel A) and the distribution of aspirations across demographic and socio-economic groups (Panel B).

Source: Balkan Public Barometer, 2017–2023 (n=42,240 respondents).



### Would you consider living and working abroad?

Share of those that consider living and working abroad



Note: High education defined as college or higher, n = 42240, source: Balkan Public Barometer 2017–2023. For Panel D only data from 2023 was used, n = 6027.

Historically, migration from the SEE region was primarily driven by the pursuit of better economic conditions and secure employment abroad. Today, recorded motivations appear more complex: individuals seek not just jobs but a better quality of life, access to better education and healthcare, and more dependable political environments (Mara and Landesmann 2022). **More recently, economic insecurity, low trust in institutions, and general dissatisfaction with governance, public services, and future prospects are among the most cited reasons.** These are further amplified by fears related to ongoing regional instability and the growing impact of climate-related stressors (RCC 2025). The role of corruption, political instability and governance failures also emerges consistently as a central theme across the region. In the 2024 SecuriMeter, 83% of respondents identified corruption as a widespread or fairly widespread issue in the SEE region (RCC 2025). It is chiefly the younger generations that increasingly view these issues as challenging, together with high rates of youth unemployment, wage gaps, skills mismatches and weak education systems (Kurecic 2023; Bygnes and Flipo 2016).

### Despite GDP growth and increasing living standards, structural disparities with the EU remain significant.

The wage and employment gaps, in particular, are powerful factors. The proximity of EU labour markets, targeted recruitment by some EU Member States and the persistence of social networks in destination regions facilitate the emigration of young, educated citizens. This dynamic is particularly evident in countries like Serbia, where several initiatives – such as co-operation with the diaspora and targeted return programmes – have aimed to counteract emigration and encourage people to remain in the country (Government of the Republic of Serbia 2021; Vukadinović et al. 2021). However, these measures have had only limited success.<sup>21</sup> In many cases, migration is no longer seen as a temporary or exceptional event, but rather as a normal and even expected life strategy, especially among younger generations.

**Furthermore, compared with Western and Northern Europe, access to health care, environmental quality and social protection in South-Eastern Europe contrast unfavourably.** According to SecuriMeter data, dis-

21 Key expert interview with representatives of civil society organization working on migration, Serbia, 07.03.2025.



satisfaction with basic services, including clean water, air quality and healthcare, is widespread and adds to the motivations for leaving. Perceptions of insecurity, too, are rising. About one-third of the respondents in the 2024 SecuriMeter report not feeling safe in their current environment (Figure 2.10), whether this is due to eco-

nomic precarity, political instability, or the impacts of climate change (RCC 2025). These perceptions reinforce the complex interplay between the economic, social and environmental drivers of migration, and point to the need for co-ordinated, evidence-based responses to address the root causes of emigration across the region.

**Figure 2.10. Patterns of perceived security levels across South-Eastern Europe.**

Share of those that feel secure

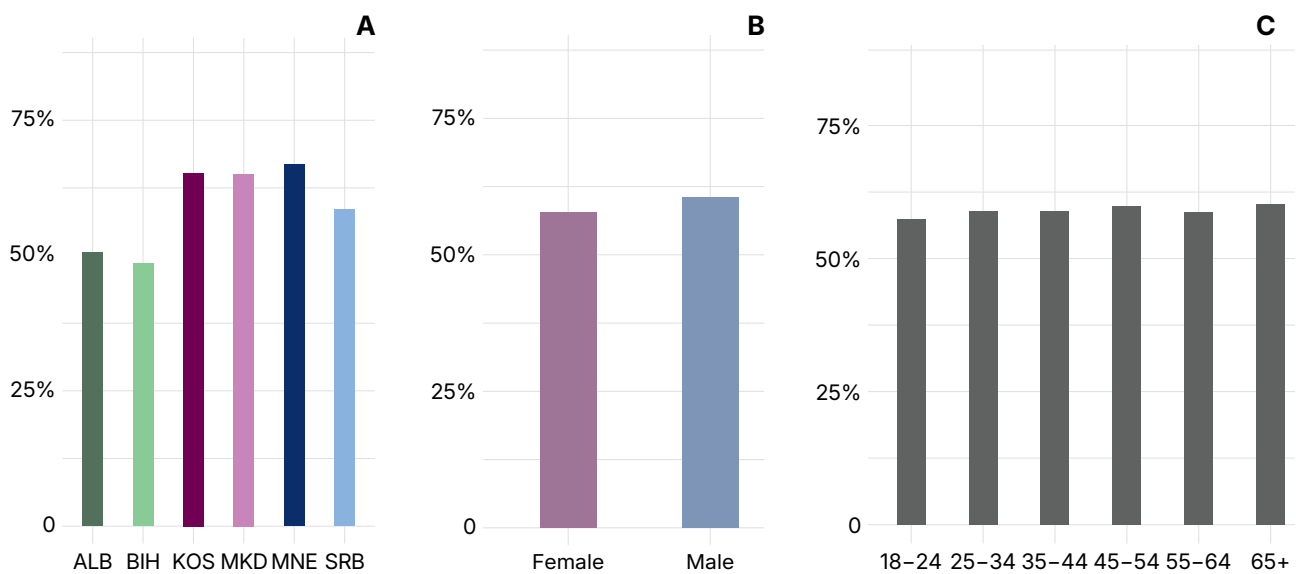


Figure 2.10 shows the perceived security levels across jurisdictions (Panel A), gender (Panel B) and age (Panel C). Responses to "How secure do you feel these days?" were recoded as 1 if participants answered "I feel quite secure" or "I feel very secure".

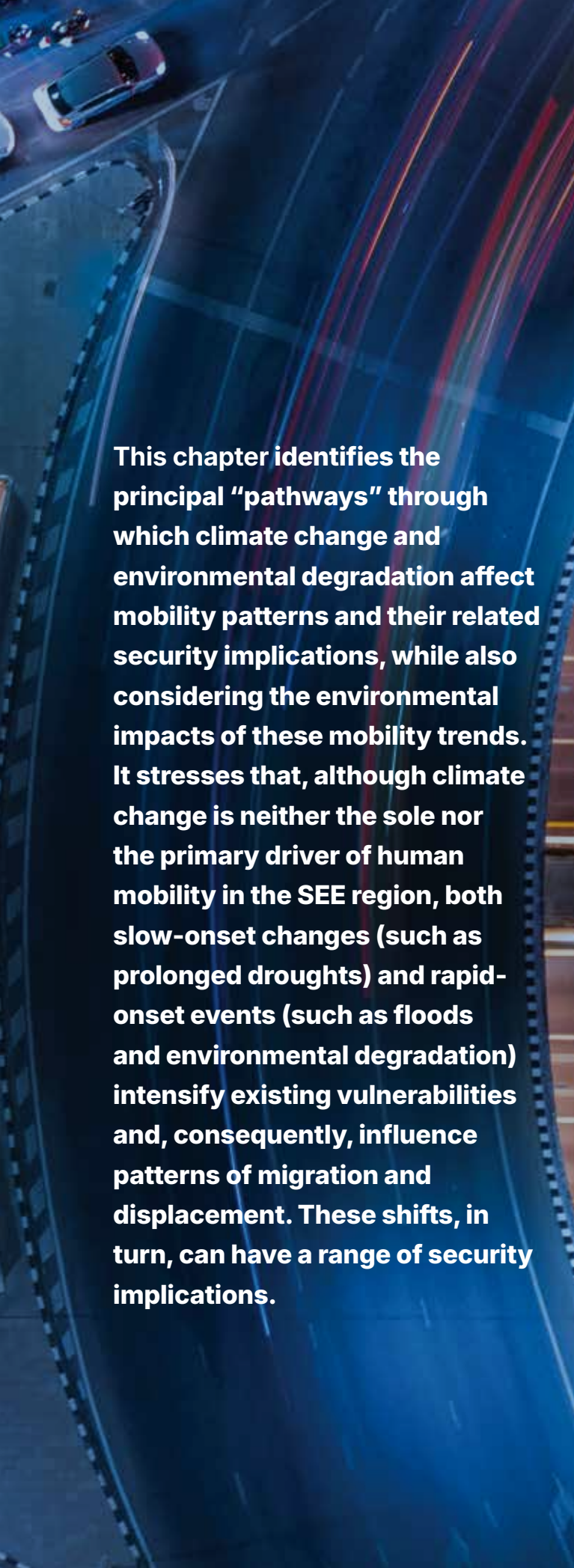
Source: SecuriMeter 2024 (n=6,004 respondents).



# 3

**3. Understanding the linkages between climate change, human mobility and security**





**This chapter identifies the principal “pathways” through which climate change and environmental degradation affect mobility patterns and their related security implications, while also considering the environmental impacts of these mobility trends. It stresses that, although climate change is neither the sole nor the primary driver of human mobility in the SEE region, both slow-onset changes (such as prolonged droughts) and rapid-onset events (such as floods and environmental degradation) intensify existing vulnerabilities and, consequently, influence patterns of migration and displacement. These shifts, in turn, can have a range of security implications.**

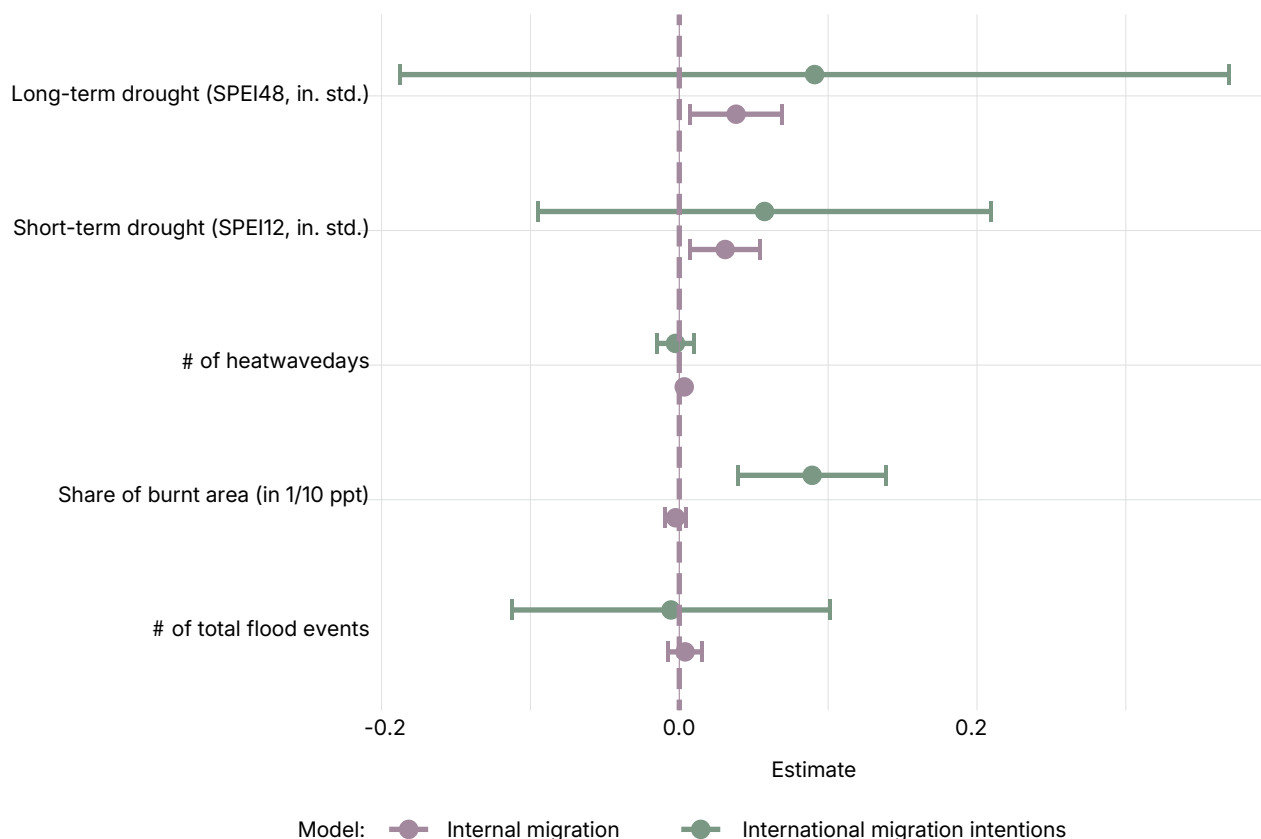
### **3.1. Depopulation of rural areas: livelihood insecurities**

**Key message:** while socio-economic factors remain the main cause of rural depopulation in South-Eastern Europe, drought events are an important driver of internal migration. More frequent, intense and prolonged drought events harm agriculture and tourism, increase the vulnerability of those who remain and ultimately threaten the stability of the region.

Among other factors, this piece of research shows that drought risks play a significant role in shaping internal migration patterns in South-Eastern Europe (Figure 3.1). Our estimates indicate that a one-standard-deviation increase in drought exposure is associated with approximately a 3.6% increase in the internal emigration counts. As regards migration intentions, the corresponding estimate is a 3.5 percentage-point increase, equivalent to about a 17.5% rise relative to the baseline migration probability. However, the latter effect is not statistically significant. These effects are most pronounced in rural and agriculturally dependent areas, where environmental stress translates more directly into livelihood insecurity.



**Figure 3.1. Predicted impacts of environmental hazards on internal migration patterns and international emigration intentions in South-Eastern Europe.**



The figure shows the estimated effects of drought events, wildfires, flooding and heat episodes on internal migration and on intentions to migrate internationally. Estimates show the expected change in the internal migration rate and the share of Balkan Barometer respondents with international migration intentions with a change in the environmental hazard indicators.

Sources: NSO internal migration data and RSS/Balkan Barometer emigration intention data.<sup>22</sup>

**In addition to droughts, wildfires also influence mobility dynamics.** Here, our estimates indicate that a 0.1 percentage-point increase in the regional share of burnt area is associated with an approximately 3.45 percentage-point increase in migration intentions, corresponding to about a 17% increase relative to the baseline migration probability.<sup>23</sup>

**Agriculture remains a vital sector in South-Eastern Europe, contributing 11% of total GDP (IMCCS 2022), yet it is becoming ever more vulnerable to the impacts of climate change,** particularly in mountainous and remote areas. This vulnerability has started to emerge as a driver of migration. In fact, Figure 3.2 shows that the area with the highest share of cropland, mainly in the north of South-Eastern Europe, is also the region most affected by drought.<sup>24</sup> A similar trend is observed in Bosnia and

<sup>22</sup> The results were estimated using longitudinal models testing whether the occurrence of environmental hazards led to increases in internal migration and emigration intentions over time. The results show that drought events had a positive effect on both internal migration and emigration intentions; and that the occurrence of wildfires in a region had a positive effect on emigration intentions. The whisker shows the uncertainty range of the point estimates (95% Confidence Intervals).

<sup>23</sup> The authors found no statistically significant effects of wildfires on internal migration.

<sup>24</sup> Key expert interview with representative of ministry, Serbia, 06.03.2025.

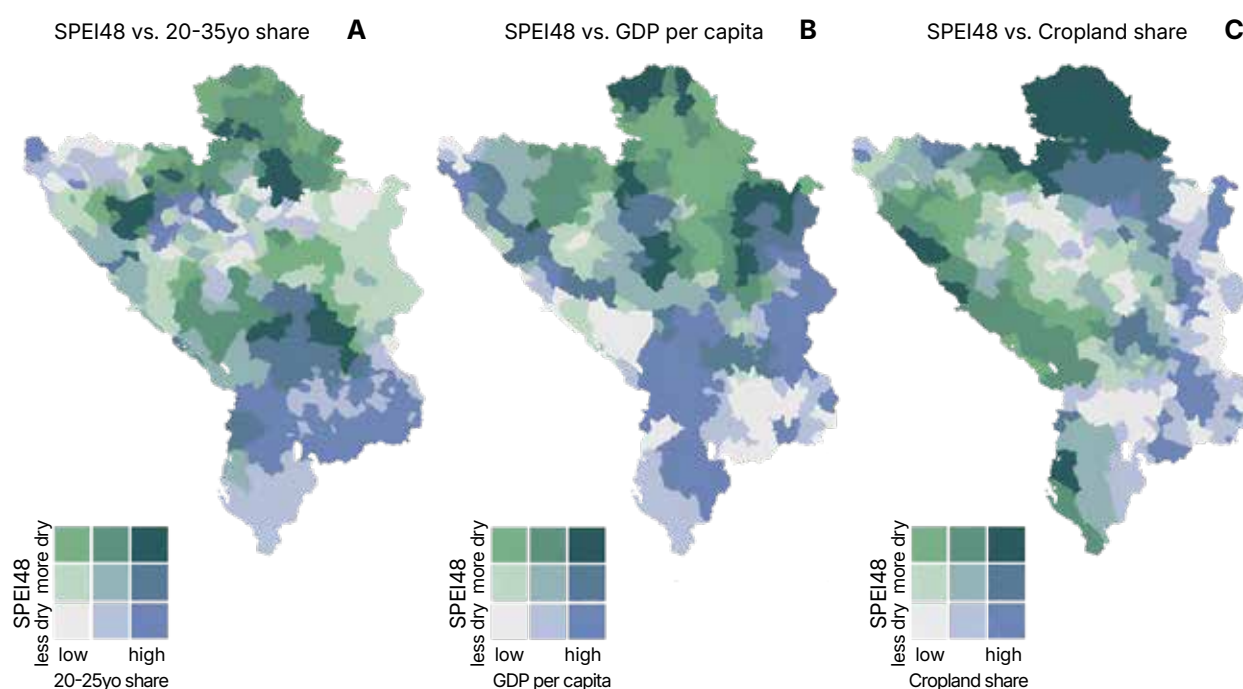




Herzegovina, where erratic climatic conditions, such as unseasonal snow in May, combined with inadequate irrigation and drainage infrastructure, are prompting many to abandon farming altogether.<sup>25</sup> These challenges have

been exacerbated by longstanding underinvestment in the agricultural sector, further limiting development prospects and contributing to a shrinking rural workforce.<sup>26</sup>

**Figure 3.2. Potential impacts of drought and aridity on migration combining climatic hazard and vulnerability indicators.**



The maps show the overlap between the SPEI48 drought indicator and the share of 20 to 35-year-olds (Panel A), the GDP per capita (Panel B), and the cropland share (Panel C) for each region.

Sources: SPEIBase, WorldPop, Kumm et al (2024), GDLC.

**Tourism, another crucial economic sector in rural areas, is highly susceptible to the impacts of climate change, further reducing livelihood opportunities.** Montenegro's northern regions, which already lag behind the more urbanized coast and the capital, have been particularly affected by the decline in winter tourism – a key pillar of the local economy – owing to reduced snowfall. This has directly undermined job and income prospects for local communities, compounding the long-standing drivers of out-migration from these

areas (Montenegro Ministry of Economic Development 2022; World Bank 2023). In Albania, repeated extreme heatwaves, droughts, and wildfires have forced tourist evacuations and the temporary closure of major destinations.<sup>27</sup>

**The depopulation of rural areas sets off a cascade of economic and social repercussions that may undermine security.** Persistent out-migration erodes local economies, communities and infrastructure, leading to

<sup>25</sup> Key expert interview with representatives of international organization working on migration and refugees, Bosnia and Herzegovina, 05.03.2025.

<sup>26</sup> Key expert interview with representative of international organization working on development, climate/environment and migration, Serbia, 06.03.2025.

<sup>27</sup> Key expert interview with representative of civil society organization working on sustainable development and climate/environment, Albania, 25.03.2025.



progressive deterioration and the closure of businesses and local essential services, such as schools and healthcare centres. In areas where more than 20–30% of the population has left, remittance flows often dwindle as entire families emigrate and community ties weaken, reinforcing a sense of permanent abandonment (World Bank 2021; Bajra 2021). In Albania, the contribution to national GDP by the rural county of Kukës, for instance, has plummeted from 18% in 1990 to just 2% by 2020 (Monitor 2022) as the departure of young people has accelerated the decline of traditional livelihoods (such as shepherding and subsistence farming) and led to the abandonment of habitats such as grasslands.<sup>28</sup> To date, Kukës remains the poorest region in Albania, contributing only €237 million – or 1.6% – to national GDP in 2021 (INSTAT 2023).

**Long-term out-migration trends leave individuals and groups staying behind – particularly the elderly – vulnerable to heightened climate risks.** For example, in North Macedonia's Shar Mountain National Park, remoteness, limited local capacity and persistent underfunding have left fire prevention and response systems severely overstretched, forcing residents – many of them elderly – to confront the threat of wildfires with minimal support (Ranocchiari 2023). Similarly, elderly people were among the most affected during the 2014 floods in Bosnia and Herzegovina and Serbia: their limited mobility and reliance on disrupted community support heightened their vulnerability (WHO 2014). In addition, communities in remote and mountainous regions may become particularly vulnerable to trafficking, a risk especially acute for young women in northern parts of Albania, as reported by key informants.<sup>29</sup>

### 3.2. Urbanization, environmental degradation and climate risks: pressures and social inequalities

**Key message: rapid, unplanned urbanization, driven by rural-to-urban migration, is leading to severe environmental degradation, increased climate risks and growing social inequalities in cities in South-Eastern Europe. Emigration currently contributes to the mitigation of social tensions, functioning as a “safety valve”.**

**The ongoing movement of people from rural to urban areas is placing significant strain on city infrastructure and services.** This persistent trend has fuelled rapid and often unplanned urban expansion, outstripping the capacity of public systems for water, energy and transport (Jeftić et al. in Filho et al. 2019). In Albania, a large influx of internal migrants to the capital, Tirana, has overwhelmed urban infrastructure, which is unable to cope with such a rapid population growth. This has led to challenges such as insufficient housing, overloaded drainage systems, and inadequate waste management – all of which are further exacerbated by climate change impacts such as increased flooding and heatwaves.<sup>30</sup> Similarly, in Serbia, migration from rural areas and smaller towns to Belgrade has put intense pressure on the city's drainage systems, which struggle to cope with the combination of rising demand and more intense precipitation linked to climate change, resulting in frequent urban flooding. The proliferation of informal settlements on the city's outskirts further compounds these challenges: many of these areas lack basic utilities and are especially vulnerable to environmental hazards.<sup>31</sup>

28 Key expert interview with representative of civil society organization working on environment and climate change, Albania, 07.04.2025.

29 Key expert interview with representatives of civil society organization working on human rights, Albania, 25.03.2025.

30 Key expert interview with independent advisor on sustainable development, migration and climate/environment, Albania, 07.04.2025.

31 Key expert interview with representative of international organization working on development, climate/environment and migration, Serbia, 06.03.2025.



**Unplanned urban development is creating severe environmental hazards, most notably air pollution and a loss of green space.** Especially during winter months, cities like Sarajevo, Belgrade and Skopje are now ranked among the most polluted in the world (AFP 2024), a problem primarily exacerbated by their outdated heating systems and by traffic congestion. These challenges are further intensified by specific geographical and meteorological conditions, as well as the growing effects of climate change which, together, contribute to prolonged pollution episodes.<sup>32</sup> In Sarajevo, unregulated construction has blocked natural air corridors, trapping pollution in the valley and forcing school closures during winter months.<sup>33</sup> In coastal Montenegro, rapid and often illegal construction for tourism has destroyed green spaces, increased runoff and damaged natural ecosystems, prompting local protests.<sup>34</sup> This adds to other challenges that individuals encounter when moving to cities, including securing employment and high living costs (IOM 2021a). For example, owing to increased demand, housing costs in capitals like Tirana and Belgrade have risen so sharply that many newcomers, as well as low-income and vulnerable inhabitants, are forced to live in overcrowded or informal settlements where access to basic services such as water, sanitation and healthcare is limited.<sup>35</sup>

**The combination of urban degradation and intensifying climate impacts, such as heatwaves, creates se-**

**vere public health risks**, particularly for vulnerable populations, for instance the elderly and children.<sup>36</sup> In urban centres across South-Eastern Europe, poor air quality resulting from industrial activity, traffic and heating is a major health concern: it leads to respiratory illnesses and other chronic conditions.<sup>37</sup> In Sarajevo, unregulated urban development and intensifying climate impacts – such as more frequent heatwaves – have exacerbated air pollution; this has led to serious health risks, disrupted daily life, including school closures, and increased illness, particularly among vulnerable groups.<sup>38</sup> In Pijevlja, Montenegro, pollution from the local coal plant has contributed to high rates of cancer and respiratory diseases. Combined with limited economic opportunities, this has been a major push factor driving people to leave the area.<sup>39</sup>

**Unplanned development, often proceeding without any adequate climate risk assessment, increases the danger of floods and landslides.** This is evident in the hills of Sarajevo, where construction in hazard-prone zones continues, driven by poverty, weak rule of law, and profit motives overriding safety considerations.<sup>40</sup> In North Macedonia and Montenegro, rapid and often illegal construction in urban and coastal areas strains the infrastructure and leaves new developments vulnerable to climate risks such as heatwaves and flooding, given that environmental assessments are often ignored.<sup>41</sup> In the Bjelopavlići Plain near Podgorica, for example, un-

32 Key expert interview with representative of international organization working on development, climate/environment and migration, Serbia, 06.03.2025; key expert interview with representative of international organization working on development, climate/environment and migration, Bosnia and Herzegovina, 26.05.2025; and key expert interview with representative of ministry, North Macedonia, 27.03.2025.

33 Key expert interview with representative of international organization working on development, climate/environment and migration, Bosnia and Herzegovina, 26.05.2025.

34 Key expert interview with representatives of civil society organization working on sustainable development and climate/environment, Montenegro, 27.05.2025.

35 Key expert interview with representative of civil society organization working on environment and climate change, Albania, 07.04.2025; and key expert interview with representative of international organization working on development, climate/environment and migration, Serbia, 06.03.2025.

36 Key expert interview with representative of civil society organization working on environment and climate change, Albania, 07.04.2025.

37 Key expert interview with representative of international organization working on development, climate/environment and migration, Serbia, 06.03.2025; key expert interview with representatives of international organization working on migration and refugees, Bosnia and Herzegovina, 05.03.2025; and key expert interview with representative of civil society organization working on human rights, migration and climate change and environment, Kosovo, 21.05.2025.

38 Key expert interview with representative of international organization working on development, climate/environment and migration, Bosnia and Herzegovina, 26.05.2025.

39 Key expert interview with representative of civil society organization working on climate/environment, North Macedonia, 27.03.2025.

40 Key expert interview with representatives of regional organization, Bosnia and Herzegovina, 04.03.2025.

41 Key expert interview with representative of civil society organization working on climate/environment, North Macedonia, 27.03.2025; and key expert interview with representatives of international organization working on sustainable development and climate/environment, Montenegro, 28.05.2025.



planned and illegal construction has reportedly led to the degradation of agricultural land and increased flood risk, with urbanization disrupting drainage and natural water flows (Popovic et al. 2018).

**These urban pressures disproportionately affect marginalized and low-income groups, deepening social inequalities.** In South-Eastern Europe, Roma communities often live in informal settlements in hazardous, flood-prone areas, with little access to basic services or political representation.<sup>42</sup> This makes them highly vulnerable to climate-related disasters. During the 2024 floods in Bosnia and Herzegovina, many homes of the Roma communities were washed away, yet they were often the last to receive assistance (UN 2024). Similarly, internally displaced persons (IDPs) from the conflicts of the 1990s and returnee populations often settle in hazardous areas owing to economic constraints (UNESCO 2023). This cycle of vulnerability is perpetuated by a lack of risk-informed urban planning.<sup>43</sup> For example, many of the houses affected by the 2014 floods had been built illegally in at-risk areas, and were populated by IDPs and displaced Roma communities (UNESCO 2023).

**Widespread emigration to outside the region currently acts as a safety valve, mitigating the rise of social tensions in these urban environments under pressure.** Despite growing pressures, social tensions in urban areas in the region have rarely escalated into large-scale violence and political instability – unlike in other regions around the world.<sup>44</sup> The continuous outflow of both skilled and unskilled workers to the EU and other countries provides an outlet, easing competition for jobs and resources, and keeping urban growth somewhat manageable.<sup>45</sup> For instance, during the 1990s there were tensions in Albania related to the chaotic settlement of internal migrants around Tirana, as competition for re-

sources and perceptions of crime and insecurity rose, but the situation has by now largely stabilized.<sup>46</sup> However, social issues could flare up in the future (IMCCS 2022).

### 3.3. Migration, land and natural resources: social tensions and conflicts

**Key message: the depopulation of rural areas is creating vacuums, leading to increased environmental degradation and the risk of illicit activity. Simultaneously, competition over land and water resources, driven by development pressures and exacerbated by climate change, is becoming a growing source of social tension and conflict.**

**The migration-driven depopulation of rural areas is increasing environmental degradation and, in some cases, paving the way for criminal activity.** With fewer people to cultivate, monitor and protect the land, abandoned areas across South-Eastern Europe have become vulnerable to illegal logging, illegal waste dumping and even the cultivation of drugs by criminal networks (IOM 2021a). In some cases, abandoned lands have been used for the cultivation of illicit crops by organized criminal groups, for example in mountainous regions of Albania (Mejdini et al. 2019). While depopulation has in some instances reduced the pressure on forests for firewood, concerns remain about the inadequate management of forest resources, as well as persisting instances of illegal logging (Knez et al. 2022). In Albania, the absence of local communities has allowed private companies in

42 Key expert interview with representatives of regional organization, Bosnia and Herzegovina, 04.03.2025.

43 Key expert interview with representative of international organization working on development, climate/environment and migration, Bosnia and Herzegovina, 26.05.2025.

44 For example, in Johannesburg, South Africa, competition for scarce resources – such as housing, jobs and basic services – has contributed to recurrent outbreaks of xenophobic violence targeting migrants; this has resulted in deaths, displacement and heightened political instability as authorities struggle to respond effectively (BBC 2019). Similarly, in Karachi, Pakistan, rapid urbanization, informal settlements and poor municipal governance have contributed to ethnic and political violence, with rival groups vying for control over neighbourhoods and resources (Gazdar et al. 2013).

45 Key expert interview with representatives of civil society organization working on migration, Serbia, 07.03.2025.

46 Key expert interview with representative of civil society organization working on sustainable development and climate/environment, Albania, 25.03.2025.



some sectors – especially in mining – to operate with minimal environmental oversight.<sup>47</sup> This has led to environmental damage, including deforestation, water pollution and landscape degradation in areas like Kukës and Bulqizë, where residents are too few – or too disempowered – to hold companies accountable (Belis et al. 2024; BalkanInsight 2025). In Montenegro, there has been an increased reporting of wildfires in abandoned areas; these are sometimes started intentionally to clear land for construction, but authorities have a limited capacity to respond on the mountainous terrain.<sup>48</sup>

**Competition over land and water is intensifying as climate change drives more frequent and intense periods of drought, water scarcity, and extreme weather, potentially creating new sources of tension and conflict.** This is especially apparent in rapidly urbanizing areas, where large-scale development projects often clash with the needs of local communities. In southern Albania, for instance, proposals to divert water from the Shushica River to support tourism in Himara have triggered widespread protests from residents and conservationists. With river flows already decreased by climate change, there are fears that the project will further damage river ecosystems, threaten water security and undermine the livelihoods of villages reliant on ecotourism connected to the Vjosa National Park (IUCN 2025, The Peninsula 2024). As these pressures mount in Himara, as well as in other parts of the region, and traditional livelihoods become increasingly unsustainable, many rural inhabitants may be compelled to migrate to cities or abroad (IMCCS 2022). This trend is further fuelled by new laws permitting the privatization of public forest land for tourism development, which threatens agricultural livelihoods and accelerates rural depopulation.<sup>49</sup>

Similar dynamics are playing out elsewhere in the SEE region. In Bosnia and Herzegovina and Serbia, plans for new hydropower dams and lithium mines have encountered strong local opposition that is based on concerns about environmental harm, loss of livelihoods, and in-

adequate transparency and consultation (Antikorupcija 2024; Todorović 2025). Nevertheless, such projects often proceed because of their profitability for authorities and businesses, despite the vulnerability and migration they may produce.<sup>50</sup>

Pre-existing land tenure challenges are being exacerbated by environmental degradation, increasing the risk of conflict. Climate-induced land degradation and soil erosion are fuelling a rise in land disputes and property conflicts. As livelihoods become increasingly insecure, a growing number of people may be compelled to move both within and beyond their regions in search of safety and sustainable livelihoods.

### 3.4. Climate-induced displacement, disaster response and recovery: the erosion of trust in the authorities

**Key message: the failure of the authorities to effectively prevent and respond to climate-related disasters is deepening the already profound public mistrust in institutions, ultimately undermining social cohesion and legitimacy.**

**The floods of May 2014 had a devastating impact across Serbia and Bosnia and Herzegovina, exposing the region's acute vulnerability to climate-induced extreme weather events.** More than three million people were affected by the floods, with tens of thousands forced to evacuate and severe losses suffered by health services, water and sanitation systems, and livelihoods (Jovanovic-Popovic and Milincic 2016; UNESCO 2023). Beyond the immediate destruction, the floods led to significant and often prolonged displacement (IDMC 2025, UNESCO 2023). Displacement not only disrupted daily

47 Key expert interview with representatives of civil society organization working on sustainable development, Albania, 04.04.2025.

48 Key expert interview with representatives of international organization working on sustainable development and climate/environment, Montenegro, 28.05.2025.

49 Key expert interview with representative of civil society organization working on sustainable development and environment, Albania, 08.04.2025.

50 Key expert interview with representatives of civil society organization working on human rights, Albania, 25.03.2025; key expert interview with representatives of regional organization, Bosnia and Herzegovina, 04.03.2025.

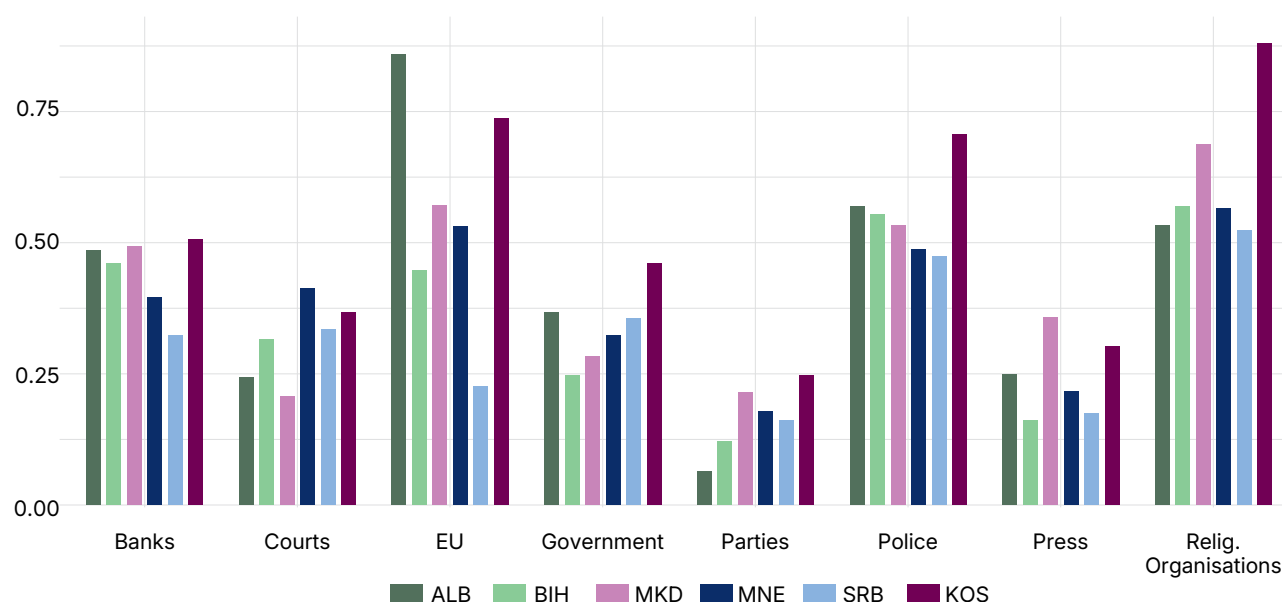


life, but also severed social ties, interrupted children's education and heightened the vulnerability of already marginalized groups (UNESCO 2023). The destruction of infrastructure and loss of livelihoods further hampered recovery efforts, leaving some areas depopulated and accelerating demographic decline (Jovanovic-Popovic and Milincic 2016; World Bank 2024). Although much displacement caused by extreme events is temporary, repeated incidents can lead to permanent relocation. This has been observed along the Sitnica River in Kosovo, where some residents have moved away from flood-prone areas to seek safer ground.<sup>51</sup>

**Institutional failures during disaster response corrode public trust, exacerbating a pre-existing crisis of confidence across the region.** According to the RCC's SecuriMeter 2024, trust in some public institutions and the press is low, while citizens place greater faith in religious institutions, the police, and international bodies such as the EU and NATO (RCC 2024) (Figure 3.3). This deep-seated mistrust is inflamed when institutional responses to disasters are perceived as inadequate and, sometimes, as hindered by corruption. For example, following the 2024 floods in Bosnia and Herzegovina, which resulted in 27 fatalities and widespread damage to infrastructure and livelihoods, protests erupted over the disaster response and lack of transparency concerning relief funds. These events further eroded public confidence in the authorities and highlighted ongoing issues of crisis governance and accountability (reliefweb 2024; Reuters 2025).

**Figure 3.3. Levels of trust in various institutions in the SEE region.**

Share of those that have confidence



*In the figure, the bar charts show the share of SecuriMeter respondents that indicated confidence in various institutions.*

Source: RCC/SecuriMeter, 2024.

<sup>51</sup> Key expert interview with representative of civil society organization working on human rights, migration and climate change and environment, Kosovo, 21.05.2025.





**Insufficient investment in long-term disaster risk reduction (DRR) leaves communities exposed and deepens public mistrust.** Despite some progress and increased awareness about the importance of proactive prevention and adaptation measures in recent years, across the region efforts remain heavily focused on short-term, post-disaster response (UNDP 2016). Comprehensive, forward-looking DRR strategies are largely absent and post-disaster assessments often neglect indirect impacts such as educational disruption and healthcare costs, further increasing the vulnerability of affected populations (UNDP 2016). Local governments frequently lack contingency funds and proactive planning, instead relying on ad-hoc funding during emergencies (UNDRR 2019). As a result, even when early warnings are issued, response efforts may still fall short of needs (UN 2024).

In some cases, citizens attribute their displacement not to the environmental hazard itself, but to what they see as the authorities' failure to protect them – a perspective echoed in other contexts beyond the region. For example, in Albania, some coastal communities have been forced to relocate owing to sea-level rise and increasing erosion. Yet residents often blame officials for not enforcing planning and building regulations or for failing to implement effective coastal protection measures. As noted by a key informant, this attitude is rooted in the expectation that the government should safeguard homes and livelihoods, rather than in concern about the rising sea.<sup>52</sup> This pattern is not unique to Albania. Across the region, inadequate responses to climate-related hazards, such as floods or landslides, frequently cause displacement, which is then perceived primarily as a consequence of institutional neglect rather than a natural disaster. In many instances, the inability of authorities to provide timely and sufficient support is seen as a direct result of institutional failure, reinforcing a cycle of eroding trust in the authorities and greater vulnerability to future displacement (UNDP 2016; UNESCO 2023).

### 3.5. Workforce gaps and the green transition: implications for energy security

**Key message: massive emigration is creating labour shortages that may derail the region's green transition and economic development. While the transition away from fossil fuels poses risks such as job displacement and social unrest, it also offers significant opportunities for creating new, sustainable livelihoods if managed through a just transition framework.**

**The "brain drain" in South-Eastern Europe has created a major bottleneck for the investments needed for the green transition.** In fact, skills shortages threaten to delay the Net Zero transition: the region has not enough domestic talent in key sectors, and training and reskilling schemes are not being scaled up at the required pace (Adams 2024; ETF 2022; World Bank 2024). In Albania, for example, the lack of qualified personnel hampers the country's ability to design, implement, and manage green policies and technologies effectively. Similarly, Serbia's efforts to increase the number of specialists in key sectors for the green transition are often hampered by insufficiently skilled labour, which slows down the adoption of green technologies in both the public and private sectors (EU4Green 2024, JRC 2024). Outdated immigration systems further compound the issue, acting as barriers for employers who need to access skilled talent (ILO 2023). For example, in Serbia, Bosnia and Herzegovina, and North Macedonia, employers who wish to hire skilled foreign engineers or technicians for green infrastructure projects often face months-long delays owing to lengthy procedures for the recognition of foreign diplomas and professional qualifications; this makes it difficult to fill urgent vacancies in the fields of renewable energy, construction, or environmental management (JRC 2024).

**The transition away from coal also presents a major socio-economic challenge that, if mismanaged, could become a driver of further instability and migration.**

<sup>52</sup> Key expert interview with representatives of civil society organization working on sustainable development, Albania, 04.04.2025; and key expert interview with representative of international organization, Albania, 25.03.2025.



The planned closure of coal mines and power plants across the region as part of the decarbonization process required for EU accession might lead to significant job losses, especially in places where coal has traditionally been the backbone of the local economy. In North Macedonia's Bitola region, for example, the closure or down-sizing of coal mines and power plants threatens the livelihoods of entire communities; many workers – mainly men – have skills that are not easily transferable to other sectors and alternative employment opportunities are limited.<sup>53</sup> Without clear, well-funded plans for a just transition to support affected workers and communities, rising unemployment is likely and social unrest could occur, especially in regions already struggling with high joblessness and poor infrastructure. This could become a powerful push factor for migration (Djatkov 2024). However, to date, there has not been an explicit recognition of the just transition as a central element in the development of Integrated National Energy and Climate Plans (NECPs) across the region. This omission reflects a lack of awareness of social equity considerations, which may increase the risk of negative socio-economic impacts, potentially leading to migration from affected communities (CAN Europe 2025).

Beyond labour issues, **the green transition and climate change impacts are affecting energy security, which in turn can drive further migration.** The region's heavy reliance on hydropower and domestic coal makes it vulnerable to climate-related disruptions (REKK Foundation 2019; IMCCS 2022; UNESCO 2023; Trifonova and Dangova 2023; Vukovic 2018). Droughts, for example, have caused sharp drops in hydropower output in Albania – in 2007 and 2022, for instance – leading to blackouts, power shortages, and higher energy prices, which exacerbate energy poverty (Reuters 2022). Geopolitical dependencies add further risks, as could be seen in Bosnia and Herzegovina during the 2022 energy crisis, when a lack of alternative gas suppliers led to soaring prices and threats to economic stability (RUSI 2021). Meanwhile, growing demand for critical minerals needed for

clean energy technologies – coupled with instances of mismanagement – can fuel new local tensions, such as disputes over proposed lithium mines in Bosnia and Herzegovina (Antikorupcija 2024; Balkan Green Energy News 2025). As energy disruptions, rising living costs and environmental degradation persist, more communities may turn to migration, intensifying demographic decline and social pressures in the region (UNESCO 2023; World Bank 2024; IOM 2023b).

**While challenging, the green transition also offers a significant opportunity to build a more sustainable and resilient economic future.** The expansion of renewable energy and other green industries can create new, healthier and more sustainable jobs in the SEE region. This would provide a potential pathway for workers transitioning from fossil fuel industries and help retain young people in the region.<sup>54</sup> In Kosovo, for example, plans are underway to close power plants while investing in the regeneration of the area and developing renewable energy education.<sup>55</sup> In Montenegro, a just transition roadmap supported by the UNDP focuses on upskilling workers and establishing a Green Jobs Academy to create new employment opportunities.<sup>56</sup> Furthermore, harnessing the financial and human capital of the diaspora through remittances and direct investment could provide a vital source of funding to support a sustainable economic transition (IOM 2023b). Successfully navigating this transition will be critical for the long-term energy security and economic stability of the region.

53 Key expert interview with representative of ministry, North Macedonia, 27.03.2025.

54 Key expert interview with representatives of international organization working on migration, Serbia, 06.03.2025.

55 Key expert interview with representative of civil society organization working on human rights, migration and climate change and environment, Kosovo, 21.05.2025.

56 Key expert interview with representatives of international organization working on sustainable development and climate/environment, Montenegro, 28.05.2025.







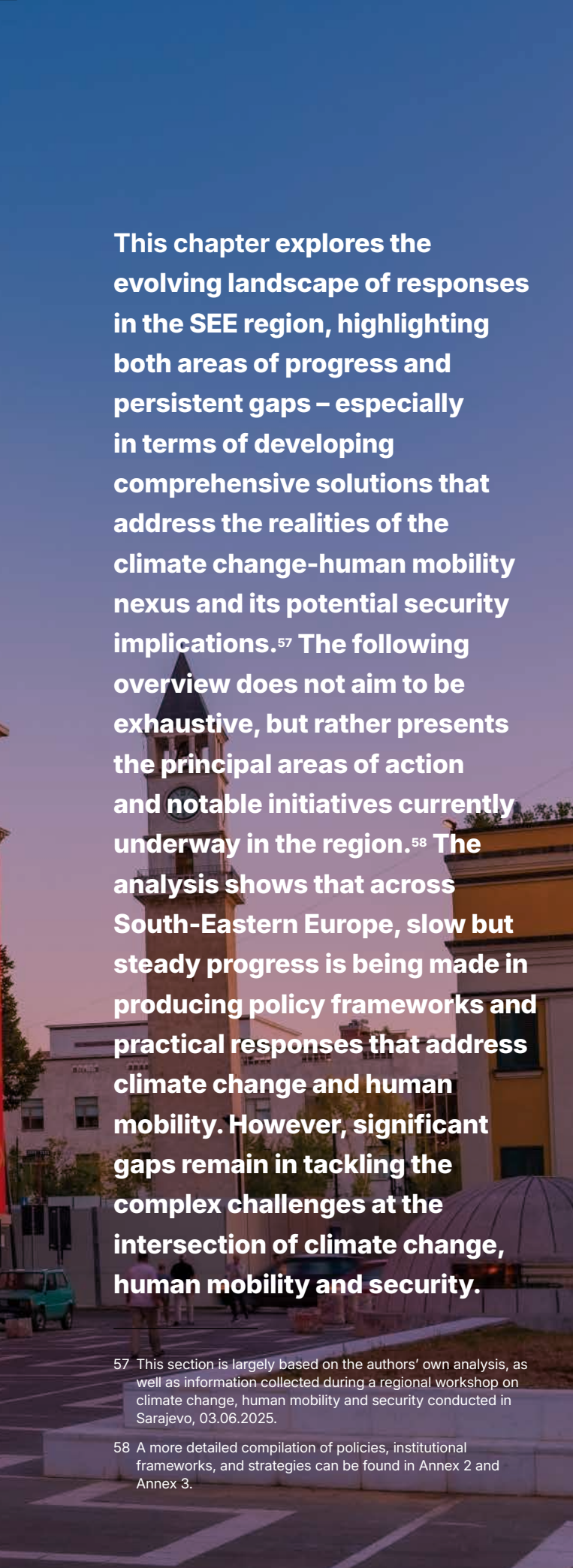




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## 4. Responses





This chapter explores the evolving landscape of responses in the SEE region, highlighting both areas of progress and persistent gaps – especially in terms of developing comprehensive solutions that address the realities of the climate change-human mobility nexus and its potential security implications.<sup>57</sup> The following overview does not aim to be exhaustive, but rather presents the principal areas of action and notable initiatives currently underway in the region.<sup>58</sup> The analysis shows that across South-Eastern Europe, slow but steady progress is being made in producing policy frameworks and practical responses that address climate change and human mobility. However, significant gaps remain in tackling the complex challenges at the intersection of climate change, human mobility and security.

57 This section is largely based on the authors' own analysis, as well as information collected during a regional workshop on climate change, human mobility and security conducted in Sarajevo, 03.06.2025.

58 A more detailed compilation of policies, institutional frameworks, and strategies can be found in Annex 2 and Annex 3.

## 4.1. Key initiatives at the intersection of climate change, human mobility and security

**Across the SEE region, climate policies and strategies rarely address human mobility.** Key frameworks, such as Nationally Determined Contributions (NDCs)<sup>59</sup> and the National Adaptation Plans (NAPs) of the United Nations Framework Convention on Climate Change (UNFCCC), tend to overlook issues of migration, displacement, or relocation, or to mention them without linking them to climate risks. Where internal migration patterns are noted, policies typically do not integrate these considerations into adaptation or resilience planning.<sup>60</sup> Overall, human mobility remains largely absent from climate frameworks in the region, with only isolated and indirect references appearing in the relevant policies and strategies (see Annex 2.2).

**At the same time, in many contexts mobility policies and strategies rarely address climate change or environmental factors.** For instance, numerous migration strategies and action plans make little or no mention of the climate, the environment, resilience, or the green transition, and often only refer to related sectors, such as agriculture, in the context of economic opportunities for diaspora investment.<sup>61</sup> Even where climate is mentioned,

59 Nationally Determined Contributions (NDCs) are national climate action plans developed by each country under the [Paris Agreement](#) and submitted every five years to the UNFCCC Secretariat.

60 For instance, [Albania's Revised NDC](#) makes no reference to migration, mobility, displacement, or relocation; however, its [2021 National Adaptation Plan](#) considers climate-induced displacement and makes reference to the social vulnerabilities produced by uneven development processes that can aggravate risks arising from climate change – e.g. for marginalized people living in informal settlements. Similarly, [Bosnia and Herzegovina's 2020–2030 Climate Change Adaptation and Low-Emission Development Strategy](#) mentions migration only in passing, without linking it to climate risks or displacement. In North Macedonia and Serbia, climate documents acknowledge rural-urban migration and demographic shifts, but stop short of integrating migration as a component of climate adaptation or resilience planning. For more information, please see Annex 2.2.

61 In North Macedonia, for example, the [Resolution On the Migration Policy of the Republic of Macedonia 2015–2020](#) and [Resolution on Migration Policy of the Republic of North Macedonia 2021–2025](#) lack any references to climate or environmental factors. Similarly, the [Economic Migration Strategy of the Republic of Serbia for the Period 2021–2027](#) mentions neither climate nor green transition, and does not consider the potential impacts of environmental change on migration patterns. Similarly, in [Albania's National Strategy on Migration and Action Plan 2019–2022](#) and the [updated 2024–2030 strategy](#), climate is mentioned just once, without any substantive engagement or dedicated actions linking climate change to human mobility. For more information, please see Annex 3.2.





references are typically brief and lack substantive engagement or dedicated actions linking climate change to human mobility (see Annex 3.2).<sup>62</sup>

**Security considerations, when present, are typically focused on traditional risks**, such as transit area management, crime prevention and the regulation of migration flows. They rarely extend to the broader or emerging security implications that may arise from the interplay between climate change and human mobility, such as: community tensions, resource competition, or the vulnerability of displaced populations. In most migration strategies, for example, while there is some recognition of demographic shifts and urbanization as potential challenges, no clear link to climate-related security risks is made, nor to the compounded vulnerabilities that might arise from environmental change and mobility taken together. Similarly, they do not explicitly address broader human security concerns – such as the protection of vulnerable groups displaced by floods or other climate events.<sup>63</sup> This fragmented approach is reinforced by a lack of available data and information on these linkages, and hence a limited awareness among policymakers, as well as by siloed institutional structures, and a general lack of capacity to tackle cross-cutting challenges.<sup>64</sup>

**A notable example of an integrated approach is the Western Balkans Strategy** (2022–2025) of the International Organization for Migration (IOM), which aligns with the IOM's global **Institutional Strategy on Migration, Environment and Climate Change (MECC) 2021–2030**. The regional strategy highlights environmental degradation and natural hazards as key drivers of migration and displacement, and calls for greater co-ordination and knowledge exchange among stakeholders in South-Eastern Europe. In Serbia, the IOM has been involved in the development of a new environmental protection strategy, financed by the European Union, which acknowledges the link between climate change and migration for the first time (UNDP 2023b; Spasić 2024).<sup>65</sup> In North Macedonia, the IOM is working to establish a

**Green Finance Facility Centre** focused on leveraging remittances and diaspora contributions to finance climate action, thereby demonstrating how migration can be harnessed for positive development and climate resilience.<sup>66</sup> The organization is also supporting the process of mainstreaming migration considerations into North Macedonia's NAP by developing the capacities of stakeholders on the migration, environment and climate change nexus, including considering interlinkages with gender issues (IOM 2024c). Meanwhile, Albania will be part of a global IOM programme aiming to leverage labour migration as a climate change adaptation strategy, involving a holistic rights-based and gender-sensitive approach (IOM 2024d).

**Other international stakeholders in the region have also begun to address these interconnections.** The European Parliament, for example, has produced a background paper that encourages stakeholders in the EU and neighbouring regions to consider the impacts of climate change on mobility; the aim is to reduce vulnerabilities and foster resilience among affected populations (EPRS 2022). In its 2024 Western Balkans Regional Country Climate and Development Report, the World Bank encouraged economies in the region to strengthen climate resilience in order to protect people and boost economic growth (World Bank 2024) (see Annex 4 for an overview of integrated climate and mobility initiatives in South-Eastern Europe). Nevertheless, for the most part these initiatives remain externally driven, with limited local ownership and translation into local policy frameworks. With climate impacts expected to intensify in the coming years, it will be increasingly important for the SEE region to adopt proactive, collaborative, integrated measures that address the full range of interconnections between climate, human mobility and security. Exploring positive opportunities, such as the creation of green jobs and leveraging diaspora engagement in climate adaptation, can also contribute to economic resilience and regional stability.

62 For example, Bosnia and Herzegovina's **Migration and Asylum Strategy 2021–2025** mentions climate-related displacement but does not substantively engage with it.

63 For a comprehensive list of key strategies and action plans, please see Annex 2.2.

64 Information collected during a regional workshop on climate change, human mobility and security conducted in Sarajevo, 03.06.2025.

65 Key expert interview with representatives of international organization working on migration, Serbia, 06.03.2025.

66 Key expert interview with representative of international organization working on migration, North Macedonia, 27.03.2025.



## 4.2. Gaps and limitations of the current policy framework

**There is an overall shortage of integrated, comprehensive approaches, while existing siloes are also reflected in funding.** In the SEE region, the discourse and policy landscape on the linkages between climate change and human mobility is predominantly oriented towards the immediate impacts of climate-induced disasters, such as floods, droughts and landslides, and their role in triggering displacement. Hence this orientation is largely channelled through disaster risk reduction (DRR) frameworks which, while essential, tend to address only the most visible and acute forms of climate-mobility interactions. There is a notable absence of integrated, cross-sectoral strategies that would bridge climate adaptation, migration management and sustainable development. Funding mechanisms also reflect this fragmentation, with resources often allocated in siloes, thereby preventing the development of comprehensive solutions that address the underlying drivers and long-term trends of climate-related mobility.

**Moreover, the predominant narrative still largely portrays human mobility as a risk that needs to be addressed, rather than as a potentially positive adaptation strategy with beneficial outcomes.** Human mobility in the region is still predominantly framed as a negative phenomenon – a risk to be managed or mitigated – rather than as a legitimate adaptation strategy that can yield positive social and economic outcomes. Policy documents and public discourse often focus on brain drain, depopulation and irregular migration as challenges, overlooking their potential to strengthen resilience, facilitate skills transfer and drive sustainable development. There is limited recognition of how well-managed mobility might contribute to adaptation, for example through remittances, diaspora engagement, or the creation of green jobs, and thus little effort is made to mainstream this perspective into climate or migration policy frameworks.

**The regional perspective is underdeveloped.** While some projects are regional in scope, this essentially means that they are implemented in several parts of the SEE region, with some components designed to enhance co-operation in order to address climate-related

security risks and/or mobility. However, there are very few projects operating across the region, and these primarily focus on transit area management issues. Despite some efforts to foster regional co-operation, such as the [Green Agenda for the Western Balkans](#), [SEE 2030 Strategy](#) and the IOM's [Western Balkans Strategy](#), truly transboundary projects that holistically address the links between climate change, mobility and security remain rare. This lack of a robust regional approach hampers the co-ordination of data collection, the sharing of best practices, and the implementation of joint adaptation and mitigation strategies that would transcend boundaries while reflecting the common challenges of the region.

**The consequences of ongoing rural depopulation and rapid urbanization are insufficiently addressed in current policy frameworks.** There is a clear need for sustainable development strategies that raise awareness of the opportunities in rural and depopulated areas, and invest in essential services to make these areas attractive both for returnees and new residents. However, concrete policies and investments remain limited. Similarly, the green transformation agenda in the region is still in its early stages; policies promoting this agenda are limited, as is the involvement of the private sector when it comes to financing green infrastructure and innovation and, also, creating green jobs and supporting the transition to a low-carbon economy.

**Finally, the intersection of climate change, human mobility and security – in particular, “hard” security concerns such as organized crime – remains under-explored in both research and policy in South-Eastern Europe.** While there is a recognition that climate-induced displacement and migration could contribute to social instability, depopulation, and a weakening of the State's presence in rural areas, explicit links to security risks such as organized crime are rarely established. The potential for climate-mobility dynamics to exacerbate vulnerabilities in transit regions, create ungoverned spaces, or strain local capacities is only starting to be acknowledged in policy discussions, but has not yet been systematically integrated into security planning or risk assessments. This is an area where more evidence and policy attention are urgently needed.





# 5

## 5. Recommendations





**Understanding the complex linkages between climate change and human mobility – and their security implications – offers a valuable entry point for addressing the region’s resilience and adaptation needs. By discovering how climate-related hazards drive migration, displacement and shifting mobility patterns, policymakers can better anticipate risks, target support to vulnerable communities, and design integrated strategies that promote resilience and sustainable development through a holistic approach to security. This will not only enable more effective responses to climate impacts, but also support the alignment of policies and practices with EU standards on climate action, disaster risk reduction and social inclusion. In this way, the climate-mobility-security nexus can inform and accelerate efforts to build greener, more resilient societies, thus positioning the region on a credible pathway towards EU accession and long-term prosperity.**

This chapter outlines some practical recommendations to help ensure that the security implications of climate change for human mobility are fully considered and integrated into efforts to strengthen the region’s resilience. The recommendations also highlight ways to seize opportunities offered by the green transition towards a more sustainable and secure future. Overall, they emphasize that building resilience in South-Eastern Europe will require co-ordinated action at every level. Success depends on integrating climate and migration policies, investing in people and places, strengthening governance and fostering inclusive, sustainable development.

## **5.1. Fostering regional co-operation and integrated strategies**

**Strong regional co-operation – through joint planning, data sharing and governance – is vital for effective and resilient responses to climate, human mobility and security challenges.**

To this end, it is essential to:

- Develop a regional adaptation and mitigation strategy:** A co-ordinated regional approach is essential to address the interconnected challenges of climate change, human mobility and security. Stakeholders at different levels should work together to develop a regional framework for climate-sensitive human mobility that integrates social protection, development, and mitigation measures while leveraging existing regional platforms such as those provided by the OSCE and RCC. As an actionable starting point, stakeholders could work towards integrating specific climate-sensitive human mobility considerations into existing regional co-operation frameworks, such as the Action Plan for



the implementation of the Sofia Declaration on the Green Agenda for the Western Balkans. This would help prevent disparities in resilience programming, bridge regional divides, and facilitate joint responses to shared challenges such as water management, energy security and disaster risk reduction.

- Improve data, dialogue and technical co-operation:** Institutional authorities should be encouraged to invest in enhancing regional data collection and information-sharing on climate impacts, human mobility and security risks, working in partnership with research centres and civil society organizations. The establishment of regional platforms for exchanging experiences and best practices – such as a joint early warning centre and regional training hubs for climate adaptation in key sectors – should also be considered.
- Promote regional networks, including academia and engaged civil society actors:** Regional organizations should work with ministerial departments to support the development of regional networks including civil society, academic institutions and local governance platforms, to provide oversight and ensure the implementation of resilience strategies. Initiatives such as a regional mayors' network or youth co-operation network could strengthen local ownership and accountability.

## Who should act?

**Regional organizations, including the OSCE, RCC, and relevant EU institutions, should lead efforts to foster co-operation. Institutional authorities and ministries must actively participate in regional platforms, while civil society organizations and academia should be involved in joint projects and information-sharing. International partners can provide technical expertise and funding to ensure inclusivity and effectiveness.**

## 5.2. Strengthening policy and institutional frameworks

**Stronger policy and institutional frameworks are essential for effective regional co-operation; they will enable stakeholders in the region to implement joint actions, harmonize policies and build resilience to shared risks while supporting progress towards EU standards and accession.**

To this end, it is essential to:

- Integrate climate and human mobility policies:** Institutional authorities should mainstream climate and environmental considerations into migration, displacement and labour strategies – and vice versa – while respecting the integrity of each policy domain. This means, *inter alia*, developing comprehensive, risk-informed strategies that link climate adaptation and human mobility, using spatial vulnerability mapping and long-term planning. Migration and displacement should be systematically – but only where relevant – integrated into National Adaptation Plans (NAPs) and Nationally Determined Contributions (NDCs), with participatory mechanisms to ensure that differentiated needs and vulnerabilities are considered.
- Enhance disaster risk reduction (DRR) and preparedness:** Institutional authorities should move beyond reactive, post-disaster responses by investing in long-term DRR strategies and strengthening early warning systems, promoting risk-informed urban and rural planning, and encouraging strategic infrastructure investments. Local authorities, in particular, should be empowered to assess risks and develop prevention measures through participatory processes that actively engage communities and civil society while accounting for diverse vulnerabilities. Such efforts could help bridge climate and human mobility issues by reducing displacement risks and building resilience.
- Improve governance, transparency and trust:** A concerted effort led by institutional authorities, with





the support of regional and international organizations and civil society, is needed to tackle corruption, improve interministerial co-ordination, and ensure transparency in the allocation of disaster relief, development and climate funds. It is essential that authorities uphold the principles of good environmental governance and comply with international commitments such as the Aarhus Convention, ensuring public access to information, participation in decision-making and access to justice in environmental matters. Strengthening legal expertise – through environmental legal clinics and free legal assistance – will further reinforce governance, enhance policy effectiveness, and bolster the resilience and dignity of affected populations.

### Who should act?

**These recommendations primarily target institutional authorities and relevant ministries, such as those in charge of the environment, climate issues, mobility and social protection. Local authorities will also play a key role in adapting and enforcing these policies at the community level. Regional bodies such as the RCC and the OSCE could provide guidance and support harmonization across the region. Civil society organizations (CSOs) are key to ensuring open communication, participatory mechanisms and accountability for the management of resources.**

## 5.3. Investing locally in climate-resilient livelihoods

**Local initiatives should be supported because they build resilience by providing practical, community-driven solutions that advance sustainable development and ensure that no one is left behind.**

To this end, it is essential to:

- /// **Implement climate-resilient livelihood projects:** International donors and development agencies in

the region should invest in, and support local initiatives – such as nature-based solutions, sustainable agriculture, non-timber forest products and rural tourism – that build resilience and create economic opportunities in vulnerable communities. All interventions should be designed and implemented with a gender lens in order to ensure that women, particularly from rural areas and minority communities, and marginalized groups have equal access to resources, training and leadership roles, and that their specific needs and capacities are addressed.

- /// **Proactively seek to understand and guide mobility patterns:** Institutional authorities at all levels should recognize the adaptive potential of mobility, and proactively seek to understand and guide mobility trends through risk-informed, participatory analysis that reflects gender-differentiated drivers and impacts. This includes supporting safe and orderly migration pathways, diaspora engagement and, where necessary, planned relocations, with the support of international and regional organizations. Special attention should be given to the reintegration of returnees, ensuring that women and men benefit equally from remittances, skills transfer, and local development opportunities linked to sustainable and green jobs.
- /// **Strengthen urban resilience:** Institutional authorities should invest in urban infrastructure to address climate risks and migration pressures, prioritizing green infrastructure (such as urban green spaces and tree planting), the enforcement of sustainable building codes and land-use planning, and the upgrading of basic services. Capacity development and experience sharing – supported by international donors, development agencies, civil society organizations (CSOs) and academic partners – should promote the active participation of women and marginalized groups in urban planning and decision-making, thereby ensuring that urban resilience measures are inclusive and equitable.

- /// **Support refugees and migrants hosted in the region:** Institutional authorities should work towards ensuring equitable access to public services, social protection, and opportunities for refugees and mi-



grants, with a strong emphasis on gender-responsive and inclusive policies.

### Who should act?

**Local authorities and municipalities are best positioned to implement concrete projects on the ground, with the support of ministries in charge of rural development, social welfare and urban planning. CSOs, community groups and private sector actors should be involved as partners to ensure that interventions are context-specific and inclusive. International donors and development agencies could provide financial and technical support, particularly for pilot initiatives and to scale up successful models.**

## 5.4. Leveraging green economy opportunities

**The green economy presents opportunities for sustainable growth, job creation and increased resilience in the SEE region. Investment in green skills and partnerships could help ensure that the benefits of the green transition are accessible to a wide range of communities and contribute to inclusive, long-term development.**

To this end, it is essential to:

**Invest in education and training for green skills:** Institutional authorities should establish or reform vocational and educational programmes oriented towards skills relevant to the green transition – such as energy efficiency, renewable energy and climate adaptation – while actively promoting gender equality and women's participation. This includes supporting women and girls in the STEM and green sectors, addressing obstacles to career advancement, and ensuring that curricula and outreach efforts are inclusive and accessible to all. These initiatives should be implemented in partnership with local authorities, educational institutions, civil society organizations (CSOs) and the private sector, draw-

ing on the support and expertise of regional and international organizations.

### **Engage the diaspora as a resource for development:**

Institutional authorities should identify ways, and set up mechanisms to draw on the expertise, financial resources and networks of the diaspora to promote energy-efficient buildings, sustainable business ventures, and innovation. This could include the creation of diaspora engagement centres and facilitate the transfer of remittances for local development purposes.

### **Promote green jobs and sustainable livelihoods:**

Public-private partnerships designed to create green jobs, especially in sectors critical for the energy transition and climate adaptation, should be encouraged by institutional authorities, the private sector and civil society working together at all levels. Supporting hybrid and remote work models could help revitalize rural areas and reduce urban-rural disparities.

### **Support systemic, co-ordinated interventions:**

All stakeholders – particularly international and regional organizations – should move beyond isolated projects to implement integrated, cross-sectoral strategies for climate, mobility and development, ensuring that investments in green infrastructure and jobs are inclusive and sustainable.

### Who should act?

**Institutional authorities should set a strategic direction for the transition to a green economy, focusing on policy, regulatory frameworks, and incentives for green jobs and education. Ministries in charge of education, labour, the economy and diaspora affairs have central roles to play in developing training programmes and fostering diaspora involvement. Local authorities, educational institutions, CSOs and the private sector should collaborate to deliver training, create jobs and attract investment. International organizations and donors could support capacity building, knowledge exchange and resource mobilization.**







## References



- Adams, H. (2024). *Green Borders: Climate Change and Business Mobility*. Geneva: Deloitte, Business Advisory Group on Migration. Accessed 21 February 2025. [https://www.gfmd.org/sites/g/files/tmzbd11801/files/documents/france2023/Green%20Borders-%20Climate%20Change%20and%20Business%20Mobility\\_WEB.pdf](https://www.gfmd.org/sites/g/files/tmzbd11801/files/documents/france2023/Green%20Borders-%20Climate%20Change%20and%20Business%20Mobility_WEB.pdf).
- AFP (2024). "Three Balkan Capitals Among World's 10 Most Polluted Cities", Barron's. Accessed 25 February 2025. <https://www.barrons.com/news/three-balkan-capitals-among-world-s-10-most-polluted-cities-5cb2085d>.
- Amelung, B., and A. Moreno (2011). "Costing the Impact of Climate Change on Tourism in Europe: Results of the PESETA Project", *Climatic Change* 112: 83–100. Accessed 5 March 2025. <https://link.springer.com/article/10.1007/s10584-011-0341-0>.
- Antikorupcija (2024). "Bosnia and Herzegovina: Municipality & Environmentalists Oppose Opening of Lithium Mine, Complain about Lack of Transparency & Consultations with Local Communities", Business & Human Rights Resource Centre. Accessed 15 February 2025. <https://www.business-humanrights.org/en/latest-news/bosnia-and-herzegovina-municipality-environmentalists-oppose-opening-of-lithium-mine-complain-about-lack-of-transparency-consultations-with-local-communities/>.
- Associated Press (2024). "Bosnia Floods Death Toll Rises in Jablanica and Neretva after Heavy Rain". Accessed 5 February 2025. <https://apnews.com/article/bosnia-floods-death-toll-jablanica-neretva-rain-8cb727b971aa6e3943f727f077c0bbd7>
- BalkanInsight (2025). "'Lifeless': Pollution Threatens the Drin and its Tributaries in Three Balkan States", Balkan Insight. Accessed 7 October 2025. <https://balkaninsight.com/2025/02/06/lifeless-pollution-threatens-the-drin-and-its-tributaries-in-three-balkan-states/>.
- Balkan Civil Society Development Network (2025). Civic Space Report 2025: Western Balkans. ECF (European Civic Forum). Accessed 7 October 2025. <https://civic-forum.eu/wp-content/uploads/2025/06/Civic-Space-Report-2025-WesternBalkans.pdf>
- Balkan Green Energy News (2025). "Locals Defy Lithium Mining Plans on Mount Majeveca", Balkan Green Energy News, 13 March 2025. Accessed 7 October 2025. <https://balkangreenenergynews.com/locals-defy-lithium-mining-plans-on-mount-majeveca/>.
- Bajra, U. (2021). "The Interactive Effects of Remittances on Economic Growth and Inequality in Western Balkan Countries", *Journal of Business Economics and Management* 23(3): 757–775. Accessed 7 October 2025. [https://www.researchgate.net/publication/351006334\\_The\\_interactive\\_effects\\_of\\_remittances\\_on\\_economic\\_growth\\_and\\_inequality\\_in\\_Western\\_Balkan\\_countries](https://www.researchgate.net/publication/351006334_The_interactive_effects_of_remittances_on_economic_growth_and_inequality_in_Western_Balkan_countries).
- BBC (2019). "South Africa: How Common Are Xenophobic Attacks?", BBC News, 2 October 2019. Accessed 7 October 2025. <https://www.bbc.com/news/world-africa-47800718>.
- BCSDN (2024). "BCSDN Solidarity after the Devastating Floods in Bosnia and Herzegovina", BCSDN News, 8 October 2024. Accessed 7 October 2025. <https://balkanicsd.net/bcsdn-solidarity-after-the-devastating-floods-in-bosnia-and-herzegovina/>.
- Belis, D., R. Van Dingenen, Z. Klimont, and F. Dentener (2021). "Impact of Air Pollution on Health in South-East Europe", *European Journal of Public Health* 31 (Issue Supplement\_3), ckab164.113. Accessed 15 February 2025. <https://doi.org/10.1093/eurpub/ckab164.113>
- Belis, D., et al. (2024). Status of Environment and Climate in the Western Balkans. JRC Publications Repository. Accessed 7 October 2025. <https://publications.jrc.ec.europa.eu/repository/handle/JRC140061>.



- Benson, M., and K. O'Reilly (2016). "From Lifestyle Migration to Lifestyle in Migration: Categories, Concepts and Ways of Thinking", *Migration Studies* 4(1): 20–37. Accessed 1 March 2025. <https://academic.oup.com/migration/article-abstract/4/1/20/2413178?login=true>.
- Berlin Economics (2025). "Berlin Economics Supports the Development of Kosovo's First Voluntary NDC". Accessed 18 June 2025. <https://berlin-economics.com/en/berlin-economics-supports-the-development-of-kosovos-first-voluntary-ndc/#:~:text=In%20March%202025%2C%20Kosovo%20officially%20adopted%20its%20first,tackle%20climate%20change%20through%20coordinated%20efforts%20by%202030>.
- Berlin Process (2025). "What Is the Berlin Process?" Accessed 10 October 2025. <https://www.berlinprocess.de/>.
- Berlin Process (2025a). "Results of the Berlin Process". Accessed 10 October 2025. <https://www.berlinprocess.de/#results>.
- Biella, R., R. Hoffmann, and H. Upadhyay (2022). "Climate, Agriculture, and Migration: Exploring the Vulnerability and Outmigration Nexus in the Indian Himalayan Region", *Mountain Research and Development* 42(2): R9–R21. Accessed 7 October 2025. <https://www.jstor.org/stable/48695047?seq=1>.
- Bygnes, S., and A. Flipo (2016). "Political Motivations for Intra-European Migration", *Acta Sociologica* 59(2): 113–129. Accessed 2 June 2025. <https://journals.sagepub.com/doi/full/10.1177/0001699316659909>.
- CAN Europe (2025). "Do Final NECPs Sufficiently Address EU-level Just Transition Requirements? Just Transition Briefing". Accessed 31 January 2025. <https://1point5.caneurope.org/wp-content/uploads/2025/04/Just-Transition-Briefing-1.pdf>.
- CDI (Cooperation and Development Institute) (2024). *The EU Growth Plan for the Western Balkans: One Year After: Insight Paper*. Tirana: Cooperation and Development Institute. Accessed 7 October 2025. [https://cdinstitute.eu/wp-content/uploads/2024/11/Insight-paper\\_EU-GP-for-WBs.pdf](https://cdinstitute.eu/wp-content/uploads/2024/11/Insight-paper_EU-GP-for-WBs.pdf).
- CMS (Center for Migration Studies) (2021). "What We Know About Climate Change and Migration". Accessed 25 May 2025. <https://cmsny.org/wp-content/uploads/2021/02/What-We-Know-About-Climate-Change-and-Migration-Final.pdf>.
- Commissariat for Refugees and Migration of Serbia (n.d.). "About Us". Accessed 30 June 2025. <https://arhiva.kirs.gov.rs/articles/aboutus.php?lang=ENG>.
- Cuttitta, P., A. Pécouda, and M. Phillips (2022). "Civil Society and Migration Governance across European Borderlands", *Journal of Intercultural Studies* 44(1). Accessed 30 June 2025. <https://www.tandfonline.com/doi/full/10.1080/07256868.2022.2160099#d1e123>.
- Cvetkovska, S., D. Ilieski, I. Nasteska, P. Holcová, and A. Džonlić (2021). "'Europe's Waste Dump': How Dangerously Polluting Oil Ended Up Heating North Macedonia's Hospitals", *Organized Crime and Corruption Reporting Project (OCCRP)*, 21 May 2021. <https://www.occrp.org/en/investigation/europes-waste-dump-how-dangerously-polluting-oil-ended-up-heating-north-macedonias-hospitals>.
- Desai, H., and E. Forsberg (2020). *Multidimensional Fragility in 2020*. OECD Development Co-operation Working Papers, No. 79. Paris: OECD Publishing. Accessed 7 October 2025. [https://www.oecd.org/content/dam/oecd/en/publications/reports/2020/09/multidimensional-fragility-in-2020\\_2f8fc1ee/b4fbdd27-en.pdf](https://www.oecd.org/content/dam/oecd/en/publications/reports/2020/09/multidimensional-fragility-in-2020_2f8fc1ee/b4fbdd27-en.pdf).
- Digital Atlas (2024). "Advancing Medium and Long-Term Adaptation Planning in the Republic of Serbia (NAP)". Accessed 10 October 2025. <https://atlas-klime.eko.gov.rs/eng/about>.





Djatkov, D. (2024). Policy Report on the Green Transition in the Western Balkans, edition 2024. Accessed 7 October 2025. [https://www.westernbalkans-infohub.eu/wp-content/uploads/2024/08/Report\\_Green-Transition\\_final.pdf](https://www.westernbalkans-infohub.eu/wp-content/uploads/2024/08/Report_Green-Transition_final.pdf).

EEA (European Environment Agency) (2024a). European Climate Risk Assessment. Accessed 3 May 2025. <https://www.eea.europa.eu/en/analysis/publications/european-climate-risk-assessment>.

EEA (European Environment Agency) (2024b). 2024 European State of the Climate. Accessed 3 July 2025. <https://climate.copernicus.eu/esotc/2024>.

EEA (European Environment Agency) (2021). Municipal Waste Management in Western Balkan Countries—Country Profile: North Macedonia. Copenhagen: European Environment Agency.

EEA (European Environment Agency) (2021a). Municipal Waste Management in Western Balkan Countries—Country Profile: Montenegro. Copenhagen: European Environment Agency.

EEA (European Environment Agency) (2021b). Municipal Waste Management in Western Balkan Countries—Country Profile: Albania. Copenhagen: European Environment Agency.

EEA (European Environment Agency) (2020). Western Balkan Countries: 20 Years of Cooperation with the EEA. Copenhagen: European Environment Agency.

EPC (European Policy Centre) (2021). "Open Balkan Initiative: Less History, More Business". Accessed 13 September 2025. <https://cep.org.rs/en/blog/open-balkan-initiative/>.

EPRS (European Parliamentary Research Service) (2022). The Future of Climate Migration. Accessed 7 October 2025. [https://www.europarl.europa.eu/RegData/etudes/ATAG/2022/729334/EPRS\\_ATA\(2022\)729334\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/ATAG/2022/729334/EPRS_ATA(2022)729334_EN.pdf).

Ergezer, A. U., P. Balažič, and E. Kopliku (2021). Southeast Europe 2030 Strategy. Accessed 7 October 2025. <https://www.rcc.int/see2030/files/SEE-2030-strategy.pdf>.

ETF (European Training Foundation) (2021). How Migration, Human Capital and the Labour Market Interact in Montenegro. Accessed 29 January 2025. <https://www.etf.europa.eu/en/publications-and-resources/publications/how-migration-human-capital-and-labour-market-interact-3>.

ETF (European Training Foundation) (2022). Review of National Career Development Support Systems in the Western Balkans. Accessed 7 October 2025. [https://www.etf.europa.eu/sites/default/files/2022-09/ETF\\_WB%20synthesis%20report\\_EN.pdf](https://www.etf.europa.eu/sites/default/files/2022-09/ETF_WB%20synthesis%20report_EN.pdf).

EU4Green (2024). "SERBIA". Accessed 10 October 2025. <https://eu4green.eu/economy/serbia/>.

European Commission (2023a). "Kosovo visa liberalisation signed for entry in early 2024", Directorate-General for Migration and Home Affairs, 21 April 2023. Accessed 25 May 2025. [https://home-affairs.ec.europa.eu/news/kosovo-visa-liberalisation-signed-entry-early-2024-2023-04-21\\_en](https://home-affairs.ec.europa.eu/news/kosovo-visa-liberalisation-signed-entry-early-2024-2023-04-21_en).

European Commission (2023b). Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: New Growth Plan for the Western Balkans, 8 November 2023. Accessed 25 June 2025. [https://enlargement.ec.europa.eu/system/files/2023-11/COM\\_2023\\_691\\_New%20Growth%20Plan%20Western%20Balkans.pdf](https://enlargement.ec.europa.eu/system/files/2023-11/COM_2023_691_New%20Growth%20Plan%20Western%20Balkans.pdf).

Euronews Albania (2023). "44% of the economy in 2021 concentrated in Tirana, other districts fading", Euronews Albania, 22 May 2023. Accessed 7 October 2025. <https://euronews.al/en/44-of-the-economy-in-2021-concentrated-in-tirana-other-districts-fading/#:~:text=On%20the%20other%20hand%2C%20the,districts%20towards%20Tirana-%20or%20abroad>.



- FAO (Food and Agriculture Organization of the United Nations) (2025). FAOSTAT Accessed 10 October 2025. [fao.org/faostat/en/#data/RL](https://fao.org/faostat/en/#data/RL).
- Filho, W. L., G. Trbić, and M. D. Filipovic (eds.) (2019). *Climate Change Adaptation in Eastern Europe: Managing Risks and Building Resilience to Climate Change*. Cham: Springer.
- Garip, F., and C. A. Reed (2025). "Climate Change and Human Mobility: Considering Context, Mechanisms, and Selectivity", *Population and Development Review* 51(1): 449–489. Accessed 14 March 2025. <https://doi.org/10.1111/padr.12716>.
- Gazdar, H., and H. B. Mallah (2013). "Informality and Political Violence in Karachi", *Urban Studies* 50(15): 3099–3115. Accessed 24 March 2025. <https://journals.sagepub.com/doi/abs/10.1177/0042098013487778>.
- Gedeshi, I., and R. King (2018). *New Trends in Potential Migration from Albania*. Tirana: Friedrich-Ebert-Stiftung. Accessed 29 January 2025. <https://tirana.fes.de/al/al-news-events-publications-detail/new-trends-in-potential-migration-from-albania.html>.
- Gemi, E., and A. Triandafyllidou (2021). *Rethinking Migration and Return in Southeastern Europe*. Accessed 29 January 2025. <https://library.oapen.org/handle/20.500.12657/102238>.
- GFMD (Global Forum on Migration and Development) (2024). *The Impact of Climate Change on Human Mobility: Preventive Action, Humanitarian Action and Development*. Background Paper. Geneva: GFMD. Accessed 29 January 2025. [https://www.gfmd.org/sites/g/files/tmzbd1801/files/documents/france2023/roundtables/GFMD%20GRT%201%20-%20Background%20paper%20Final\\_EN.pdf?EN](https://www.gfmd.org/sites/g/files/tmzbd1801/files/documents/france2023/roundtables/GFMD%20GRT%201%20-%20Background%20paper%20Final_EN.pdf?EN).
- Global Forest Watch (2025). *Global Forest Watch map*. Accessed 25 May 2025. <https://www.globalforestwatch.org/map/>.
- Government of the Republic of Serbia (2021). *Economic Migration Strategy of the Republic of Serbia for the Period 2021–2027*. Accessed 2 February 2025. [https://www.minrzs.gov.rs/sites/default/files/2021-02/ENG\\_%20Strategija%20ekonomske%20migracije%202021-2027-30\\_10%20%28002%29.pdf](https://www.minrzs.gov.rs/sites/default/files/2021-02/ENG_%20Strategija%20ekonomske%20migracije%202021-2027-30_10%20%28002%29.pdf).
- Hajdari, L., and J. Krasniqi (2021). "The Economic Dimension of Migration: Kosovo from 2015 to 2020", *Humanities and Social Sciences Communications* 8: 273. Accessed 15 February 2025. <https://doi.org/10.1057/s41599-021-00923-6>.
- Haxha, U. (2023). "Floods Are Taking Kosovo by Surprise: Climate Change, Riverbed Degradation and Too Much Concrete Threaten Unprepared Municipalities", 19 September 2023. *Kosovo 2.0*. Accessed 19 September 2025. <https://kosovotwopointzero.com/en/floods-are-taking-kosovo-by-surprise/>.
- ICMPD (International Centre for Migration Policy Development) (2020). *Geopolitical Outlook on International Migration*. Accessed 4 February 2025. [https://www.icmpd.org/fileadmin/ICMPD-Website/ICMPD\\_Geopolitical\\_Outlook\\_on\\_International\\_Migration.pdf](https://www.icmpd.org/fileadmin/ICMPD-Website/ICMPD_Geopolitical_Outlook_on_International_Migration.pdf).
- IDMC (Internal Displacement Monitoring Centre) (2014). "Floods Cause New Displacement in Bosnia and Herzegovina", 5 September 2014. Accessed 5 September 2025. <https://www.internal-displacement.org/expert-analysis/floods-cause-new-displacement-in-bosnia-and-herzegovina/>.
- IDMC (2025). "Country Profile: Bosnia and Herzegovina". Accessed 10 October 2025. <https://www.internal-displacement.org/countries/bosnia-and-herzegovina/>.
- ILO (International Labour Organization) (2023). *Skills for a Greener Future: A Global View*. Accessed 7 October 2025. [https://www.ilo.org/sites/default/files/wcmsp5/groups/public/%40ed\\_emp/documents/publication/wcms\\_732214.pdf](https://www.ilo.org/sites/default/files/wcmsp5/groups/public/%40ed_emp/documents/publication/wcms_732214.pdf).



IMCCS (International Military Council on Climate and Security) (2022). The World Climate and Security Report 2022: Climate Security Snapshot – The Balkans. Accessed 29 January 2025.

[https://councilonstrategicrisks.org/wp-content/uploads/2022/07/Climate-Security-Snapshot-The-Balkans\\_World-Climate-and-Security-Report-2022.pdf](https://councilonstrategicrisks.org/wp-content/uploads/2022/07/Climate-Security-Snapshot-The-Balkans_World-Climate-and-Security-Report-2022.pdf)

IOM (International Organization for Migration) (2019). Glossary on Migration. Accessed 7 October 2025. [https://publications.iom.int/system/files/pdf/iml\\_34\\_glossary.pdf](https://publications.iom.int/system/files/pdf/iml_34_glossary.pdf).

IOM (International Organization for Migration) (2021a). Migration in North Macedonia: A Country Profile 2021. Accessed 29 January 2025. <https://publications.iom.int/books/migration-north-macedonia-country-profile-2021>.

IOM (International Organization for Migration) (2021b). South-Eastern Europe, Eastern Europe and Central Asia – Regional Strategy 2020–2024. Accessed 29 January 2025. <https://publications.iom.int/books/south-eastern-europe-eastern-europe-and-central-asia-regional-strategy-2020-2024>.

IOM (International Organization for Migration) (2023a). “Western Balkans Partners Accept Action Plan on Sustainable Migration Governance at the Third Sarajevo Migration Dialogue”, 9 June 2023. Accessed 29 January 2025. <https://www.iom.int/news/western-balkans-partners-accept-action-plan-sustainable-migration-governance-third-sarajevo-migration-dialogue>.

IOM (International Organization for Migration) (2023b). Exploring the Links between Migration, Environment and Climate Change in Bosnia and Herzegovina. Accessed 29 January 2025. <https://bih.iom.int/resources/exploring-links-between-migration-environment-and-climate-change-bosnia-and-herzegovina>.

IOM (International Organization for Migration) (2024a). Flood and Landslide Response Situation Report, 7 November 2024. Accessed 29 January 2025. <https://bih.iom.int/sites/g/files/tmzbd11076/files/documents/2024-11/2024-flood-and-landslide-response-situation-report-7-november-2.pdf>.

IOM (International Organization for Migration) (2024b). “North Macedonia: Mainstreaming Migration and Climate Change Perspectives into National Adaptation Plan Processes”. Accessed 29 January 2025. <https://d-portal.org/q.html?aid=XM-DAC-47066-NC.0143>.

IOM (International Organization for Migration) (2024c). Labour Migration and Climate Change, Information Sheet, January 2024. Accessed 29 January 2025. <https://www.iom.int/sites/g/files/tmzbd1486/files/documents/2024-05/information-sheet-labour-migration-and-climate-change.pdf>.

IOM (International Organization for Migration) (2024d). Bridging Climate Change and Human Mobility: Collective Analysis for a Deeper Understanding of Climate Mobility in the East and Horn of Africa. Accessed 7 October 2025. [https://dtm.iom.int/sites/g/files/tmzbd1461/files/reports/Bridging%20Climate%20Mobility%20Hackathon%20Report\\_Final\\_V2.pdf](https://dtm.iom.int/sites/g/files/tmzbd1461/files/reports/Bridging%20Climate%20Mobility%20Hackathon%20Report_Final_V2.pdf).

IPCC (Intergovernmental Panel on Climate Change) (2021). Climate Change 2021: The Physical Science Basis, Working Group I contribution to the Sixth Assessment Report. Accessed 5 March 2025. <https://www.ipcc.ch/report/ar6/wg1/>.

IPCC (2022). Climate Change 2022: Impacts, Adaptation and Vulnerability, Working Group II contribution to the Sixth Assessment Report. Accessed 5 March 2025. <https://www.ipcc.ch/report/sixth-assessment-report-working-group-ii/>.



- IUCN (International Union for Conservation of Nature) (2025). Vjosa Wild River National Park Mitigation Hierarchy Assessment for the Rural Water Supply IV Project (Lot 1) at Shushica River, Albania: Final Report, 27 January 2025. Accessed 7 October 2025. [https://balkanrivers.net/uploads/files/shares/Studies/VWRNP\\_MHA\\_Final\\_Report\\_20250127\\_compressed.pdf](https://balkanrivers.net/uploads/files/shares/Studies/VWRNP_MHA_Final_Report_20250127_compressed.pdf).
- Jakovljevic, A. (2021). "Effects of Public Policy Measures on Combating Migration in Serbia", *Međunarodna politika* 72, No. 1183: 7–29. Accessed 29 January 2025. [http://doi.fil.bg.ac.rs/pdf/journals/iipe\\_mp/2021-1183/iipe\\_mp-2021-72-1183-1.pdf](http://doi.fil.bg.ac.rs/pdf/journals/iipe_mp/2021-1183/iipe_mp-2021-72-1183-1.pdf).
- Jeftic, M., D. Tošić, and T. Nikolić (2019). "Resilient Functional Urban Regions: Spatial Planning in the Light of Climate Change" In W. L. Filho, G. Trbić, and D. Filipovic (eds.). *Climate Change Adaptation in Eastern Europe: Managing Risks and Building Resilience to Climate Change*. Cham: Springer International Publishing.
- Jovanović Popović, D., and M. Milinčić (2016). "Impact of Climate Changes, Floods and Internal Displacement in Southeastern Europe", *Herald of the Geographic Society of Republic of Srpska* 20: 111–122. Accessed 7 October 2025. [https://www.researchgate.net/publication/321344026\\_IMPACT\\_OF\\_CLIMATE\\_CHANGES\\_FLOODS\\_AND\\_INTERNAL\\_DISPLACEMENT\\_IN\\_SOUTH\\_EASTERN\\_EUROPE](https://www.researchgate.net/publication/321344026_IMPACT_OF_CLIMATE_CHANGES_FLOODS_AND_INTERNAL_DISPLACEMENT_IN_SOUTH_EASTERN_EUROPE).
- JRC (Joint Research Centre) (2024). Status of Environment and Climate in the Western Balkans. JRC Publications Repository. Accessed 7 October 2025. <https://publications.jrc.ec.europa.eu/repository/handle/JRC140061>.
- King, R., and I. Gedeshi (2019). "New Trends in Potential Migration from Albania: The Migration Transition Postponed", *Migration and Development* 9(2): 131–151. Accessed 29 January 2025. <https://www.tandfonline.com/doi/full/10.1080/21632324.2019.1608099>.
- Knez, S., S. Štrbac, and I. Podbregar (2022). "Climate Change in the Western Balkans and EU Green Deal: Status, Mitigation and Challenges", *Energy, Sustainability and Society* 12(1). Accessed 29 January 2025. <https://doi.org/10.1186/s13705-021-00328-y>.
- Kurecic, P. (2023). "Is Corruption the Driving Force of Migration from Croatia: Evidence from a Survey", *South East European Journal of Economics and Business* 18(1): 1–14. Accessed 10 October 2025. <https://reference-global.com/article/10.2478/jeb-2023-0001>.
- Low Carbon Power (2025). "Electricity in North Macedonia in 2024/2025". Accessed 10 October 2025. [https://lowcarbonpower.org/region/North\\_Macedonia](https://lowcarbonpower.org/region/North_Macedonia).
- Malak, M. A., and N. K. Lina (2024). "Tropical Cyclones and the Mobility of Older Persons: Insights from Coastal Bangladesh". In S. Jolly, N. Ahmad, and M. Scott (eds.). *Climate-Related Human Mobility in Asia and the Pacific*, Sustainable Development Goals Series. Singapore: Springer. Accessed 29 January 2025. [https://doi.org/10.1007/978-981-97-3234-0\\_2](https://doi.org/10.1007/978-981-97-3234-0_2).
- Martin, R., and R. Dragos (2012). "Return Migration: The Experience of Eastern Europe", *International Migration* (50)6: 109–128. Accessed 29 January 2025. <https://onlinelibrary.wiley.com/doi/10.1111/j.1468-2435.2012.00762.x>.
- Mara, I., and M. Landesmann (2022). *Use It or Lose It! How Do Migration, Human Capital and the Labour Market Interact in the Western Balkans?* Accessed 29 January 2025. <https://www.etf.europa.eu/en/publications-and-resources/publications/use-it-or-lose-it-how-do-migration-human-capital-and-labour>.
- McAreavey, R., and N. Argent (2018). *New Immigration Destinations: Migrating to Rural and Peripheral Areas*. Routledge.
- Mejdini, F., and K. Amerhauser (2019). *Growing Like Weeds? Rethinking Albania's Culture of Cannabis Cultivation*. Accessed 7 October 2025. [https://globalinitiative.net/wp-content/uploads/2019/12/AlbaniaCannabis.14.12.web\\_.pdf](https://globalinitiative.net/wp-content/uploads/2019/12/AlbaniaCannabis.14.12.web_.pdf).



- Monitor (2022). "Prapavija Ekonomike e Shpopullimit te Kukesit", 10 December 2022. Accessed 15 March 2025. <https://monitor.al/prapavija-ekonomike-e-shpopullimit-te-kukesit-2/>.
- Muttarak, R. (2021). "Demographic Perspectives in Research on Global Environmental Change", *Population Studies* 75(2): 267–284. Accessed 29 January 2025. <https://www.tandfonline.com/doi/full/10.1080/00324728.2021.1988684>.
- Muttarak, R. (2022). "Vulnerability to Climate Change and Adaptive Capacity from a Demographic Perspective". In: Hunter, L.M., Gray, C., Véron, J. (eds) *International Handbook of Population and Environment. International Handbooks of Population*, vol 10. Springer, Cham. [https://doi.org/10.1007/978-3-030-76433-3\\_4](https://doi.org/10.1007/978-3-030-76433-3_4)
- Montenegro Ministry of Economic Development (2022). *Montenegro Tourism Development Strategy 2022–2025 with the Action Plan*. Accessed 7 October 2025. <https://www.gov.me/en/documents/a4a670bc-abac-447b-bd91-2b9203bd95d9>.
- Nature Returns (2025). "About the Nature Returns Project". Accessed 10 October 2025. <https://nature-returns.eu/the-project/>.
- North Macedonia Ministry of Energy, Mining, and Raw Materials (2025). "The Just Energy Transition Platform is Strengthening – JETIP: Macedonia Calls on the International Community for Partnership". Accessed 3 June 2025. <https://energy.gov.mk/en-GB/odnosi-so-javnost/soopstenija/se-zacvrstuva-platformata-za-pravedna-energetska-tranzicija-jetip-makedonija-japovikuva-megjunarodnata-zaednica-na-partnerstvo>.
- North Macedonia Ministry of Environment and Physical Planning (2025). Landing page for Ministry. Accessed 30 June 2025. <https://www.moepp.gov.mk/en-GB/ministerstvo>.
- OECD (2022). *Labour Migration in the Western Balkans: Mapping Patterns, Addressing Challenges and Reaping Benefits*. Accessed 29 January 2025. [https://www.oecd.org/en/publications/labour-migration-in-the-western-balkans\\_af3db4f9-en.html](https://www.oecd.org/en/publications/labour-migration-in-the-western-balkans_af3db4f9-en.html).
- OSCE (2009). *The OSCE Concept of Comprehensive and Co-operative Security: An Overview of Major Milestones*. Vienna: Conflict Prevention Centre. <https://www.osce.org/files/f/documents/c/0/37592.pdf>
- OSCE Mission to Serbia (2024). *Consolidating the Democratization Process in the Security Sector in Serbia*. <https://www.osce.org/files/f/documents/1/8/580225.pdf>
- Panebianco, S. (2022). "Climate Change Migration Enters the Agenda of the Wider Mediterranean: The Long Way Towards Global Governance". In S. Panebianco (ed.), *Border Crises and Human Mobility in the Mediterranean Global South, Critical Security Studies in the Global South*, 145–175. Cham: Palgrave Macmillan.
- Petrović, J. (2022). "Chapter 9: Environment, Climate Change and Depopulation in Serbia". In D. Vuković (ed.), *National Human Development Report – Serbia 2022: Human Development in Response to Demographic Change*, 206–223. Belgrade: UNDP Srbija. Accessed 10 October 2025. <https://hdr.undp.org.rs/wp-content/uploads/2023/05/Chapter9-Environment-Climate-Change-and-Depopulation-in-Serbia-e1.pdf>.
- Pietrapertosa, F., V. Khokhlov, M. Salvia, and C. Cosmi (2018). "Climate Change Adaptation Policies and Plans: A Survey in 11 South East European Countries", *Environmental Science & Policy* 85: 24–34. Accessed 10 October 2025. <https://doi.org/10.1016/j.envsci.2018.03.013>.
- Popovic, S., et al. (2018). *Land Degradation Caused by Illegal Construction in the Bjelopavlici Plain: Case Study of the Narrow Belt along the Motorway Podgorica–Danilovgrad, Montenegro*. Podgorica: Green Room Sessions 2018 International GEA Conference. Accessed 10 October 2025. [https://www.researchgate.net/publication/331275515\\_Land\\_degradation\\_caused\\_by\\_illegal\\_construction\\_in\\_the\\_Bjelopavlici\\_Plain\\_Case\\_study\\_of\\_the\\_narrow\\_belt\\_along\\_the\\_motorway\\_Podgorica\\_-Danilovgrad\\_Montenegro](https://www.researchgate.net/publication/331275515_Land_degradation_caused_by_illegal_construction_in_the_Bjelopavlici_Plain_Case_study_of_the_narrow_belt_along_the_motorway_Podgorica_-Danilovgrad_Montenegro).





- Ranocchiari, G. (2023). "North Macedonia: Limited Resources for Managing Natural Park Fires", 11 October 2023. Accessed 29 January 2025. <https://www.balcanicaucaso.org/eng/Areas/North-Macedonia/North-Macedonia-limited-resources-for-managing-natural-park-fires-227448>.
- RCC (Regional Cooperation Council) (2020). "Compendium on Best Practices in Diaspora Engagement in the Western Balkans". Accessed 29 January 2025. <https://www.rcc.int/pubs/148/compendium-on-best-practices-in-diaspora-engagement-in-the-western-balkans>.
- RCC (2024). SecuriMeter 2024. Accessed 30 June 2025. <https://www.rcc.int/pubs/199/securometer-2024>.
- RCC (2025). SecuriMeter database. Accessed 30 June 2025. <https://www.rcc.int/securometer/database>.
- REKK Foundation (2019). The Southeast European power system in 2030: Flexibility challenges and benefits from regional integration. Analysis. Accessed 30 June 2025. [https://www.agora-energiewende.org/fileadmin/Projekte/2019/Southeast\\_European\\_power\\_system\\_in\\_2030/154\\_SoutheastEuropPowerSys\\_WEB.pdf](https://www.agora-energiewende.org/fileadmin/Projekte/2019/Southeast_European_power_system_in_2030/154_SoutheastEuropPowerSys_WEB.pdf).
- Reliefweb (2024). Bosnia and Herzegovina: Pluvial/Flash Flood 2024 – DREF Operation Appeal MDRBA017, 19 October 2024. Accessed 29 January 2025. <https://reliefweb.int/report/bosnia-and-herzegovina/bosnia-and-herzegovina-pluvialflash-flood-2024-dref-operation-appeal-mdrba017>.
- Reuters (2022). "Albania Dims Lights as Drought, Price Spike Spark Energy Crisis", Reuters, 21 March 2022. Accessed 7 October 2025. <https://www.reuters.com/world/europe/albania-dims-lights-drought-price-spike-spark-energy-crisis-2022-03-21/>.
- Reuters (2025). "Bosnian Students Protest Government Inaction after Deadly Floods", Reuters, 10 February 2025. Accessed 29 January 2025. <https://www.reuters.com/world/europe/bosnian-students-protest-government-inaction-after-deadly-floods-2025-02-10/>.
- Rosinska, A. (2024). Drivers of Migration: Dimensions and Indicators. A Policy-Oriented Literature Review. Luxembourg: Publications Office of the European Union. Accessed 29 January 2025. <https://op.europa.eu/en/publication-detail/-/publication/3a347b71-bb6a-11ef-91ed-01aa75ed71a1/language-en>.
- Rüttinger, L., P. van Ackern, N. Gordon, and A. Foong (2021). Regional Assessment for South-Eastern Europe. Security Implications of Climate Change. Berlin: adelphi; Vienna: OSCE. Accessed 29 January 2025. <https://www.osce.org/files/f/documents/a/a/484148.pdf>.
- Rüttinger, L., et al. (2023). Climate Security Risk Assessment Methodology Guide & Tools. Accessed 30 June 2025. [https://weatheringrisk.org/sites/default/files/document/WR\\_Climate\\_Security\\_Risk\\_Assessment\\_Methodology\\_Guide\\_Tools\\_0.pdf](https://weatheringrisk.org/sites/default/files/document/WR_Climate_Security_Risk_Assessment_Methodology_Guide_Tools_0.pdf).
- RUSI (Royal United Services Institute) (2021). "Russia is Weaponising Bosnia and Herzegovina's Gas Dependence". Accessed 29 April 2025. <https://www.rusi.org/explore-our-research/publications/commentary/russia-weaponising-bosnia-and-herzegovinas-gas-dependence>.
- Scissa, C. (2024). Migration in the Context of Climate and Environmental Changes in Non-EU Prague Process States: Exploring Vulnerabilities, Policy Gaps and Available Protection Frameworks. Prague: International Centre for Migration Policy Development. Accessed 21 February 2025. <https://www.pragueprocess.eu/en/news-events/news/994-migration-in-the-context-of-climate-and-environmental-changes-in-non-eu-prague-process-states-exploring-vulnerabilities-policy-gaps-and-available-protection-frameworks>.



- Smeltzer, S., and A. Karppi (2024). "A Region Reordered by Autocracy and Democracy". Accessed 10 October 2025. <https://freedomhouse.org/report/nations-transit/2024/region-reordered-autocracy-and-democracy>.
- Spasić, V. (2022). "North Macedonia First in Western Balkans Adopts National Energy and Climate Plan", Balkan Green Energy News, 2 June 2022. Accessed 7 October 2025. <https://balkangreenenergynews.com/north-macedonia-first-in-western-balkans-adopts-national-energy-and-climate-plan/>.
- Spasić, V. (2024). "Serbia Publishes Draft Environmental Protection Strategy: Green Agenda 2024–2033", Balkan Green Energy News, 11 September 2024. Accessed 29 January 2025. <https://balkangreenenergynews.com/serbia-publishes-draft-environmental-protection-strategy-green-agenda-2024-2033/>.
- Temova, A. (2017). "Internal Migration and Its Impact on Regional Development in Macedonia", Global Journal of Human-Social Science 17(E4): 39–46. Accessed 29 January 2025. <https://socialscienceresearch.org/index.php/GJHSS/article/view/2287>.
- The Peninsula (2024). "Albania Tourism Boom Sparks Fight over River's Future", The Peninsula, 22 July 2024. Accessed 29 January 2025. <https://thepeninsulaqatar.com/article/22/07/2024/albania-tourism-boom-sparks-fight-over-rivers-future>.
- Tierolf, P., et al. (2023). "A Coupled Agent-Based Model for France for Simulating Adaptation and Migration Decisions under Future Coastal Flood Risk", Scientific Reports 13. Accessed 29 January 2025. <https://www.nature.com/articles/s41598-023-31351-y>.
- Todorović, I. (2025). "Activists in Northeastern BiH to Obstruct Majevica Lithium Mining Project", Balkan Green Energy News, 9 April 2025. Accessed 7 October 2025. <https://balkangreenenergynews.com/activists-in-northeastern-bih-to-obstruct-majevica-lithium-mining-project/>.
- Trifonova, M., and A. Dangova (2023). Climate Change and Security Dynamics in Southeastern Europe. Potsdam-Babelsberg: Friedrich-Naumann-Stiftung für die Freiheit. Accessed 29 January 2025. <https://www.freiheit.org/de/consent?dest=https%3A%2F%2Fshop.freiheit.org%2F%23!%2FPublikation%2F1471>.
- UBA (2020). Migration, Environment and Climate Change: Literature Review. Accessed 29 January 2025. [https://www.umweltbundesamt.de/sites/default/files/medien/1410/publikationen/2020-03-04\\_texte\\_42-2020\\_migration-literature-review\\_1.pdf](https://www.umweltbundesamt.de/sites/default/files/medien/1410/publikationen/2020-03-04_texte_42-2020_migration-literature-review_1.pdf).
- UN (2024). Bosnia and Herzegovina Floods Response: Multi-Cluster Initial Rapid Assessment. Accessed 7 October 2025. [https://bosniaherzegovina.un.org/sites/default/files/2024-11/MIRA%20-%20BiH%20Floods%20Response\\_FINAL.pdf](https://bosniaherzegovina.un.org/sites/default/files/2024-11/MIRA%20-%20BiH%20Floods%20Response_FINAL.pdf).
- UNDP (2016). Risk-Proofing the Western Balkans: Empowering People to Prevent Disasters. Accessed 7 October 2025. <https://www.adaptation-undp.org/resources/risk-proofing-western-balkans-empowering-people-prevent-disasters>.
- UNDP (2023). "Development of the Environmental Protection Strategy". Accessed 25 January 2025. <https://www.undp.org/serbia/news/development-environmental-protection-strategy>.
- UNDRR (2019). A Compendium of Disaster Risk Reduction Practices in Cities of the Western Balkans and Turkey: A Review of Selected Cities Participating in UNISDR's 'Making Cities Resilient: My City is Getting Ready!' Campaign. Accessed 7 October 2025. [https://www.unisdr.org/files/39825\\_compendiumuploadpw.pdf](https://www.unisdr.org/files/39825_compendiumuploadpw.pdf).
- UNECE (2020). Formalizing the Informal: Challenges and Opportunities of Informal Settlements in South-East Europe. Accessed 19 January 2025. <https://unece.org/housing-and-land-management/publications/formalizing-informal-challenges-and-opportunities-informal>.



UNESCO (2023). South-Eastern Europe Regional Synthesis: Climate Change, Displacement and the Right to Education. Paris: UNESCO. Accessed 29 January 2025. <https://doi.org/10.54675/ATXM1669>.

UNFCCC (2024). Technical Guide on Integrating Human Mobility and Climate Change Linkages into Relevant National Climate Change Planning Processes. Accessed 29 January 2025. [https://unfccc.int/sites/default/files/resource/WIM\\_ExCom\\_human-mobility\\_TFD\\_2024.pdf](https://unfccc.int/sites/default/files/resource/WIM_ExCom_human-mobility_TFD_2024.pdf).

UNHCR (United Nations High Commissioner on Refugees) (2025). UNHCR master glossary of terms. Accessed 10 October 2025. [UNHCR master glossary of terms | UNHCR](#).

UNHCR (2025). "Operational Data Portal: South Eastern Europe". Accessed 10 October 2025. <https://data.unhcr.org/en/situations/southeasterneurope>.

Vuković, A. (2018). Study on Climate Change in the Western Balkans Region. Sarajevo: Regional Cooperation Council Secretariat. Accessed 21 February 2025. <https://www.rcc.int/pubs/62/study-on-climate-change-in-the-western-balkans-region>.

WHO (2014). Floods in the Balkans: Bosnia and Herzegovina, Croatia and Serbia: Situation Report No. 2, 3 June 2014. Accessed 7 October 2025. <https://iris.who.int/items/bb131d1f-a819-4b68-9caf-f1c57e942d6f>.


World Bank Group (2021). Subdued Recovery. Western Balkans Regular Economic Report, No. 19, Spring 2021. Accessed 31 January 2025. <https://openknowledge.worldbank.org/bitstream/handle/10986/35509/Subdued-Recovery.pdf?sequence=1&isAllowed=y>.

World Bank (2023). Towards Adaptive Social Protection in Europe and Central Asia: A Synthesis Report. Accessed 3 March 2025. <https://documents1.worldbank.org/curated/en/099052223073526504/pdf/P175926081f2a306d08c780c0f1eac68ab2.pdf>.

World Bank (2024). Western Balkans 6 – Country Climate Development Report (English). Accessed 29 January 2025. <http://documents.worldbank.org/curated/en/099071524133044083/P17920517750570c21b0f01a95ff7aa3fcc>.

WB Info Hub (2023). "Green Agenda for the Western Balkans". Accessed 1 November 2025. <https://westernbalkans-infohub.eu/programmes/green-agenda-for-the-western-balkans/#:~:text=The%20GAWB%20Action%20Plan%20envisages%2058%20actions%20and,food%20supply%20and%20Protection%20of%20nature%20and%20biodiversity>.





# **Annex 1 Methodology of the study and its limitations**







## 1.1. Methodology

The study was conducted using a **mixed methods approach** combining desk research, data analysis, expert informant interviews and stakeholder consultations in order to identify exposure, vulnerabilities, and prevailing trends and patterns specific to South-Eastern Europe. It highlights potential implications for security, livelihoods, health and well-being. A combination of quantitative and qualitative data is essential to capture the complex, context-specific pathways linking climate change impacts to socio-economic and security dynamics (Rüttinger et al. 2023). For example, when exploring the knock-on effects of climate impacts – such as how increased extreme weather events impact livelihoods, social cohesion, political instability, trust in the authorities and gender-based violence – qualitative data alone is often not extensive enough, while quantitative models miss complex feedback loops and people-centred interactions that shape climate security risk pathways. The research also adopted an intersectional approach considering gender, age, socio-economic status and conflict in order to account for differential risks and resilience-building opportunities faced by diverse groups in society.

The applied analytical framework builds on the OSCE's approach to **security** as a broad, comprehensive and co-operative issue expressed through its three dimensions: politico-military, economic and environmental, and human (OSCE 2009).<sup>67</sup> The OSCE Ministerial Council Decision on Strengthening Co-operation to Address the Challenges Caused by Climate Change (MC.DEC/3/21 of 3 December 2021) emphasized that climate change can exacerbate economic challenges and environmental degradation, which may negatively affect prosperity, stability and security in the OSCE area. **Climate-related security risks** include those driven by one or more climate stressors that directly and/or indirectly impact human security, and thus challenge the peace and stability of societies and regions (Rüttinger et al. 2023). These systemic risks emerge through complex interactions between climate change and various social, economic, environmental, demographic

<sup>67</sup> The framework also relies on the OECD definition of instability and fragility, namely “the combination of exposure to risk and insufficient coping capacity of the state, system, and/or communities to manage, absorb, and mitigate those risks” (Desai and Forsberg 2020). Political instability, (organized) crime, urban violence, terrorism and violent conflict are different ways in which insecurity manifests; all are covered by the framework.

and political factors, which are clustered and described through specific impact **pathways**. Importantly, this approach seeks to identify not only risks, but also dimensions of **resilience** across different groups and communities.

Furthermore, the interlinkages between climate change, human mobility and security were referred to in the 2007 Madrid Declaration on Environment and Security (MC.DOC/4/07), which stressed that environmental degradation, including disasters and their possible impact on migratory pressures, could be a potential additional contributor to conflict and that climate change may magnify these challenges. This link was also highlighted in subsequent Ministerial Council decisions, including the Athens 2009 decision on Migration Management and the Basel 2014 decision on Disaster Risk Reduction.

## Quantitative analysis

For the quantitative analysis, extensive data collection was undertaken. Two primary datasets were compiled from publicly available sources:

▮ **Individual-year-level dataset:** Combining multiple waves of the Balkan Public Barometer (BB) survey with gridded environmental indicators (e.g., droughts, floods, or heatwaves), this dataset covers the 2017–2023 period and includes approximately 40,000 observations across the SEE region. It is a balanced, repeated cross-sectional dataset. The BB also allows for aggregation to 37 larger regions, enabling an analysis of regional patterns over time. The key question featured in the survey for the purpose of this report was: “Would you consider living and working abroad?”, which enabled us to capture emigration intentions.

▮ **Municipal-year-level dataset:** This dataset merges gridded socio-economic indicators (e.g., GDP, built-up surface, or age structure of population) and environmental indicators with population and internal migration data from National Statistical Offices (NSOs). Spanning 2010–2024, it includes roughly 4,000 observations across 431 subnational regions, using the most granular administrative unit available (typically municipalities). This is an unbalanced panel dataset, mainly because the time period covered by the data provided by NSOs varies substantially.

After compiling and cleaning the data, descriptive analyses were conducted to examine the spatial and temporal distribution of key indicators, thereby identifying general patterns. The results were visualized using various graphs, such as choropleth maps, chord diagrams or bar charts, which have been incorporated in this report. Relationships between variables were analysed by using statistical modelling approaches with a focus on how socio-economic and environmental factors have influenced migration outcomes. Starting with simple bivariate models, the models used progressively increased complexity to account for additional factors.

For the individual-year-level dataset, we estimated a two-way fixed-effects (TWFE) probit model with region and country-specific year-fixed effects, with emigration intention as the outcome variable and a set of time-varying regressors. Standard errors are clustered at the regional level. For the municipal-year-level dataset, we estimated a TWFE negative binomial model with region and country-specific year-fixed effects, with internal emigration counts as the outcome and a set of time-varying regressors. Standard errors are again clustered at the regional level. To further examine the mechanisms and detect heterogeneous effects, we estimated models with interaction terms, particularly between our four key environmental hazards and vulnerability indicators. Additionally, we conducted robustness checks by using alternative data sources and running the models on different sub-samples; we included leads and lags; and we tested alternative model specifications.

## Qualitative analysis

Qualitative data collection and analysis consisted in a desk-based review of the existing knowledge base (grey and peer-reviewed literature) on the interlinkages between climate change, mobility and security, with a focus on the SEE region (period covered: 2010–2024). It also included an overview of recent (from 2010 onwards) and ongoing projects and activities addressing the linkages between environmental and climate risks, on the one hand, and mobility (both internal and international), on the other hand. Key stakeholders at ministerial and regional levels who are in charge of human mobility as well as climate and environmental issues were mapped separately, together with existing policies and regulations in this area. Additionally, actors and initiatives addressing



the interlinkages between these topics in an integrative manner were also identified. The findings from the desk-based analysis were complemented with 38 semi-structured interviews with a total of 63 key experts, conducted online and in-person during two visits to the region. The interviews focused largely on: (i) understanding how climate and environmental stresses drive mobility in the region (to complement key trends outlined by quantitative data analysis), including key gender and youth-specific trends; and (ii) mapping current responses and gaps at regional, ministerial and local levels.

## Validation

Preliminary results of the qualitative and quantitative analyses were shared during a regional workshop in Sarajevo on 3 June 2025 that brought together relevant ministerial bodies, international and regional organizations, civil society, and academia from across the region. The event also provided a platform to exchange experiences and lessons learned, and to discuss a regional roadmap addressing the interlinkages between climate change, human mobility and security, including adaptation and mitigation aspects, designed to strengthen resilience in South-Eastern Europe. The workshop's outcomes have been incorporated in this study.

## 1.2. Limitations of the study

The short time frame of the study limited the number and geographical reach of the interviews that were conducted; although the research team tried to ensure as comprehensive a coverage as feasible, some parts of the region were less represented during the interview phase than others, and it was difficult to interview experts outside the capital cities. Moreover, despite a deliberate effort to ensure a gender balance of participants in the key expert interviews, structural constraints made this difficult at times.

The quantitative analysis of human mobility in South-Eastern Europe was constrained by several persistent data limitations and structural gaps. Mobility data systems in the region are characterized by uneven availability, inconsistent documentation and limited public access. Key sources vary in scope and quality, with many datasets lacking comprehensive metadata or data

collection methods lacking transparency. These limitations hampered the comparability of data across countries and over time, thus impeding efforts to produce harmonized and policy-relevant mobility estimates.

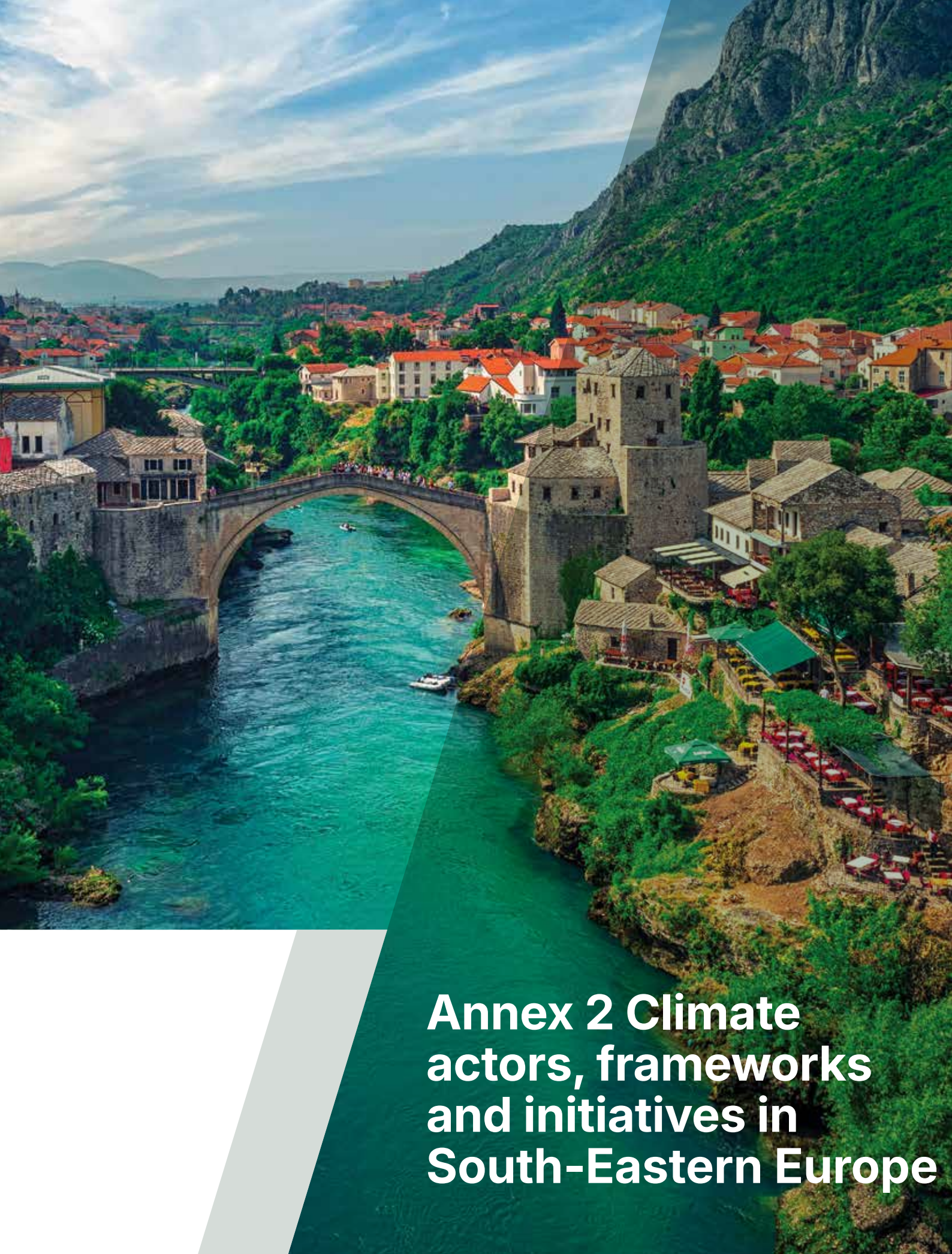
As regards internal migration, our primary data sources were National Statistical Offices (NSOs), whose methodologies differ significantly in terms of definitions, spatial classifications and frequency of data collection. These inconsistencies presented challenges for the current study, particularly when attempting to generate regionally comparable indicators. Moreover, many national datasets do not systematically capture internal migrants' destinations, duration of stay, or key demographic and socio-economic characteristics. As a result, the scope for a disaggregated analysis of internal migration drivers and consequences remains limited.

Emigration is assessed primarily through migration intentions data derived from surveys conducted by the Regional Cooperation Council (RCC), notably the Balkan Barometer and SecuriMeter. While such data offer valuable insights into perceptions and intentions, they do not reflect actual migration behaviour. These surveys are also subject to sampling variability, potential response biases and changes in survey instruments across waves, all of which reduce comparability over time. Furthermore, gaps in the documentation on variable construction and survey methodology complicate the integration of these data into longitudinal analyses.

There are several opportunities to enhance migration data systems in the SEE region. An improved co-ordination and harmonization of mobility definitions and data collection practices across countries would greatly improve data quality and comparability. Strengthening collaboration among NSOs, international organizations, and research institutions could facilitate the development of standardized indicators and metadata protocols. Ensuring public access to datasets, accompanied by transparent documentation and methodological notes, would promote more rigorous and reproducible research. As these systems are expanded, attention to ethical data governance – including privacy, informed consent and the protection of vulnerable populations – should remain a central guiding principle.







## **Annex 2 Climate actors, frameworks and initiatives in South-Eastern Europe**





## 2.1. Summary frameworks and climate change initiatives

Over recent years, significant progress has been made in producing responses to climate change across South-Eastern Europe, largely driven by the overarching goal of EU accession, which continues to shape policy priorities across the region (Belis et al. 2024). Most administrations in the region have ratified key international agreements, including the Kyoto Protocol, the UNFCCC and the Paris Agreement. They have also adopted comprehensive strategies that reflect these commitments, in particular by focusing on the development of climate adaptation and mitigation strategies, legal harmonization, and the implementation of projects supported by international partners and donors (Petrović 2022; UNESCO 2023). These developments, however, have tended to focus on fulfilling external requirements, with adaptation and mitigation frequently addressed as stand-alone issues, rather than as part of a broader, integrated agenda.<sup>68</sup>

**Climate change adaptation has not consistently been treated as a top priority**, despite the region's high vulnerability to climate and environmental hazards, such as floods, droughts and wildfires (World Bank 2024). Instead, much of the available funding is directed towards decarbonization and mitigation measures in compliance with EU requirements, leaving insufficient capacity for broader or locally-driven climate action.<sup>69</sup> This is partly attributable to limited public awareness, persistent challenges in policy implementation, and resource constraints.<sup>70</sup> Moreover, the implementation of existing strategies is often slow or incomplete and, where action is taken, immediate environmental hazards – rather than longer-term climate risks – tend to receive priority.<sup>71</sup> As a result, investment in disaster risk reduction remains limited, and even comparatively minor climate or environmental events can have severe consequences, exposing

<sup>68</sup> Key expert interview with independent advisor on sustainable development, migration and climate/environment, Albania, 07.04.2025.

<sup>69</sup> Key expert interview with representatives of regional organization, online, 19.02.2025.

<sup>70</sup> Key expert interview with representatives of regional organization, [Bosnia and Herzegovina] 04.03.2025.

<sup>71</sup> Key expert interview with representative of regional organization, [Austria] 06.03.2025.



a persistent gap between policy ambition and practical outcomes.

## Policy responsibilities, strategies and initiatives

**Leadership on climate and environmental strategies in South-Eastern Europe is typically provided by high-level institutions such as ministries, specialized agencies and policy committees.** Reflecting the cross-cutting nature of climate action, these bodies often oversee a range of interconnected portfolios. For instance, in Kosovo, climate and environmental matters fall under the Ministry for Environment, Spatial Planning and Infrastructure, while in Bosnia and Herzegovina responsibility lies with the two entity ministries for the environment, as well as with the two entity governments as regards financing the climate agenda. Additionally, agencies responsible for energy frequently play a significant role in shaping climate and environmental policy, particularly in relation to green transition strategies, as can be seen in North Macedonia (North Macedonia Ministry of Energy, Mining, and Raw Materials 2025). In Montenegro, the Ministry of Ecology, Sustainable Development, and Northern Development is responsible for managing climate policies.

**Given that climate change interacts with a wide range of sectors, a variety of ministries beyond those with direct environmental mandates are frequently involved in shaping climate and environmental policy.** Ministries responsible for agriculture, economic development, labour and social protection, and foreign affairs all contribute to efforts aiming to strengthen climate resilience and advance environmental objectives across South-Eastern Europe. For example, in North Macedonia, the preparation of the National Energy and Climate Plan (NECP) has involved ministries in charge of energy, the environment and economic development to ensure the alignment of climate and energy policies with EU standards (Spasić 2022). International partners such as the European Environment Agency and United Nations Development Programme (UNDP) provide technical and financial support for these integrated efforts (EEA 2020). For a comprehensive list of key actors, please see Annex 2.1.

**A range of significant initiatives and strategies have been launched to translate policy commitments into tangible action on climate change and resilience in South-Eastern Europe.** These span from national<sup>72</sup> adaptation plans to cross-sectoral projects (see Annex 2.2 for a comprehensive list). Most authorities in the region – Albania, Bosnia and Herzegovina, Montenegro, North Macedonia and Serbia – have submitted their Nationally Determined Contributions (NDCs) to the UNFCCC, while Kosovo, though not a UNFCCC member, published a voluntary NDC in March 2025 (Berlin Economics 2025; UNDP 2023b). National Adaptation Plans (NAPs) have also been developed or are underway across South-Eastern Europe, typically led by environmental ministries with the support of international partners such as the UNDP and the Green Climate Fund. However, the extent of alignment with EU standards continues to vary (EEA 2021, EEA 2021a, EEA 2021b).

**In addition, institutional authorities throughout South-Eastern Europe have joined forces to design and implement a number of region-wide initiatives and strategies.** Most notably, the [Green Agenda for the Western Balkans](#) – endorsed at the Sofia Summit in late 2020 and developed in partnership with the Regional Cooperation Council (RCC) – seeks to align the region's climate action with the EU Green Deal. This initiative features an Action Plan comprising seven roadmaps focused on climate policy, sustainable energy, sustainable mobility, the circular economy, depollution, sustainable agriculture and food supply, and the protection of nature and biodiversity (WB Info Hub 2023). Additionally, the [SEE 2030 Strategy](#), published by the RCC in 2021, aims to foster socio-economic development through enhanced regional co-operation. Climate and environmental action are central pillars of this strategy, which includes ambitious targets such as doubling the share of renewables in the regional energy mix by 2030 and improving preparedness for natural disasters, as well as the capacity to mitigate disaster risks (Ergezer et al. 2021).

## Internationally funded initiatives

**International actors have played a pivotal role in supporting regional efforts to address climate and envi-**

72 The use of the term “national” here is aligned with the official designation of these documents.





**Environmental challenges in South-Eastern Europe.** Many initiatives led by the authorities in the region have benefited from international funding and technical assistance that helped translate strategic commitments into concrete action. For instance, the NAPs of Serbia, Montenegro and North Macedonia received substantial support from the Green Climate Fund and the UNDP. Furthermore, organizations including the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) and the International Organization for Migration (IOM) have actively contributed to a wide range of climate and environmental projects across the region. Also, since 2012, the OSCE Mission to Serbia has worked with the Ministry of Interior's Sector for Emergency Management to improve the emergency responses of local self-government units through district-level simulation exercises.<sup>73</sup>

**A number of major initiatives in South-Eastern Europe have focused on fostering regional co-operation and aligning climate and environmental policy with EU standards.** The [Berlin Process](#), established in 2014, has been central to this effort, promoting collaboration between the region and the EU with the support of GIZ. Within its broad framework, the Berlin Process has advanced climate and environmental objectives by providing guidelines for the implementation of the Green Agenda and supporting renewable energy programmes (Berlin Process 2025; Berlin Process 2025a). Another outcome of the process is the [Western Balkans Fund \(WBF\)](#), which places sustainable development at the heart of a range of initiatives and events related to climate and environmental co-operation that it funds. In parallel, the [EU Growth Plan for the Western Balkans](#) seeks to accelerate economic integration into the EU single market, increase financial support for the region and drive reforms in key sectors. Central to the plan are green and digitalization reforms, which focus on decarbonization, energy diversification, and the promotion of climate-neutral and climate-smart urban development (European Commission 2023b, CDI 2024).

**Alongside policy frameworks, several initiatives have targeted innovation, conservation and urban resilience.**

The Digital Climate Atlas, developed through a partnership between Serbian authorities, the UNDP, and the Green Climate Fund as part of Serbia's NAP, exemplifies innovation in climate data management. This tool enhances our understanding of Serbia's baseline climate situation, supports vulnerability assessments and informs decision-making for climate action, particularly in urban planning (Digital Atlas 2024). Conservation efforts are also prominent, as can be seen in the [Nature Returns project](#), which promotes the management of protected natural areas through the private sector and civil society engagement. With activities spanning several parts of the region – including North Macedonia and Montenegro – the project demonstrates the value of co-operation and multi-stakeholder involvement in biodiversity protection (Nature Returns 2025). In Bosnia and Herzegovina, a digital interactive [Climate Atlas](#) was created in 2016 in the context of the Third National Communication to the UNFCCC with the support of the Faculty of Natural Sciences and Mathematics of the University of Banja Luka. The Atlas consists of sets of digital climatological maps for the period 1961–1990 and includes future scenarios.

## Civil society-led initiatives

**Civil society organizations and NGOs in South-Eastern Europe play a vital and increasingly visible role in advancing climate action across the region.** Climate change advocacy with authorities is the focal point of their work, with many groups actively engaging in policy dialogue and pushing for stronger climate commitments at different levels, from local to regional. For example, the [Centre for Environment](#) (Centar za životnu sredinu) is a leading advocacy group which has led vocal campaigns on environmental protection and climate policy in Bosnia and Herzegovina, including on topics such as air quality, illegal logging and sustainable transport. Similarly, the Macedonian Ecological Society in North Macedonia has led critical work aiming to influence biodiversity and

<sup>73</sup> Through the extrabudgetary project, "Consolidating the Democratization Process in the Security Sector in Serbia", the Mission has supported 22 three-day simulation exercises spanning 19 administrative districts and 74 municipalities and cities, and involving more than 1,370 members of local emergency management headquarters. These training sessions have improved disaster risk reduction skills tailored to local hazards and promoted better co-ordination between district and municipal emergency management teams. Participants consistently rated the exercises as invaluable for testing preparedness plans and enhancing decision-making, teamwork and cross-sectoral co-operation during emergencies (OSCE Mission to Serbia Progress Reports 2012–2024 for extrabudgetary project Consolidating the Democratization Process in the Security Sector in Serbia).



ecosystem management decisions. In some contexts, such as in Montenegro and North Macedonia, civil society's advocacy role has become more prominent and organized in recent years, with successful campaigns against small hydropower projects and illegal environmental activities in protected areas.

**Public awareness and education are central pillars of many CSOs' and NGOs' missions across South-Eastern Europe**, reflecting the understanding that informed and engaged citizens are essential for effective climate action. Organizations such as [Eco-Awareness \(North Macedonia\)](#) conduct research and run public campaigns to inform people about climate risks, disaster preparedness and the importance of sustainable practices. Similarly, the [Institute for Environmental Policy \(Albania\)](#) works to raise awareness through public campaigns, policy advocacy, and the dissemination of accessible information on climate change, renewable energy and waste management. The [Aarhus Centres network](#), co-ordinated by the OSCE, also plays a significant role in the region by promoting access to information, public awareness, and participation in environmental matters, with numerous active centres across South-Eastern Europe. A particular strength of these organizations lies in their outreach to younger generations. Youth engagement has become a growing trend in the SEE region, as can be seen in initiatives such as the [Young Ecologists programme](#) in North Macedonia, which combines environmental education with hands-on activities to foster a sense of stewardship and activism among school-aged children and students. In Albania, [Milieukontakt](#) has developed youth-focused projects that not only provide climate education, but also encourage active participation in local adaptation initiatives and community decision-making.<sup>74</sup>

**Environmental protection and conservation remain at the heart of many organizations' work, and the implementation of local adaptation and resilience-building projects plays an increasingly important role.** The [Institute for Nature Conservation](#) in Albania, for instance,

focuses on biodiversity preservation and sustainable land use, often in partnership with international donors and regional networks.<sup>75</sup> These efforts often include practical components, such as tree planting, restoration of degraded land, and the promotion of climate-resilient agriculture and water management practices; they also entail capacity development to empower local communities and networks to participate in environmental governance.<sup>76</sup> In recent years, NGOs and CSOs in the region have also increasingly been involved in the implementation of adaptation and resilience-building projects at the local level, with a particular emphasis on disaster risk reduction.<sup>77</sup> During the recent floods in Bosnia and Herzegovina, for example, CSOs played a crucial role in community mobilization and disaster response (BCSDN 2024).

**Regional civil society networks have also been on the rise, helping amplify the voice, reach and effectiveness of climate action across South-Eastern Europe.** One prominent example is the [Balkan Civil Society Development Network \(BCSDN\)](#), which brings together CSOs from across the Western Balkans to protect and expand civic space, influence policy, and strengthen the sector's response to challenges such as climate change and disaster risk. The [Resource Environmental Center \(REC\)](#), in Albania, Bosnia and Herzegovina, and other parts of the SEE region, is another relevant actor. REC's projects – such as watershed management, emissions reduction and environmental justice – often involve regional co-operation and the transfer of best practices. Several regional youth initiatives – such as the [Western Balkans Youth Window](#) – have also provided a platform for young people to become involved in climate resilience and adaptation programmes.

**Despite their crucial contributions, CSOs and NGOs in South-Eastern Europe face significant challenges in sustaining and scaling their climate work.** Limited funding is a constant obstacle, with many organizations relying on short-term project grants rather than stable, long-term support. This financial insecurity can hinder

74 Key expert interview with representative of civil society organization working on sustainable development and environment, Albania, 08.04.2025.

75 Key expert interview with representatives of civil society organization working on sustainable development, Albania, 04.04.2025.

76 Key expert interview with representatives of civil society organization working on sustainable development, Albania, 04.04.2025.

77 Key expert interview with representatives of regional organization, [Bosnia and Herzegovina] 03.03.2025.





strategic planning and the development of lasting programmes, especially where environmental issues are not a top priority for donors or the authorities.<sup>78</sup> Another acute challenge is the lack of generational renewal within the sector. As older activists and leaders retire, there is often a shortage of young people willing or able to take their place, largely as a result of high rates of youth emigration from the region. This demographic trend threatens the continuity and future capacity of civil society, particularly in areas with a high level of out-migration.<sup>79</sup> The ability of CSOs to influence policy can be limited by institutional barriers, lack of access to decision-makers and the complexity of integrating local knowledge into climate strategies.<sup>80</sup> Moreover, the approach taken by institutional authorities that consists of dealing with climate change and human mobility as completely separate policy areas or issues is, to some extent, mirrored in NGOs and CSOs. Despite these hurdles, the resilience and innovation shown by civil society actors remain a key asset for climate action in South-Eastern Europe, especially in reaching vulnerable communities and piloting locally tailored solutions.

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78 Key expert interview with representative of international organization, Albania, 25.03.2025.

79 Key expert interview with representatives of regional organization, [Bosnia and Herzegovina] 03.03.2025.

80 Key expert interview with representatives of regional organization, [Bosnia and Herzegovina] 03.03.2025.



## 2.2. Overview of legal frameworks and policy responsibilities regarding climate change

	Main legal framework	Main body responsible	Cross-sectoral involvement
Albania	Law on Climate Change (OG ALB No. 155/2020), Law on Environmental Protection (OG ALB No. 10431/2011), Law on Integrated Waste Management (OG ALB No. 10463/2011), Law on Air Protection (OG ALB No. 10448/2011), Law on Ratification of the Paris Agreement (OG ALB No. 92/2016), Law on Ratification of the Kyoto Protocol (OG ALB No. 8932/2002)	Ministry of Tourism and Environment; National Environment Agency, National Agency of Protected Areas	Ministry of Infrastructure and Energy; Ministry of Agriculture and Rural Development; Ministry of Finance and Economy
Bosnia and Herzegovina	Decision on Ratification of the Paris Agreement (OG BiH Ia No. 1/17), Law on Ratification of the Kyoto Protocol (OG BiH Ia No. 3/08)  Federation of BiH: Law on Environmental Protection (OG FBiH No. 33/03, 38/09), Law on Nature Protection (OG FBiH No. 66/13), Law on Air Protection (OG FBiH No. 33/03), Law on Waste Management (OG FBiH No. 33/03), Law on Energy Efficiency (OG FBiH No. 22/17), Law on Renewable Energy Sources and Efficient Cogeneration (OG FBiH No. 70/13, 5/14, 79/15, 24/19, 82/23)  Republic of Srpska: Law on Environmental Protection (OG RS No. 71/12, 79/15), Law on Nature Protection (OG RS No. 20/14), Law on Air Protection (OG RS No. 124/11), Law on Waste Management (OG RS No. 111/13), Law on Energy Efficiency (OG RS No. 59/13), Law on Renewable Energy Sources and Efficient Cogeneration (OG RS No. 39/13, 108/13, 79/15, 26/18, 20/21, 52/21)  Brčko District BiH: Law on Environmental Protection (OG Brčko District BiH No. 24/04, 1/05, 19/07, 9/09, 21/18), Law on Nature Protection (OG Brčko District BiH No. 24/04), Law on Air Protection (OG Brčko District BiH No. 25/09), Law on Waste Management (OG Brčko District BiH No. 24/04), Law on Energy Efficiency (OG Brčko District BiH No. 25/22), Law on Renewable Energy Sources and Efficient Cogeneration (OG Brčko District BiH No. 22/22)	Ministry of Foreign Trade and Economic Relations; entity ministries (Federation of BiH: Ministry of Environment and Tourism; Republic of Srpska: Ministry of Spatial Planning, Construction and Ecology); Environmental Protection Funds	Ministry of Finance and Treasury; entity ministries (Ministry of Agriculture, Water Management and Forestry; Ministry of Energy, Mining and Industry)
Kosovo	Law on Climate Change (OG KS No. 08/L-250), Law on Forest (OG KS No. 08/L-137), Law on Energy Efficiency (OG KS No. 06/L-079), Law on Environmental Protection (OG KS No. 03/L-025), Law on Air Protection (OG KS No. 03/L-160), Law on Nature Protection (OG KS No. 03/L-233), Law on Waters (OG KS No. 04/L-147)	Ministry of Environment, Spatial Planning and Infrastructure; Kosovo Environmental Protection Agency	Ministry of Economy; Ministry of Agriculture, Forestry and Rural Development; Ministry of Finance
Montenegro	Law on Environment (OG MNE No. 25/10, 40/11, 27/14), Law on Climate Protection (OG MNE No. 73/19), Law on Air Protection (OG MNE No. 80/05, 40/11, 47/19), Law on Waste Management (OG MNE No. 64/11, 39/16), Law on Ratification of the Paris Agreement (OG MNE No. 1/17), Law on Ratification of the Kyoto Protocol (OG MNE No. 11/07)	Ministry of Ecology, Sustainable Development and Northern Region Development; Environmental Protection Agency	Ministry of Agriculture, Forestry and Water Management; Ministry of Capital Investments (energy, transport); Ministry of Finance



North Macedonia	Law on Environment (OG MKD No. 53/05, 51/11, 44/15), Law on Climate Action (OG MKD No. 88/19), Law on Nature Protection (OG MKD No. 67/04, 14/06), Law on Air Quality (OG MKD No. 92/07), Law on Ratification of the Paris Agreement (OG MKD No. 23/17), Law on Ratification of the Kyoto Protocol (OG MKD No. 49/04)	Ministry of Environment and Physical Planning; State Environmental Inspectorate	Ministry of Agriculture, Forestry and Water Economy; Ministry of Economy (energy); Ministry of Finance; Ministry of Transport and Communications
Serbia	Law on Climate Change (OG RS No. 26/2021), Law on Disaster Risk Reduction and Emergency Situation Management (OG RS No. 87/2018), Law on Environmental Protection (OG RS No. 135/2004, 36/2009), Law on Nature Protection (OG RS No. 36/2009, 88/2010), Law on Air Protection (OG RS No. 36/2009, 10/2013), Law on Waste Management (OG RS No. 36/2009, 88/2010), Law on Ratification of the Paris Agreement (OG RS No. 11/2017), Law on Ratification of the Kyoto Protocol (OG RS No. 88/07)	Ministry of Environmental Protection: Environmental Protection Agency	Ministry of Mining and Energy; Ministry of Agriculture, Forestry and Water Management; Ministry of Finance; Ministry of Construction; Transport and Infrastructure

## 2.3. Overview of policy strategies and regional climate change initiatives

Albania				
Name	Year	Stakeholders	Description	Mobility considerations
National Energy and Climate Plan of the Republic of Albania	2024	Ministry of Infrastructure and Energy; Ministry of Finance and Economy; Ministry of Tourism and Environment  Supported by EU, German Federal Ministry for the Environment, Climate Action, Nature Conservation and Nuclear Safety (BMU)	Integrated policy framework to steer Albania's decarbonization efforts until 2030 and after, and to align with the goals of the European Green Deal.	No
National Civil Emergency Plan	2023	Ministry of Defence; Ministry of Interior; civil protection agencies  Supported by UNDRR and IOM	Framework for disaster risk reduction and emergency response, including climate-related hazards. Updates previous civil emergency plans according to developments related to the climate, governance and politics. Considers and plans for displacement risks including evacuation, temporary accommodation, etc.	Addresses displacement risks, including evacuation and assistance.
Fourth National Communication to UNFCCC	2022	Ministry of Tourism and Environment; Ministry of Finance and Economy; Ministry of Infrastructure and Energy  Supported by UNFCCC; UNDP; and GEF	Fourth comprehensive report on Albania's climate policies, actions, and progress to the UNFCCC.	No



Albania				
Name	Year	Stakeholders	Description	Mobility considerations
Revised Nationally Determined Contribution	2021	Ministry of Tourism and Environment; Ministry of Finance and Economy; Ministry of Infrastructure and Energy; Inter-Ministerial Working Group on Climate Change  Supported by UNFCCC; UNDP; German Federal Ministry for Economic Cooperation and Development (BMZ); and GIZ	Updates Albania's climate commitments under the Paris Agreement, increasing ambition for greenhouse gas reductions.	No
Albania National Adaptation Plan	2021	Ministry of Tourism and Environment; Ministry of Agriculture and Rural Development; Ministry of Health and Social Protection; Ministry of Infrastructure and Energy  Supported by UNEP; UNDP; and GCF	Coordinates and mainstreams climate change adaptation across all sectors. It aims to strengthen preparedness, reduce vulnerabilities, and build long-term climate resilience in line with EU and UNFCCC guidelines.	Highlights social vulnerabilities produced by uneven development processes that can aggravate risks arising from climate change, e.g. for marginalized people living in illegal settlements.
Climate Change Strategy and 2020–2030 Action Plans	2020	Ministry of Tourism and Environment; Ministry of Infrastructure and Energy; Ministry of Agriculture and Rural Development; Ministry of Health and Social Protection  Supported by UNDP; GEF; UNEP; SIDA; GIZ; and EU Special Climate Change Fund	Outlines Albania's long-term climate mitigation and adaptation strategy, including sectoral action plans.	No

Bosnia and Herzegovina				
Title	Year	Stakeholders	Description	Mobility considerations
Integrated National Energy and Climate Plan	2023	Ministry of Foreign Trade and Economic Relations  Entity ministries: Ministry of Energy, Mining and Industry, Ministry of Environment and Tourism (Federation of BiH); Ministry of Energy and Mining, Ministry of Spatial Planning, Construction and Ecology (Republic of Srpska)  Supported by EU; GIZ; UNDP; and World Bank	Sets national targets and measures for increasing the share of renewable energy in the energy mix, in line with EU directives.	No





Bosnia and Herzegovina				
Title	Year	Stakeholders	Description	Mobility considerations
Fourth National Communication to the UNFCCC	2021	Ministry of Foreign Trade and Economic Relations  Entity ministries: Ministry of Environment and Tourism, Ministry of Energy, Mining and Industry (Federation of BiH); Ministry of Spatial Planning, Construction and Ecology (Republic of Srpska)  Supported by UNDP and GEF	Update to the UNFCCC on greenhouse gas emissions, mitigation actions and support received; includes recent data and progress since the last National Communication.	Mentions emigration and its relationship to GDP growth.
Bosnia and Herzegovina National Adaptation Plan – NAP	2021	Ministry of Foreign Trade and Economic Relations  Entity ministries: Ministry of Environment and Tourism, Ministry of Agriculture, Water Management and Forestry (Federation of BiH); Ministry of Spatial Planning, Construction and Ecology, Ministry of Agriculture, Forestry and Water Management (Republic of Srpska)  Supported by UNDP and GCF	Strategy to integrate climate adaptation into sectoral policies, assess climate risks and propose adaptation measures for vulnerable sectors.	Considers climate-induced displacement.
Updated Nationally Determined Contribution (NDC) for the period 2020–2030	2021	Ministry of Foreign Trade and Economic Relations  Entity ministries: Ministry of Environment and Tourism, Ministry of Energy, Mining and Industry (Federation of BiH); Ministry of Spatial Planning, Construction and Ecology, Ministry of Energy and Mining (Republic of Srpska)  Supported by UNDP	Bosnia and Herzegovina's official climate pledge under the Paris Agreement, outlining greenhouse gas reduction targets and adaptation priorities.	No
2020–2030 Climate Change Adaptation and Low Emission Development Strategy for Bosnia and Herzegovina	2020	Ministry of Foreign Trade and Economic Relations  Entity ministries: Ministry of Environment and Tourism, Ministry of Energy, Mining and Industry (Federation of BiH); Ministry of Spatial Planning, Construction and Ecology, Ministry of Energy and Mining (Republic of Srpska)  Supported by UNDP and GEF	Outlines strategy for climate adaptation and development within the context of UNFCCC and EU policies and regulations.	Considers displacement risks as part of increasing climate resilience.



Kosovo				
Name/Title	Year	Stakeholders	Description	Mobility considerations
Kosovo's First and Voluntary National Determined Contribution	2025	Ministry of Environment, Spatial Planning, and Infrastructure; cross-ministerial working group  Supported by UNDP	Determines Kosovo's climate mitigation and adaptation ambitions, targets and actions. Submitted voluntarily to the UNFCCC.	Addresses climate impact on population movement and urban planning for mobility.
Review of the State Strategy for 2023–2027 and Action Plan Waters 2023–2025	2023	Ministry of Environment, Spatial Planning and Infrastructure; Ministry of Economy; Ministry of Agriculture, Forestry and Rural Development; Inter-Ministerial Water Council  Supported by EU; GIZ; World Bank; and Swiss Agency for Development and Cooperation	Sets Kosovo's water management and adaptation priorities, referencing climate change impacts on water resources.	No
Energy Strategy of Kosovo 2022–2031	2022	Ministry of Economy; Prime Minister's Office; the Ministry of Finance, Labour and Transfers; Ministry of Environment, Spatial Planning and Infrastructure  Supported by the Embassy of the Netherlands	Sets national energy policy, focusing on decarbonization, renewables and climate resilience.	No
Strategy for Agriculture and Rural Development 2022–2028	2021	Ministry for Agriculture, Forestry, and Rural Development	Outlines measures to improve the efficiency and sustainability of farm production and natural resource management. Outlines challenges and opportunities to advance climate mitigation and adaptation in the agricultural sector.	No
Climate Change Strategy 2019–2028 and Action Plan 2019–2021	2018	Ministry of Environment and Spatial Planning; Ministry of Economy; Emergency Management Agency  Supported by UNDP; EU; Austrian Development Cooperation; GIZ; and other partners	Sets Kosovo's long-term climate policy and measures for mitigation and adaptation.	No



Montenegro				
Name/Title	Year	Stakeholders	Description	Mobility considerations
National Adaptation Plan for Climate Change 2025–2035; Action Plan for the period 2025–2027	2025	Government of Montenegro Supported by UNDP and GCF	Strategy to integrate climate adaptation into sectoral policies, assess climate risks, and propose adaptation measures for vulnerable sectors.	Considers displacement caused by extreme weather conditions and differentiated vulnerabilities to these events; also, indirectly refers to internal migration and consequent depopulation trends.
Montenegro Third Nationally Determined Contribution	2025	Ministry of Ecology, Sustainable Development and Northern Region Development; Ministry of Capital Investments; Ministry of Agriculture, Forestry and Waters; Ministry of Energy; Ministry of Economic Development; Ministry of Finance  Supported by UNDP; GEF; and EU	Montenegro's third NDC submission to the UNFCCC, outlining updated climate targets and actions.	No
Montenegro Fourth National Communication and First Biennial Transparency Report to the UNFCCC	2025	Ministry of Ecology, Sustainable Development and Northern Development  Supported by UNDP and GEF	Montenegro's first Biennial Transparency Report and Fourth National Communication to the UNFCCC, reporting on climate action and progress.	Considers mobility, specifically internal migration and rural-urban movement, in the context of climate and demographic change
National Strategy for Sustainable Development to 2030	2016	Ministry of Sustainable Development and Tourism; other relevant ministries  Supported by UNDP; EU; and Western Balkan Investment Framework	Sets Montenegro's sustainable development strategy up to 2030, with climate change mitigation as a key issue, along with energy, industry and ecosystem protection.	Considers internal migration and regional disparities

North Macedonia				
Name/Title	Year	Stakeholders	Description	Mobility considerations
North Macedonia National Development Strategy 2024–2044	2024	Ministry of Economy and Labour; Ministry of Education and Science; Ministry of Environment and Spatial Planning; Ministry of Social Policy, Demography and Youth; Ministry of Agriculture, Forestry and Water Supply  National Development Council, Association of the Units of Local Self-Government  Supported by UNEP; Ministry of Finance of Slovakia; and UK International Development	Overarching development strategy for North Macedonia, which includes green transformation as a strategic priority area.	Climate change and mobility both mentioned as key challenges; however, they are not integrated.
North Macedonia Fourth National Communication	2023	Ministry of Environment and Physical Planning; Ministry of Economy; Ministry of Agriculture, Forestry and Water Management; other relevant ministries  Supported by UNDP; GEF	Comprehensive report on North Macedonia's emissions, vulnerabilities and actions to address climate change.	Mentions seasonal and socio-economic migration but does not directly link it to climate or environmental factors.
North Macedonia Just Transition Roadmap	2023	Ministry of Economy; Ministry of Environment and Physical Planning; Ministry of Labour and Social Policy; Ministry of Finance  Supported by European Bank for Reconstruction and Development (EBRD) and EU	Guiding framework for a just transition away from coal and towards a green economy.	No
North Macedonia Enhanced Nationally Determined Contribution	2021	Ministry of Environment and Physical Planning; Ministry of Economy; Cabinet of the Vice-Prime Minister; Secretariat for European Affairs; Ministry of Labour and Social Policy; other relevant ministries  Supported by UNDP and EU	Update to initial nationally determined contribution; specifies national climate targets.	No
Long-term strategy on climate action and action plan	2021	Ministry of Environment and Physical Planning  Supported by UNDP and EU	Sets out North Macedonia's long-term vision and concrete actions for climate change mitigation and adaptation.	Notes potential for urban-rural migration through climate action to mitigate inequalities between these regions.
Energy Development Strategy until 2040	2019	Ministry of Economy; Ministry of Environment and Physical Planning  Supported by UK Aid Direct and EU	Replaces the 2010 Energy Strategy; focuses on decarbonization, energy efficiency, and integration with EU frameworks.	No





Serbia				
Name	Year	Stakeholders	Description	Mobility considerations
Draft Environmental Protection Strategy – Green Agenda for the Republic of Serbia 2025–2033	Ongoing	Ministry of Environmental Protection Supported by UNDP and EU	Sets out the main environmental policy priorities for the next decade. It aligns with the Sofia Declaration and EU standards, dealing with climate change, the circular economy, pollution reduction, biodiversity and sustainable food systems.	For the first time, recognizes the link between climate change and mobility, and the need for related capacity building.
Low Carbon Development Strategy for the Republic of Serbia for the Period 2023–2030 with Projections until 2050	2024	Ministry of Mining and Energy; Ministry of Environmental Protection Supported by UNDP; GEF; and EU	Official long-term low-emission development strategy submitted to the UNFCCC. Sets decarbonization pathways and sectoral targets.	No
Serbia's Third National Communication	2024	Ministry of Environmental Protection Supported by UNDP and GEF	Comprehensive communication to the UNFCCC outlining Serbia's emissions, vulnerability and actions to address climate change.	Mentions rural-to-urban migration and demographic change increasing vulnerability to climate change impacts, especially heat risk in cities
Climate Change Adaptation Programme for the period 2023–2030	2024	Ministry of Environmental Protection Supported by UNDP and GCF	Focuses on building resilience to climate impacts and is a key strategic document for Serbia's environmental and climate policy (submission to UNFCCC as National Adaptation Plan)	No
Serbia's Nationally Determined Contribution	2025	Ministry of Environmental Protection; Ministry of Mining and Energy, Supported by GEF	UNFCCC submission. NDC 3.0 outlining Serbia's climate targets and measures.	No



## Regional and internationally supported initiatives

Title	Time	Stakeholders	Description
<b>Green Agenda: Climate Change Adaptation</b> in the Western Balkans	2024–2026	RCC; GIZ; Albania; Bosnia and Herzegovina; Kosovo; Montenegro; North Macedonia; Serbia; and other partners and donors	An initiative supporting climate adaptation in the fields of agriculture and urban transport; and promoting regional co-operation, gender equality and nature-based solutions through decision tools, demonstration projects, and training.
<b>Western Balkan Economies Need to Strengthen Climate Resilience to Protect People and Boost Growth: WBG Report</b>	2024	World Bank; Albania; Bosnia and Herzegovina; Kosovo; Montenegro; North Macedonia; Serbia; and another partner and donors	Stresses the urgent need for regional economies to invest in climate resilience, estimating a \$37 billion investment need over the next decade to protect people and economies from climate impacts.
<b>Bilateral Climate and Development Partnerships: Partnership with the Western Balkans for more ambitious climate action</b>	2023–(ongoing)	BMZ; Albania; Bosnia and Herzegovina; Kosovo; Montenegro; North Macedonia; Serbia; and other partners and donors	These partnerships aim to accelerate implementation of the Green Agenda for the Western Balkans through bilateral co-operation on climate action, renewable energy, adaptation and a just transition.
<b>Green Transition Initiatives:</b>  <b>Supporting Green Transition through Circular Economy Roadmaps</b>  <b>Green Transition in the Western Balkans</b>	2022–2026	OECD; EU; RCC; Albania; Bosnia and Herzegovina; Kosovo; Montenegro; North Macedonia; Serbia; and other partners and donors	Projects assist public, private, and civil sectors in shifting towards environmental sustainability by focusing on climate mitigation, clean energy, resource efficiency and ecosystem protection.
<b>SEE 2030 Strategy</b>	2021–2030	RCC; Albania; Bosnia and Herzegovina; Bulgaria; Croatia; Greece; Kosovo; Moldova; Montenegro; North Macedonia; Romania; Serbia; Slovenia; Türkiye; and other partners and donors	A regional initiative by 13 SEE economies to accelerate progress towards the UN Sustainable Development Goals through co-operation and co-ordinated action across economic, social and environmental areas (incl. climate action).
<b>Climate Proofing for Sustainable Development in the Western Balkans Platform (WB-CPP)</b>	2021–(ongoing)	UNEP; Austrian Development Agency; Albania; Bosnia and Herzegovina; Kosovo; Montenegro; North Macedonia; and Serbia	A regional initiative to strengthen climate resilience by creating a climate-proofing platform that helps authorities and stakeholders integrate climate knowledge into decision-making and investments.
<b>Green Agenda for the Western Balkans</b>	2020–2030	RCC; Albania; Bosnia and Herzegovina; Kosovo; Montenegro; North Macedonia; Serbia; and other partners and donors	A regional initiative to accelerate the green transition and align with the EU Green Deal by co-operating on climate action, the circular economy, pollution reduction, biodiversity protection, and sustainable food and rural development.



## Regional and internationally supported initiatives

Title	Time	Stakeholders	Description
South-East European Platform to Beat Pollution (SEEPP)	2019– (ongoing)	UNEP; Italian Ministry of Environment; Albania; Bosnia and Herzegovina; Kosovo; Montenegro; North Macedonia; and Serbia	A regional initiative to accelerate action against pollution in South-Eastern Europe by supporting the implementation of the UNEA Pollution Implementation Plan and the Sustainable Development Goals.
Developing South-East European Multi-Hazard Early Warning System	2016– (ongoing)	World Meteorological Organization; DPPI; Meteorological and Hydrological Services of 18 SEE economies including Albania; Bosnia and Herzegovina; Kosovo; Montenegro; North Macedonia; Serbia; European Centre for Medium-Range Weather Forecasts; and other partners and donors	A regional advisory system to improve the forecasting of, and warning for meteorological and hydrological hazards by strengthening data exchange and prediction capacity.
Berlin Process	2014– (ongoing)	EU; Albania; Bosnia and Herzegovina; Kosovo; Montenegro; North Macedonia; and Serbia	A platform for high-level co-operation whose aim is to strengthen regional co-operation (incl. on climate action), connectivity and the EU integration process.
EU Civil Protection Mechanism	2001– (ongoing, varies according to jurisdiction)	EU; Albania; Bosnia and Herzegovina; Iceland; Moldova; Montenegro; North Macedonia; Norway; Serbia; Türkiye; Ukraine; Civil Protection Agencies; Ministries; and other partners	Initiative to strengthen co-operation and co-ordination in disaster prevention, preparedness and response.





## **Annex 3**

# **Mobility actors, frameworks and initiatives**





### 3.1. Summary frameworks and mobility initiatives

**Cross-sectoral approaches that connect mobility with climate change and development remain rare, and the complex interplay between these dynamics is still largely absent from prevailing strategies.** Mobility responses have predominantly emphasized transit area management and control, reflecting both the region's position as a key transit corridor and the influence of EU migration policy. While there has been a recent uptick in activities aiming to engage the diaspora and facilitate return migration, these initiatives remain relatively limited in both scale and ambition. Crucially, little sustained attention has been given to the underlying drivers of mobility – particularly those related to climate change and environmental pressures.

#### Policy responsibilities, strategies and initiatives

**In South-Eastern Europe, given the cross-cutting nature of mobility, a range of ministries are involved** – including those responsible for foreign affairs, labour, health and social affairs, and education (OECD 2022). Immigration management is typically overseen by ministries of interior affairs, which often run dedicated departments or agencies for this purpose (OECD 2022). For instance, Kosovo's Ministry of Internal Affairs houses the Department of Citizenship, Asylum and Migration, while Montenegro's Ministry of Interior includes a Division for Migration and Readmission. In Albania, the Ministry of Labour and Social Affairs plays an important role, particularly in labour migration and integration matters. Notably, no authority in the SEE region currently assigns any tasks in connection with mobility-related responsibilities to ministries of the environment, or integrates climate and environmental considerations into migration policy.

**To improve co-ordination, several interministerial bodies have been established**, such as the Coordination Body for Migration and Asylum in Bosnia and Herzegovina (OECD 2022). In Serbia, the independent Commissariat for Refugees and Migration not only manages accommodation and the integration of refugees and migrants, but also acts as a central body for migration



policy co-ordination and monitoring (Commissariat for Refugees and Migration of Serbia n.d.). Migration data is generally collected by ministries of interior and foreign affairs, alongside other institutions dealing with asylum and work permits. In Albania, Kosovo and North Macedonia, statistical offices have a more prominent role, whereas in Bosnia and Herzegovina and Serbia, annual mobility profiles are published by the relevant ministries (OECD 2022). For a comprehensive list of key actors, please see Annex 3.1.

**A robust legal and strategic framework underpins migration management across South-Eastern Europe.** All SEE authorities have enacted comprehensive migration laws that establish the legal basis for the regulation of foreign residents, asylum, emigration for employment purposes, and broader migration management in line with international and, increasingly, EU standards (OECD 2022). Building on this foundation, the authorities have developed multi-annual mobility strategies and action plans – often with the support of international organizations such as the IOM. These strategies address a range of priorities, including the prevention of irregular migration, the socio-economic integration of immigrants, and the economic reintegration of return migrants (IOM 2021b). In Albania, Kosovo, Montenegro, North Macedonia, and Serbia, particular emphasis is placed on attracting skilled immigrants to fill labour shortages, while in North Macedonia, Serbia, and Bosnia and Herzegovina, reducing emigration and tackling the underlying push factors remain central policy objectives.<sup>81</sup>

**Alongside these efforts, diaspora engagement has emerged as a key priority in recent years.** Recognizing the potential of the diaspora to contribute to national development, the authorities across the region are increasingly seeking to attract diaspora investments and foster the creation of high-quality, knowledge-intensive, skills-intensive jobs.<sup>82</sup> This shift is reflected in the development of dedicated diaspora strategies in Bosnia and Herzegovina, Montenegro and North Macedonia, as well

as the establishment of specialized agencies for diaspora engagement in Albania, Kosovo and Serbia (RCC 2020). These initiatives not only aim to strengthen economic ties with migrants abroad, but also to leverage the skills and expertise of the diaspora for sustainable development and innovation at home.

**Regional co-operation on mobility has become increasingly prominent in South-Eastern Europe,** largely propelled by the shared objective of EU accession and the recognition of mobility's cross-border dynamics. One milestone in this collaborative approach is the [Skopje Declaration](#), adopted in November 2022, which underscored the need for robust and sustainable migration governance closely linked to the long-term development of both host and transit communities (IOM 2023a). Building on this commitment, the authorities in the region endorsed the [Action Plan for Sustainable Migration Governance \(2023–2025\)](#), a framework designed to address key challenges (such as trafficking and smuggling), establish sustainable return pathways and ensure adequate protection for those unable to return. This plan is closely aligned with the EU Action Plan for the Western Balkans, launched in 2022, and reflects the region's ongoing efforts to harmonize migration policies and practices.

**Complementing these governance-focused initiatives are broader regional integration efforts.** In particular, the Common Regional Market Action Plans ([2021–2025](#) and [2025–2028](#)), launched at the Sofia Summit 2020 and co-ordinated by the RCC, aim to create a unified trade area — with free movement of goods, services, capital and people. The second phase of this initiative places special emphasis on developing human capital, improving access to higher education, closing skills gaps, labour market reform and fostering regional innovation. In parallel, the [Open Balkan Initiative](#) – launched by Albania, North Macedonia and Serbia in July 2021 – seeks to establish a common economic area as a stepping stone towards EU membership.<sup>83</sup> With regard

81 For a comprehensive list of key strategies and action plans, please see Annex 2.2.

82 Key expert interview with representative of regional organization, 06.03.2025.

83 The Open Balkan Initiative was launched in 2019 by the leaders of Albania, North Macedonia and Serbia. Initially referred to as “Mini-Schengen”, it was officially renamed the Open Balkan Initiative at the Economic Forum on Regional Cooperation held in Skopje on 29 June 2021. Other parts of the region, however, have been hesitant until now to participate fully owing to political disputes and because of concerns that the initiative could overlap with other ongoing integration efforts (e.g. the EU-led Berlin Process and the existing Common Regional Market) and, thus, create divisions in the region (EPC 2021; OECD 2022).



to mobility, the initiative particularly emphasizes labour mobility, facilitating the free movement of workers and easing administrative barriers for employment across the region. Together, these regional initiatives illustrate a growing commitment to co-ordinated migration management and economic integration across South-Eastern Europe.

## Internationally funded initiatives

**The European Union is a key actor, concentrating its migration management efforts on strengthening integrated transit area controls, improving asylum systems, and enhancing return and readmission processes as part of the broader EU enlargement framework.**

The [EU Action Plan on the Western Balkans](#) sets out 20 operational measures across five pillars – ranging from transit area management to visa policies alignment – designed to help the SEE authorities adapt to evolving mobility trends and meet EU accession requirements. The [2020 EU Pact on Migration and Asylum](#) also introduced tools such as Talent Partnerships, which combine labour mobility schemes with capacity-building support in migrant-origin areas, including in South-Eastern Europe. Visa liberalization agreements between the EU and SEE authorities have further facilitated mobility, allowing short-term travel to the Schengen area without a visa (European Commission 2023a).

**International organizations play a central role in shaping mobility governance and supporting the authorities across South-Eastern Europe.** The IOM, in particular, is a key stakeholder on mobility-related topics in the region. Its engagement has been guided by the [IOM Strategy in the Western Balkans \(2022–2025\)](#) and a dedicated [Action Plan for Sustainable Migration Governance in the Western Balkans](#).<sup>84</sup> The IOM's initiatives address a wide spectrum of mobility priorities, from strengthening transit area management and preventing irregular migration to supporting labour migration, diaspora engagement, and socio-economic development.

For example, in North Macedonia, the IOM has improved the identification and registration of mixed movement flows, facilitating the connection to EU information systems and enhancing both border management and human rights protection.<sup>85</sup> In Serbia, the IOM has provided support to local authorities with planning for youth internal migration,<sup>86</sup> while in Albania, it has advanced gender-sensitive, rights-based diaspora engagement and migration policies aligned with EU and international standards.<sup>87</sup>

**Other international organizations also make significant contributions to mobility governance and protection in the SEE region, complementing and reinforcing existing strategies.** The UNDP's work in the region focuses on the root causes of mobility, supporting local development to reduce the need for irregular migration and promoting the positive potential of mobility for development. For example, in North Macedonia, the UNDP has worked with local partners to help Roma returnees reintegrate into their communities by providing employment support, skills training and access to social services ([UNDP Eurasia 2023](#)). In contrast, the United Nations High Commissioner for Refugees ([UNHCR](#)) lays more emphasis on meeting the humanitarian and protection needs of people on the move, including asylum seekers and internally displaced persons.<sup>88</sup> The Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) concentrates on promoting regular labour migration, strengthening governance and fostering diaspora engagement. Notable projects include the [regional initiative to improve labour migration policies](#) in Albania, Kosovo, Montenegro and North Macedonia, which harmonizes standards and enhances migrant worker protections, and the [Programme Migration & Diaspora \(PMD\)](#), which aims to maximise the benefits of regular migration and diaspora engagement across the region. [UNICEF](#), meanwhile, centres its mobility work in South-Eastern Europe on protecting children and families: prioritizing the rights of unaccompanied and separated children, access to education and healthcare, psychosocial support, and

84 Moreover, the IOM has developed specific strategies for Albania, Bosnia and Herzegovina, Kosovo and North Macedonia.

85 Key expert interview with representative of international organization working on migration, North Macedonia, 27.03.2025.

86 Key expert interview with representatives of international organization working on migration, Serbia, 06.03.2025.

87 Key expert interview with representative of international organization working on migration, Albania, 25.03.2025.

88 Key expert interview with representatives of international organization working on migration, Serbia, 06.03.2025.



protection from violence and exploitation. The [International Centre for Migration Policy Development](#) (ICMPD) facilitates transboundary projects, capacity building, and dialogue between the authorities and civil society.

## Civil society-led initiatives

**CSOs and NGOs play a vital role in addressing mobility issues in South-Eastern Europe by operating across a spectrum of priority areas.** Their activities range from providing immediate humanitarian aid – such as food, shelter and medical assistance – to more complex support including legal counselling, psychosocial care, and integration services for migrants and refugees (Cuttitta et al. 2022). Many organizations, such as [Group 484](#) in Serbia and the [Macedonian Young Lawyers Association](#), focus on ensuring access to rights and legal protection for migrants, asylum seekers and vulnerable groups. Others, like [Terre des Hommes](#), prioritize the needs of children and youth, offering psychosocial support, child protection, and reintegration services, particularly in the context of trafficking or unsafe migration. In addition, CSOs and NGOs in the region are involved in advocacy, human rights monitoring, and policy dialogue in order to influence migration governance and promote evidence-based policies.

**In South-Eastern Europe, civil society organizations frequently collaborate through networks to share expertise, co-ordinate their responses and advocate together, which highlights the importance of regional co-operation.** For example, the [Western Balkans Migration Network](#) (WB-MIGNET) brings together researchers and practitioners from across the region to analyse mobility trends and support policy development.<sup>89</sup> Humanitarian organizations such as [Caritas](#), although they mostly operate through local branches, are also part of wider networks; this enables rapid mobilization and the sharing of best practices, especially during mobility crises.

**Despite their key contributions, CSOs and NGOs in South-Eastern Europe face significant challenges.**

Funding is often limited and unpredictable, particularly for organizations working outside of high-profile crises or in areas not prioritized by donors or governments.<sup>90</sup> Political instability and weak institutional frameworks further complicate their work. In some parts of the region, civil society faces bureaucratic hurdles or, even, are viewed with suspicion by the authorities, which can constrain advocacy efforts (Smeltzer et al. 2024; Balkan Civil Society Development Network 2025). Additionally, the lack of more comprehensive data on human mobility – especially on climate-induced displacement and returnees – hampers effective planning and response.<sup>91</sup> Scaling up successful local initiatives is another persistent difficulty, often owing to insufficient institutional support or co-ordination mechanisms.<sup>92</sup>

89 Key expert interview with representative of international organization working on migration, Bosnia and Herzegovina, 04.03.2025.

90 Key expert interview with representatives of regional organization, [Bosnia and Herzegovina] 19.02.2025.

91 Information collected during regional workshop on climate change, human mobility and security conducted in Sarajevo, 03.06.2025.

92 Information collected during regional workshop on climate change, human mobility and security conducted in Sarajevo, 03.06.2025.





### 3.2. Overview of legal frameworks and policy responsibilities regarding mobility

	Main legal framework	Main body responsible
Albania	Law on Foreigners (No. 79/2021, replaces No. 108/2013), Law on Asylum (No. 10/2021), Law on Emigration (No. 9668/2006), Law on Citizenship (No. 8389/1998, amended), Law on Integration of Foreigners (No. 121/2014)	Ministry of Interior: Border and Migration Department, Directorate for Asylum, Directorate of Anti-Trafficking and Migration, National Commission for Refugees  Migration data collection and reporting: Institute of Statistics (INSTAT), Ministry of Interior
Bosnia and Herzegovina	Law on Foreigners (Official Gazette BiH, No. 88/15, 34/21), Law on Asylum (Official Gazette BiH, No. 11/16), Law on Border Control (Official Gazette BiH, No. 53/09, 54/10, 47/14, 40/20)	Ministry of Human Rights and Refugees; Ministry of Security: Asylum Sector, BiH Border Police, entity-level ministries for displaced persons and refugees  Migration data collection and reporting: Ministry of Security, Commissariat for Refugees and Migration
Kosovo	Law on Foreigners (No. 04/L-219, amended by No. 08/L-296, 2023), Law on Asylum (No. 04/L-217, 2013), Law on Citizenship (No. 04/L-215, 2013), Law on State Border Control and Surveillance (No. 04/L-072)	Ministry of Internal Affairs: Department of Citizenship, Asylum and Migration; National Coordinator on Migration; Authority on Migration; Directorate for Migration and Foreigners (Kosovo Police)  Migration data collection and reporting: Kosovo Agency of Statistics
Montenegro	Law on Foreigners (OG MNE No. 12/18, 3/19, 34/21, 37/22), Law on International and Temporary Protection of Foreigners (OG MNE No. 2/17, 34/21), Law on Citizenship (OG MNE No. 13/08, 40/10, 28/11, 46/11, 14/12, 61/13)	Ministry of Interior: Asylum Office  Involvement of Ministries of Foreign Affairs, Finance and Social Welfare, and Economic Development  Migration data collection and reporting: State Statistical Office
North Macedonia	Law on Foreigners (OG NM No. 35/06, 66/07, 117/08, 92/09, 156/10, 158/11, 84/12, 13/13, 147/15, 217/15, 25/16, 11/18, 140/18, 101/19), Law on Asylum and Temporary Protection (OG NM No. 49/03, 66/07, 142/08, 51/11, 54/13, 71/16, 64/18), Law on Border Surveillance (OG NM No. 171/10, 158/11, 13/13, 164/13, 44/15, 177/14, 31/16, 64/18, 101/19)	Ministry of Interior: Migration Policy Coordination Body (for policy development/monitoring)  Local authorities in charge of accommodation for refugees  Migration data collection and reporting: State Statistical Office
Serbia	Law on Foreigners (OG RS No. 24/18, 31/19, 62/23), Law on Employment of Foreigners (OG RS No. 128/14, 113/17, 50/18, 31/19, 62/23), Law on Asylum and Temporary Protection (OG RS No. 24/18), Law on Border Control (OG RS No. 24/18)	Ministry of Interior; Commissariat for Refugees and Migration (also the co-ordination body for migration policy)  Migration data collection and reporting: Commissariat for Refugees and Migration

### 3.3. Overview of policy strategies and regional mobility initiatives

Albania				
Title	Year	Stakeholders	Description	Climate and environmental considerations
National Strategy on Migration and Action Plan 2019–2022	2019	Ministry of Interior; Ministry of Finance and Economy; Ministry of Health and Social Protection; Ministry for Europe and Foreign Affairs; and relevant other ministries  Supported by IOM	A cross-sectorial approach towards migration governance to address the challenges and maximize the impact of mobility on the development of the country.	No mention of the climate, the environment, green issues, resilience, or forestry. Agriculture and tourism mentioned as investment sectors.
National Strategy on Migration 2024–2030 and Action Plan 2024/2026	2024	Ministry of Interior; with Ministry for Europe and Foreign Affairs; Ministry of Finance and Economy; Ministry of Education and Sports; Ministry of Health and Social Protection; Ministry of Justice; Ministry of Defence; Ministry of Agriculture and Rural Development; and other ministerial entities  Supported by IOM	Sets out a comprehensive, cross-sectorial framework to manage mobility, protect migrants' rights and promote socio-economic development through co-ordinated policy measures and international co-operation	Mentions the climate only once (notes lack of linkage); mentions displacement but not substantively; no green/environmental aspects.

Bosnia and Herzegovina				
Title	Year	Stakeholders	Description	Climate and environmental considerations
Strategy in the Area of Migration and Asylum and Action Plan 2016–2020	2016	Ministry of Security; Ministry of Foreign Affairs; Ministry of Human Rights and Refugees; Ministry of Internal Affairs of Republic of Srpska; Ministry of Internal Affairs of the Federation of Bosnia and Herzegovina; Government of Brčko District; Border Police; Service for Foreigners' Affairs; and other ministerial entities  Supported by Switzerland and Lichtenstein through the Migration Partnership, and by IOM	A structured approach to managing mobility and asylum that aims to strengthen institutions, align with European standards, and address both regular and irregular migration challenges.	No mention of the climate, the environment, green issues, resilience, forestry, or agriculture.



## Bosnia and Herzegovina

Title	Year	Stakeholders	Description	Climate and environmental considerations
<b>Migration and Asylum Strategy 2021–2025</b>	2021	Ministry of Security; Ministry of Foreign Affairs; Ministry of Human Rights and Refugees; Ministry of Internal Affairs of Republic of Srpska; Government of Brčko District; Federal Civil Protection Administration, Service for Foreigners' Affairs; Border Police; and other ministerial entities  Supported by Geneva Centre for Security Sector Governance (DCAF); Hilfswerk International, with the partner organization HAJDE; Migration and Integration (AMIF); Ministry of Internal Affairs of Austria; and IOM	Sets out a framework for managing mobility and asylum that aims to align with EU standards, strengthen institutions, and ensure effective and humane migration governance.	No mention of the climate, the environment, green issues, resilience, forestry, or agriculture.

## Kosovo

Title	Year	Stakeholders	Description	Climate and environmental considerations
<b>Strategy on Migration 2021–2025</b>	2021	Ministry of Internal Affairs; Ministry of Foreign Affairs and Diaspora; Ministry of Finance, Labour and Transfers; Ministry of Education, Science, Technology and Innovation; Ministry of Health; Ministry of Justice; and other relevant ministries  Supported by IOM; International Centre for Migration Policy Development (ICMPD); Swiss State Secretariat for Migration; GIZ; and other international partners and donors	Provides a comprehensive framework for managing mobility, focusing on safe and orderly migration, the reintegration of returnees, alignment with EU standards, and strengthening institutional capacity.	No mention of the climate, the environment, green issues, resilience, forestry, agriculture, or displacement.



## Montenegro

Title	Year	Stakeholders	Description	Climate and environmental considerations
<a href="#">Strategy on Migration and Reintegration of Returnees 2021–2025, with an Action Plan for 2021 and 2022</a>	2021	Ministry of Interior; Ministry of Foreign Affairs; Ministry of Economic Development; Ministry of Labour and Social Welfare; Ministry of Education; Ministry of Finance and Social Welfare; and other relevant ministries  Supported by IOM; UNHCR; and EU Agency for Asylum (EUAA)	Sets out comprehensive approach to managing mobility and supporting the sustainable reintegration of returnees, aligning national policy with EU standards while focusing on institutional strengthening and improved service delivery.	No mention of the climate, the environment, green issues, resilience, forestry, or agriculture. Displacement only mentioned in the context of refugees from Yugoslavia.

## North Macedonia

Title	Year	Stakeholders	Description	Climate and environmental considerations
<a href="#">Resolution on Migration Policy 2021–2025</a>	2021	Ministry of the Interior; Ministry of Labour and Social Welfare; Ministry of Public Administration; Statistical Office; and other relevant ministries  Supported by IOM and other UN agencies	Outlines priorities for managing mobility in line with EU standards, dealing with legal migration, asylum, integration and the effective reintegration of returnees.	No mention of the climate, the environment, green issues, resilience, or forestry. Agriculture mentioned only in relation to diaspora knowledge transfer.

## Serbia

Title	Year	Stakeholders	Description	Climate and environmental considerations
<a href="#">Economic Migration Strategy 2021–2027</a>	2021	Ministry of Labour, Employment, Veteran and Social Affairs; Ministry of Interior; Ministry of Education, Science and Technological Development; Ministry of Finance; Ministry of Foreign Affairs; National Employment Service  Supported by IOM and EU	Sets out strategic aims to manage economic migration by reducing brain drain, attracting returnees and foreign talent, and fostering knowledge and skills transfer to support national development and alignment with EU standards.	References the Strategy of Agriculture and Rural Development, which recognizes climate change as a major impact. Otherwise, no substantive mention of the climate or the environment.

## Regional and internationally supported initiatives

Title	Year	Stakeholder	Description
<a href="#">Action Plan for Sustainable Migration Governance (2023–2025)</a>	2023–2025	Albania; Bosnia and Herzegovina; Kosovo; Montenegro; North Macedonia; Serbia; EU; IOM; and other partners	A framework designed to address key challenges such as trafficking and smuggling, establish sustainable return pathways, and ensure adequate protection for those unable to return. This plan reflects the region's ongoing efforts to harmonize migration policies and practices with the EU.

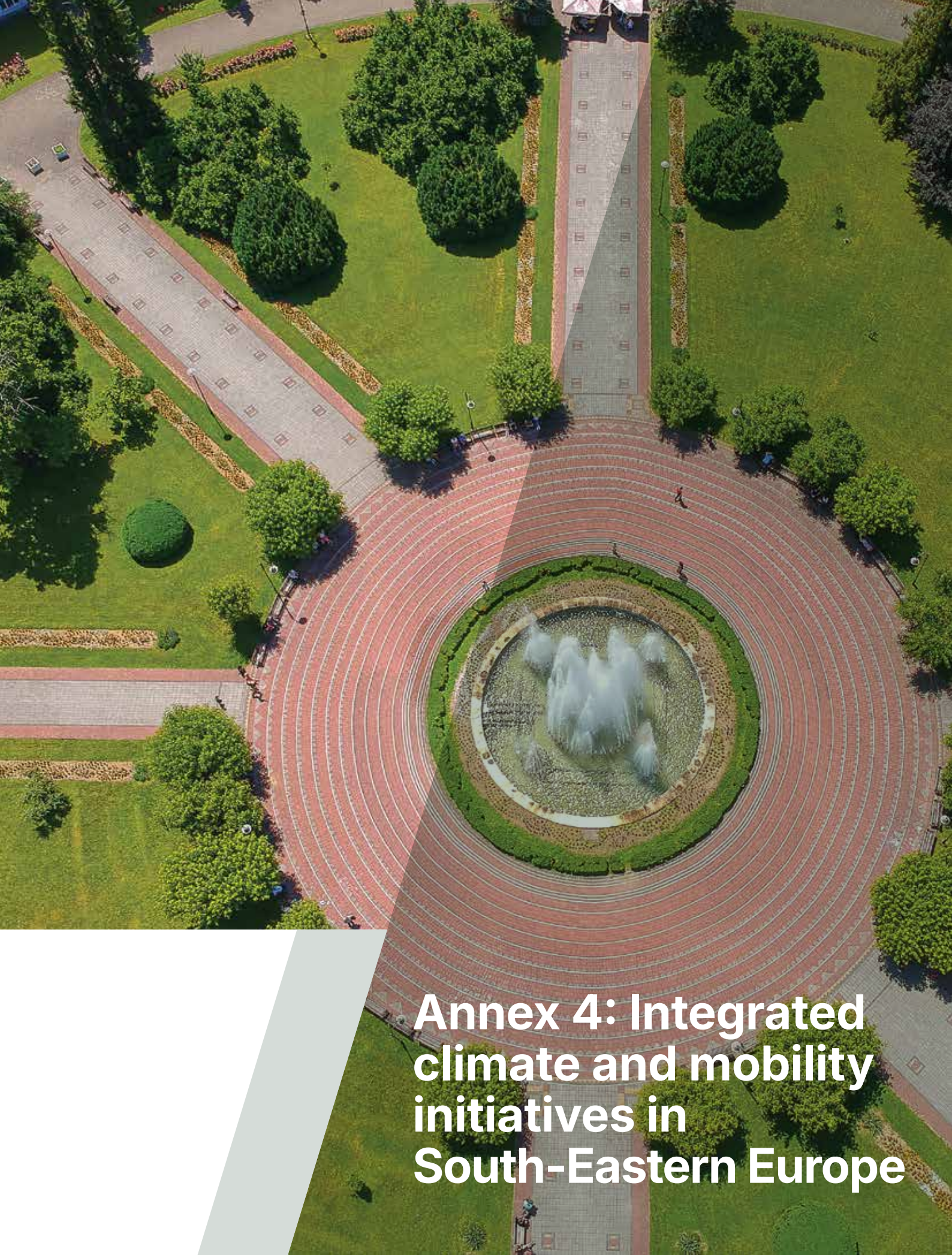




## Regional and internationally supported initiatives

Title	Year	Stakeholder	Description
Skopje Declaration	2022	Albania; Bosnia and Herzegovina; Kosovo; Montenegro; North Macedonia; Serbia; EU; IOM; and other partners	Underscores the need for robust and sustainable migration governance closely linked to the long-term development of both host and transit communities.
Common Regional Market Action Plan 2021–2025	2021–2025	RCC; Albania; Bosnia and Herzegovina; Kosovo; Montenegro; North Macedonia; Serbia; EU; and other partners	Aims to create a unified trade area involving the free movement of goods, services, capital and people; launched at the Sofia Summit 2020 and co-ordinated by the RCC.
Common Regional Market Action Plan 2025–2028	2025–2028		The second phase of this initiative places special emphasis on developing human capital, improving access to higher education, closing skills gaps, labour market reform, and fostering regional innovation.
Strengthening Migration Management, Asylum and Return processes in the Western Balkans	2023–2025	Hilfswerk International; Joint Coordination Platform; Albania; Bosnia and Herzegovina; Kosovo; Montenegro; North Macedonia; Serbia; EU; and other partners	The initiative offers practical support to the SEE authorities for return and asylum management, strengthening their capacity and promoting regional co-operation. Its main aim is to ease mobility pressure on the EU by making asylum and return processes in the region more efficient and rights-based.
IOM Strategy in the Western Balkans (2022–2025)	2022–2025	IOM; Albania; Bosnia and Herzegovina; Kosovo; Montenegro; North Macedonia; Serbia; EU; and other partners	The IOM's initiatives address a wide spectrum of migration priorities, from strengthening transit area management and preventing irregular migration to supporting labour migration, diaspora engagement, and socio-economic development.
Action Plan on Sustainable Migration in the Western Balkans			
EU Action Plan on the Western Balkans	2022–2025	EU; Albania; Bosnia and Herzegovina; Kosovo; Montenegro; North Macedonia; Serbia; and other partners	Sets out 20 operational measures across five pillars, ranging from transit area management to visa policies alignment, in order to help the SEE authorities adapt to evolving mobility trends and meet EU accession requirements.
Open Balkan Initiative	2021–ongoing	Albania; North Macedonia; Serbia	Seeks to establish a common economic area as a stepping stone towards EU membership. The initiative particularly emphasizes labour mobility, allowing people to live and work anywhere in the SEE region without the need for any additional residence or work permits.
EU Pact on Migration and Asylum	2020–2026	EU; Albania; Bosnia and Herzegovina; Kosovo; Montenegro; North Macedonia; Serbia; and other economies	A set of new rules to create a fair and efficient system for managing mobility and asylum across Europe by establishing common procedures and standards for protection, reception, and solidarity. It introduces tools such as Talent Partnerships, which combine labour mobility schemes with capacity-building support in migrant-origin areas, including in South-Eastern Europe.





## Annex 4: Integrated climate and mobility initiatives in South-Eastern Europe



## 4.1. Overview of integrated climate and mobility initiatives

Albania			
Title	Year	Stakeholders	Description
Country Climate and Development Report – Albania	2024	World Bank; Albanian ministries; and other partners	<p>Provides a roadmap for a sustainable, climate-resilient growth model by recommending urgent investments in resilience, adaptation and renewable energy to reduce disaster risks and support long-term development.</p> <p>It considers mobility in relation to long-term population decline caused by ageing and out-migration.</p>
IOM strategy for Albania (2022–2025)	2022–2025	IOM; Albanian ministries; and other partners	<p>The strategy examines immigration and transit area management, the prevention of irregular migration, the management of mixed movement flows, labour migration, the reintegration of Albanian returnees, diaspora engagement, countering human trafficking, and the prevention of violent extremism.</p> <p>Climate change is named as one contextual factor indirectly contributing to mobility.</p>

Bosnia and Herzegovina			
Title	Year	Stakeholders	Description
Country Climate and Development Report – Bosnia and Herzegovina	2024	World Bank; Bosnia and Herzegovina ministries; and other partners	<p>Analyses major climate risks, recommends urgent investments in resilience and adaptation, and outlines pathways for sustainable, inclusive growth in the face of climate change.</p> <p>A shrinking workforce, as a result of population ageing and emigration, is mentioned as a limiting factor for this endeavour, making investments in human capital critical for climate action.</p>
Exploring the links between migration, environment and climate change in Bosnia and Herzegovina	2024	IOM; Bosnia and Herzegovina ministries; and other partners	<p>The report analyses how environmental degradation and climate change interact with mobility patterns in Bosnia and Herzegovina, highlighting the need for integrated policies to address the challenges and opportunities at the intersection of mobility, the environment, and resilience.</p>
Engaging Youth in Environmentally and Socio-Economically Sustainable Initiatives	2023–2025	IOM; Bosnia and Herzegovina ministries; and other partners	<p>The project focuses on issues disproportionately affecting youth, including the nexus of economic, environmental and social instability contributing to youth disenfranchisement and unsustainable emigration; it especially targets the emerging environmental drivers of mobility.</p> <p>It aims to empower young people to lead community actions and participate in environmental and socio-economic activities that foster climate resilience, social cohesion and sustainable development.</p>

### Bosnia and Herzegovina

Title	Year	Stakeholders	Description
IOM country strategy for Bosnia and Herzegovina (2022–2025)	2022–2025	IOM; Bosnia and Herzegovina ministries; and other partners	<p>The strategy analyses mixed migration flows, human mobility, social cohesion and resilience.</p> <p>The chapter on climate change adaptation and disaster risk reduction identifies BiH as the jurisdiction in the SEE region with the highest exposure to natural hazards, with a risk index rating of 3.7/10 and a special vulnerability to flooding. It highlights the advantages of well-managed, safe, responsible and regular migration in the context of climate change, environmental degradation, and disasters resulting from natural hazards.</p>

### Kosovo

Title	Year	Stakeholders	Description
Country Climate and Development Report – Kosovo	2024	World Bank; Kosovo ministries; and other partners	<p>Provides an analysis of climate risks and economic challenges, recommending urgent investments in adaptation, resilience and the energy transition to secure sustainable, inclusive growth.</p> <p>The green transition is emphasized as an opportunity to attract highly skilled migrants or diaspora members to come back to fill new green opportunities. Conversely, emigration has the potential to slow down the green transition.</p>
IOM country strategy for Kosovo (2022–2025)	2022–2025	IOM; Kosovo ministries; and other partners	<p>Aims to empower migrants and communities, ensure safe and regular migration benefits for society and business, and promote strong, coherent migration governance.</p> <p>Environmental factors, such as pollution and other environmental hazards, are considered to be closely linked with other factors that influence mobility.</p>

### Montenegro

Title	Year	Stakeholders	Description
Country Climate and Development Report – Montenegro	2024	World Bank; Kosovo ministries; and other partners	<p>Analyses major climate risks and recommends targeted investments in resilience and adaptation to support sustainable economic growth and protect communities.</p> <p>It emphasizes the climate change-health-mobility nexus, noting that health systems must be prepared to support people migrating because of climate change, since these individuals may have limited access to health services; thus, agile and adaptive health care is essential for both the green transition and climate-related mobility.</p>





North Macedonia			
Title	Year	Stakeholders	Description
Country Climate and Development Report – North Macedonia	2024	World Bank; North Macedonian ministries; and other partners	Analyses climate risks, recommends major investments in adaptation and energy transition, and outlines pathways for sustainable, resilient economic growth.  It emphasizes that health systems must be flexible and prepared to meet the needs of people migrating because of climate change, thus ensuring access to care and adapting to the challenges of the green transition.
Mainstreaming Migration and Climate Change Perspectives into National Adaptation Plan Processes	2024–2025	IOM; North Macedonian ministries; and other partners	The project aims to integrate mobility and climate change considerations into North Macedonia's National Adaptation Plan processes, ensuring that adaptation policies address the links between mobility and environmental change for more resilient and inclusive climate action.
Green Finance Facility Centre	2022–2025	IOM; North Macedonian ministries; and other partners	The project focuses on leveraging remittances and diaspora contributions to finance climate action, thereby demonstrating how mobility can be harnessed for positive development and climate resilience.
IOM country strategy for North Macedonia (2022–2025)	2022–2025	IOM	The strategy focuses on humanitarian aid and quality services for crisis-affected populations, while boosting migrants' resilience by strengthening institutional capacities and community resistance to violent extremism. It emphasizes support for people compelled to migrate owing to poverty, exploitation, lack of opportunities, climate change or environmental challenges.

Serbia			
Title	Year	Stakeholders	Description
Country Climate and Development Report – Serbia	2024	World Bank; Serbian ministries; and other partners	Analyses climate risks, recommends major investments in adaptation and energy transition, and outlines pathways for sustainable, resilient economic growth.  It emphasizes that health systems must be flexible and prepared to ensure access to care for people migrating because of climate change or the green transition.
Greening Migrant Centres in Serbia and Mainstreaming Policy Development related to the Migration, Climate Change, Environment, and Energy Nexus	2022–2025	IOM; Serbian ministries; and other partners	The project aims to improve sustainability and energy efficiency in Serbia's migrant centres while building national policy capacity to address the links between mobility, climate change, the environment and energy.

## Regional and internationally supported initiatives

Title	Year	Stakeholders	Description
Labour Migration as Climate Adaptation	2024–ongoing	IOM; Albania; and other economies	Global programme aimed at leveraging labour migration as a climate change adaptation strategy, using a holistic rights-based and gender-sensitive approach.
Western Balkans Regional Country Climate and Development Report	2024	World Bank; Albania; Bosnia and Herzegovina; Kosovo; Montenegro; North Macedonia; Serbia; and other partners	Encourages economies in the region to strengthen climate resilience to protect people and boost economic growth.  Emigration and demographic decline, especially in relation to vulnerable rural areas, are set to worsen as climate change amplifies existing pressures in South-Eastern Europe, making integrated climate and development policies essential.
Background paper: The future of climate migration	2022	EU; neighbouring regions; European Parliament's research service (EPRS)	Encourages stakeholders in the EU and neighbouring regions, such as South-Eastern Europe, to consider the impacts of climate change on mobility, with the aim of reducing vulnerabilities and fostering resilience among affected populations.
Western Balkans Strategy (2022–2025)	2022–2025	IOM; Albania, Bosnia and Herzegovina; Kosovo;	Highlights environmental degradation and natural hazards as key drivers of mobility and displacement in South-Eastern Europe and calls for greater co-ordination and knowledge exchange among stakeholders in the region.
IOM Institutional Strategy on Migration Environment and Climate Change 2021–2030	2021–2030	Montenegro; North Macedonia; Serbia; UN members	Sets out a comprehensive, evidence-based approach to help people move, stay, or adapt in the face of climate and environmental challenges, supporting States and communities through rights-based solutions, protection, and capacity building.














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