Regional Cooperation Council

Funded by the European Union

2023 Report

On the Implementation of the Green Agenda for the Western Balkans Action Plan (GARI)

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Title:
2023 Report on the Implementation of the Green Agenda for the Western Balkans Action Plan (GARI)

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February 2025

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1. Executive Summary

The **Green Agenda for the Western Balkans (GAWB) Action Plan Implementation Report** offers a detailed evaluation of progress made across 58 targeted actions in 2023. It highlights the challenges and opportunities faced by the WB6 and outlines priority actions. The report provides a comprehensive overview of goals within the seven thematic Roadmaps: **Climate Action, Energy, Sustainable Transport, Circular Economy, Depollution, Sustainable Agriculture,** and **Protection of Nature and Biodiversity.**

The monitoring mechanisms established by the Regional Cooperation Council (RCC) allow for regular tracking of implementation progress, while identifying bottlenecks and delays. This system serves as a foundation for timely corrective actions and adjustments to the Action Plan, enabling dynamic responses to evolving needs. Monitoring is conducted annually through pre-defined qualitative and quantitative indicators, in close cooperation with the WB6, regional partners, the European Commission, and other key stakeholders.

Geopolitical challenges in 2023 continued to impact the region, surpassing the difficulties faced in 2022. The war in Ukraine, political instability in the Middle East and South Mediterranean, discussions on "loss and damage" and other key issues at major climate negotiations, along with a decline in industrial activity in Europe, internal factors like domestic fiscal risks and political challenges, created a challenging backdrop for implementing the Green Agenda within the WB6. Although the region demonstrated resilience in navigating external shocks, these challenges demanded significant energy, time, and effort from policymaking institutions.Major EU legislative developments in 2023, including amendments to the EU Emissions Trading System (ETS) Directive and the introduction of the Carbon Border Adjustment Mechanism (CBAM), have reshaped the regional integration landscape. These changes amplify the urgency of implementing the GAWB roadmaps across climate action, energy, and other thematic areas, reinforcing their critical role in the EU accession process of the WB6.

Decarbonisation and energy transition, as envisioned in the Green Agenda, are increasingly recognised as essential for political stability, energy security, and economic growth.

In 2024, the EU introduced the **Growth Plan for the Western Balkans**, featuring a substantial funding package aimed at building on the GAWB's achievements. Investments in decarbonization, energy security, clean air, and health improvements have the potential to significantly enhance the economic impact of the Growth Plan and accelerate the region's EU accession. However, better harmonization between the GAWB and the Growth Plan, coupled with adequate financing mechanisms, is necessary to maximize outcomes—a topic beyond the scope of this report.

This report synthesizes data from regional organisations, international financial institutions, EuroStat, and other sources, offering a snapshot of progress in the GAWB implementation.

By focusing on implementation metrics, this report provides a robust foundation for monitoring the Green Agenda's advancement and ensuring its alignment with the broader EU integration goals for the Western Balkan 6.

1.1 Key Findings

1. **Progress Achieved:** Significant strides have been made in the implementation of the GAWB across all WB6, particularly in legislative and normative developments, as well as in the adoption of policies and measures. Most planned GAWB actions are underway, reflecting momentum in aligning with its objectives.
2. **Implementation Gaps:** While legislative activities are progressing, actual on-the-ground accomplishments lag behind, requiring intensified efforts and innovative policy approaches to close the gap.
3. **Cross-Sectoral Coordination:** Coordination across sectors remains inadequate and needs strengthening through well-targeted thematic workshops, cross-sectoral publications, and structural improvements to the GAWB framework.
4. **Structural and External Barriers:** In some WB6, structural challenges and external barriers hinder progress, particularly in areas requiring regional collaboration, such as transboundary air and water pollution agreements, which remain a critical bottleneck.
5. **Biodiversity Cooperation Success:** Positive regional progress in cross-economy cooperation on biodiversity showcases the potential of collaborative efforts when clear visions and mutual benefits are established.
6. **Sector-Specific Challenges:** Real-life implementation of GAWB actions remains particularly challenging in sectors such as energy, transport, Nature-based Solutions (NbS), land use, land-use change and forestry (LULUCF), circular economy, and climate adaptation.
7. **Complex Investment Environment:** Policy and regulatory uncertainties—linked to EU trade regimes, the Carbon Border Adjustment Mechanism (CBAM), the Global Methane Pledge, and other commitments—create a challenging investment climate. High financing costs (Weighted Average Cost of Capital) further exacerbate reluctance among WB6 to advance GAWB implementation.
8. **Need for Financing:** The GAWB represents a vital development framework for the region. However, its success hinges on establishing a large-scale, cooperative financing framework to unlock its transformative potential.
9. **Energy Security Focus:** Decarbonization, driven by the imperative of energy security, remains the cornerstone of GAWB implementation, underscoring its role as a critical priority for sustainable development in the Western Balkans 6.

2. Recommendations

2.1. Climate Action Roadmap

While greenhouse gas (GHG) emission reduction targets are set through Nationally Determined Contributions (NDCs) under the UNFCCC Paris Agreement, as well as within the Energy Community framework (including National Energy and Climate Plans (NECPs)), and emission inventories are reported via National Communication (NC) and Biennial Update Reports (BURs)[1], a multitude of policy documents exists across the WB6 and various sectors. Therefore, effective policy coordination across sectors and among the WB6 is essential to achieving established targets...

The development of the Climate Adaptation Roadmap, as outlined by the GAWB, is more effectively structured in those WB6 that have adopted climate change laws. These laws mandate the adoption of policy documents for low-carbon development and climate adaptation within specific timeframes. While climate change impacts are acknowledged, this effort remains incomplete due to the absence of comprehensive and well-developed vulnerability and risk (V&R) assessments essential for adaptation planning. Additionally, progress in implementing the adaptation roadmap is challenging to track due to the lack of robust monitoring and evaluation (M&E) mechanisms.

Harmonisation with the decarbonisation targets that are set in the Energy Community Treaty framework as well as Global Methane Pledge requires attention. Further efforts seem to be required using the National Energy and Climate Plans (NECP) and other instruments to come to a more comprehensive data and policy framework.

The concept of Nature-based Solutions (NbS) is not yet integrated into policy frameworks across the WB6. Proper integration requires adopting a clear definition and evaluation guidelines to ensure measures align with the NbS concept. This approach would prevent the risk of false NbS implementation and enable effective monitoring of NbS actions. Without a proper introduction of the NbS concept, the sustainability of Land Use, Land-Use Change, and Forestry (LULUCF) contributions to mitigation may be compromised due to insufficient coordination between mitigation and adaptation policies.

Furthermore, the WB6 lack essential tools such as a dedicated platform or portal to disseminate climate risk and adaptation knowledge, as well as regulations for monitoring and evaluation (M&E) tools for adaptation efforts.

Policies and measures (P&M) need to be better defined within the NECPs. From an opposite perspective, sulphur dioxide and other harmful emissions that continue beyond the limits set by LCPD and IED under the Energy Community Treaty inevitably impact both NbS and LULUCF.

Starting from 2024, WB6 will submit their Biennial Transparency Reports (BTRs) to the UNFCCC. Thus, reporting on climate change impacts, mitigation and adaptation will be more frequently revised and available for progress tracking. Such reporting for adaptation is difficult for WB6 also because of the lack of M&E mechanisms with publicly available information and data, which would integrate the information about the adaptation finance and progress

1 Starting from end of 2024

in implementation and risk reductions. Increasing capacities for establishment of M&E is required.

Western Balkans Six are expected to adopt their 2030 NECPs by 2024. Table 3.1.6 presents progress in NECPs development and adoption in the WB6. These policy documents, when adopted, will provide more systematic review of energy actions under the climate action roadmap.

The next new set of post-2030 NDCs is expected in 2025, which will provide updated targets for GHG emission reductions, and hopefully a more systematic approach amongst the WB6 in assessment of LULUCF contribution, Global Methane Pledge and target setting for net emission reductions.

The implementation of WB6 adaptation planning is expected when NAPs or corresponding policy documents are adopted by all six. Currently, there are three WB6 without an adopted NAP. Monitoring of the adaptation process implementation can be implemented through the monitoring of priority sectors included in the NAP, the level of vulnerability and risk assessment and the level of systematic approaches in adaptation process through NAP documents.

The Western Balkans Six would benefit from a portal/platform for monitoring of climate change actions and policies that are complementary to those envisaged by NECP, especially for adaptation. It is proposed to include WB6 in the EU Climate Adaptation Platform, which is vital for aligning WB6 efforts with EU climate adaptation monitoring and actions.

Since the implementation of the Green Agenda is an ongoing process, more progress is expected in incorporating climate action roadmap measures into policy in the future.

2.2. Energy Roadmap

The following recommendations are, among others, proposed for consideration to address challenges and advance the implementation of GAWB objectives in the energy sector:

Comprehensive and large scale programme for addressing energy poverty including financing schemes for household renovation and providing basic standards of living is an urgent necessity. The programme needs to direct public funds to households in need that lack capacity to address the condition of the building where they are living combined with inefficient heating (and cooking) devices. It is not only about financial capacity to invest but also about knowledge and social capacity to conduct investment.

There is a conflict between the objective to improve energy efficiency and reduce energy poverty at one hand and objective to preserve very high share of biomass in the energy mix in order to preserve the share of renewable energy in the energy balance. Therefore, efficient use of biomass for energy offers an interesting decarbonisation opportunity.

Both NECP and policies and measures to address energy poverty and improve energy efficiency need to be harmonised with climate change, methane pledge, NbS, LULUCF and climate adaptation policies and measures in order to reinforce each other. The role of these policies and measures in preservation of biodiversity and development of circular economy needs to be better understood and recognised.

Geothermal energy is an opportunity for many of the Western Balkans Six. The region contains better-than-average geothermal resource for European continent circumstances. That is a competitive opportunity for decarbonisation if legally accessible and used with high efficiency.

There are serious inter-sectoral impacts from energy sector including acid emissions that affect biodiversity, forests, land use, erosion and land sliding as well as soil productivity and longevity of infrastructure. Continuation of these emissions poses' risks to adaptation strategies within GAWB as well as LULUCF based solutions and circular economy. Rapid decarbonisation has a side-effect of replacing acid emissions with all of health and economic benefits it may produce.

GAWB has to be reflected in the individual-level spatial plans in order to coordinate and streamline implementation as well as to manage conflict between different facilities at the given territory.

Although there is significant interest in investments into solar and wind energy in the region with various sorts of support schemes, these forms of energy have to be reconsidered from the comparative economy competitiveness point of view.

Hydro, geothermal, wind and solar energy investments may benefit from better cross-border/boundary cooperation since a number of attractive investment opportunities in the region are actually cross-border/boundary.

2.3 Sustainable Transport Roadmap

The key recommendations are to:

- Continue with the efforts to support development of smart transport infrastructure, especially regarding development of policy aligned with EU acquis, intelligent system development, multimodal ticketing, data exchange, digitalisation;
- Continue with reconstruction of railway companies;
- Enhance efforts to align with the Action Plan for Waterborne Transport and Multimodality;
- NECP, NbS, LULUCF may produce serious challenges for available transport infrastructure and interoperability between railways, roads and waterborne transport. Interfaces have to be carefully examined and taken into consideration. Comprehensive spatial planning may help in this context.
- It is essential to align climate change and transport/sustainable urban mobility policies across the WB6 and local levels to ensure coherence and effective implementation, such as WB6 Urban Mobility Policy and Programmes, WB6 Energy and Climate plans with Sustainable Urban Mobility Plan and Sustainable Energy and Climate Action Plan.
- Additionally, transposition of Alternative Fuel Infrastructure Regulation is one of the main priorities for achieving sustainability of transport.
- Adoption of Sustainable urban mobility plans on urban nodes on TEN-T network as per new TEN-T Regulation will be important for future development in this sector as well as the adoption of transport infrastructure climate resilience plans for both road and railway network.
- Establish a Road Traffic Safety Agency fully competent to coordinate and lead the improvements in road safety and strengthen the road safety management system;
- Complete the full transposition of ITS Directive (EU) 2023/2661 amending Directive 2010/40/EU and Directive (EU) 2019/520 on e- tolling as well as Regulation (EU) 2020/1056 on electronic freight transport information;
- Enable mutual recognition of licences, safety certificates and vehicle permits with regional partners and the EU;
- Finalise and adopt the ITS Strategy and EU ITS Framework.

2.4. Circular Economy Roadmap

The key recommendations are to:

- Revise and modernise laws and regulations (e.g. mineral policy and strategy; procedures for permits for exploration and exploitation activities; royalties, fees, and compensatory benefits; spatial plans and environmental legislation related to strategic environmental impact assessment, environmental impact assessment, ESPOO convention, etc.);
- Enhance financing options and competitiveness in the PRM production industry;
- Increase stakeholder consent and public awareness: stakeholder approval and societal acceptance are necessary throughout the entire mining project's lifecycle;
- Improve the quality of data on geological potential: it is crucial that both domestic and international businesses disclose the findings of their exploratory projects and categorise their mineral reserves and resources in accordance with globally recognised standards;
- Organise WB6 regional events related to PRM production;
- Promote public-private partnerships and enhance stakeholder participation to accelerate the shift to circular economy;
- Improve interface between circular economy and transport P&Ms taking into account spatial distribution of population and economic activity as well as economy of scale in waste management;
- Integrate green practices into current funding channels to enhance circularity and SME greening;
- Promote eco-design and eco-labelling of products;
- Conduct a comprehensive evaluation of the management of sorted and residual waste with an emphasis on waste prevention and increasing recycling rates;
- Create a roadmap for circular economy in local communities;
- Develop relevant studies on specific topics focused on reducing plastic waste, construction and demolition waste, textile industry challenges, waste management systems in WB region, food waste prevention, etc.;
- Establish a website with a regular blog that discusses the idea of circular economy in everyday life of citizens in WB region;
- Ensure full implementation of the Barcelona Convention and Joint Statement on Preventing Plastic Pollution, especially addressing marine litter in the WB6;
- Provide capacity building for waste management in local communities in coastal regions of WB6;
- Reduce waste disposal in rivers flowing into both the Adriatic Sea and Danube;

- Utilise the Western Balkans Research and Innovation Information Hub to promote regional innovation;
- Establish regional centres of excellence on specific topics for circular economy to help implement smart specialisation strategy;
- Introduce practical individual-level or regional educational programmes on circular economy at secondary education and university levels.

2.5 Depollution Roadmap

The key recommendations are to:

- Finalise the process of ratification of Convention on Long-range Transboundary Air Pollution and its protocols;
- Improve air quality by decreasing emissions, especially from energy production and industrial processes;
- Make further development and implementation of air pollution modelling of five main pollutants with the intention to reduce emissions;
- Continue with the activities on developing, harmonisation and implementation of Air Quality Strategies;
- Complete the alignment with the EU's Industrial Emissions Directive and ensure BAT implementation, as the most effective and advanced methods and processes to achieve high level of environmental protection;
- Further development of air quality monitoring system (increase the number of stations and start measuring NH3 and NMVOCs in accordance with NEC Directive and the Gothenburg Protocol under the Convention on Long-range Transboundary Air Pollution);
- Coordinate these P&Ms with NECPs, Global Methane Pledge, energy poverty reduction strategies and energy efficiency interventions in order to better support local clean air interventions;
- Consider urban green strategies;
- Establish a monitoring system for the assessment of health impacts and costs attributable to air pollution in urban areas;
- Strengthen the process of relevant EU water-related acquis implementation;
- Adopt a comprehensive and integrated water management framework in light of the pressing challenges posed by water pollution and the impacts of climate change;
- Establish an integrated framework of inter-sectorial collaboration amongst departments and agencies involved in water management, pollution control and climate resilience;
- Continue the investments in wastewater treatment infrastructure;
- Make more efforts to improve soil monitoring, protection from pollutants, and remediation of contaminated sites.
- Take measures to improve implementation of the EU acquis specifically for EU Soil Strategy for 2030 reaping the benefits of healthy soils for people, food, nature and climate.

2.6 Sustainable Agriculture Roadmap

The key recommendations are to:

- Establish a system which will enable monitoring of the GAWB AP. This could include nomination of delegated persons within the representative ministries who will be in charge of monitoring, data collection and guiding the implementation of GAWB AP;
- Introduce land use indicators into the structure of GAWB indicators;
- Identify major recent changes in agricultural policies in the WB6 and their implications on the EU accession process;
- Provide information on the Green Agenda relevant for its implementation in the WB6: climate policy, reduction of pesticides, strengthening of organic farming, nature conservation and biodiversity policy;
- Define forms for data monitoring and reporting for each of the sub-areas within sustainable agriculture;
- Provide training for employees involved in the implementation of GAWB AP in all sectors;
- Create a formal working group of representatives of institutions of the WB6 and secure funds for their work and training;
- Improve regulatory and institutional set-up;
- Continue to implement the strategy for legislative alignment with and implementation of the EU acquis, specifically for relevant laws on official controls, quality policy and organic food production, animal health and plant health;
- Further increase the share of food establishments compliant with the EU standards;
- Continue to strengthen administrative capacity and infrastructure for food safety controls;
- Strengthen the capacity to implement effective disease surveillance and vaccination, as applicable;
- Move from strategies to actions;
- Update and accelerate implementation of the action plan for EU acquis alignment in agriculture and rural development;
- Take measures to improve implementation and avoid further loss of IPARD funds;
- Increase awareness amongst farmers and other stakeholders about strategies and policies;
- Redesign the budgetary support to increase the climate resiliency of agricultural production and productivity;
- Increase financing of AKIS, research, digitalisation, competent authority capacity;

- Increase financing of AEMs (Measure 4 of IPARD III) dedicated to environmental protection on farmland and climate resilience, including support for digital CSA platforms, AKIS and agri-environmental demonstrations/pilots;
- Support green capital investment in agriculture and food processing;
- Set up foundation for climate mitigation;
- Strengthen the capacity of competent authorities to monitor the results of AEMs;
- Establish the manure management regulatory framework and relevant guidelines;
- Strengthen animal identification, registration and movement control;
- Gradually increase the number of AEMs beyond only organic farming;
- Step up efforts for sustainable development and livelihood diversification of rural areas;
- Support self-organisation in the rural areas, LEADER;
- Find an adequate mechanism (possibly in the context of spatial planning) to better coordinate between sustainable agriculture, energy, circular economy and transport.

2.7 Protection of Nature and Biodiversity Roadmap

The GAWB AP envisages development of the Western Balkans Biodiversity Strategic Plan (WBBSP) that should reflect on targets and indicators aligned with the 2030 EU Biodiversity Strategy, EU Green Deal, and Convention on Biological Diversity (CBD) Post-2020 Global Biodiversity Framework, incorporating indicators used for UNCBD reporting.

IUCN ECARO and BDTF WB, whose role is among others to coordinate activities in the nature and biodiversity pillar of the GAWB, along with the supporting role of the RCC, provide regional coordination and consultation framework for WBBSP. The process is expected to start in 2024, continue and conclude by the end of 2025.

There is a need for the development of the Restoration Opportunities Assessment Report (ROAR) which will serve as the foundation for creating the regional Forest Landscape Restoration Plan (FLRP). The ROAR will guide the selection of priority areas for restoration, outline measurable goals, and establish criteria for monitoring progress. The development process will also include consultations with stakeholders, data collection, and the integration of local knowledge to ensure that restoration efforts are both contextually relevant and scientifically sound. The final ROAR will provide a clear framework for tracking and enhancing restoration outcomes across the target landscapes and will contribute to development of the regional FLRP.

The FLRP will include a financial plan to support joint strategies for resource mobilisation towards FLRP. It will identify opportunities for enhanced sustainable forest management and restoration, pinpoint key areas for restoration, and specify types of restoration interventions.

The Report on Climate Change and Biodiversity Linkages will provide recommendations for incorporating these linkages into climate change policies, strategies, and plans, including the GAWB decarbonisation component, NDCs, and NAPs, featuring key species indicators to track the effects of climate change on species and habitats.

The WB Biodiversity Information Hub (WBBIH) will be integrated with relevant biodiversity information systems, such as the Biodiversity Information System for Europe (BISE), and provide detailed guidelines for standardised data collection across five species/taxonomic groups (birds, mammals, amphibians, reptiles, and vascular plants as outlined in the EU Habitats Directive, Annex 2 and Annex 4). It will adhere to biodiversity data standards, including the Darwin Core and the Access to Biological Collections Data (ABCD) scheme, as well as regional guidelines specific to the WB6.

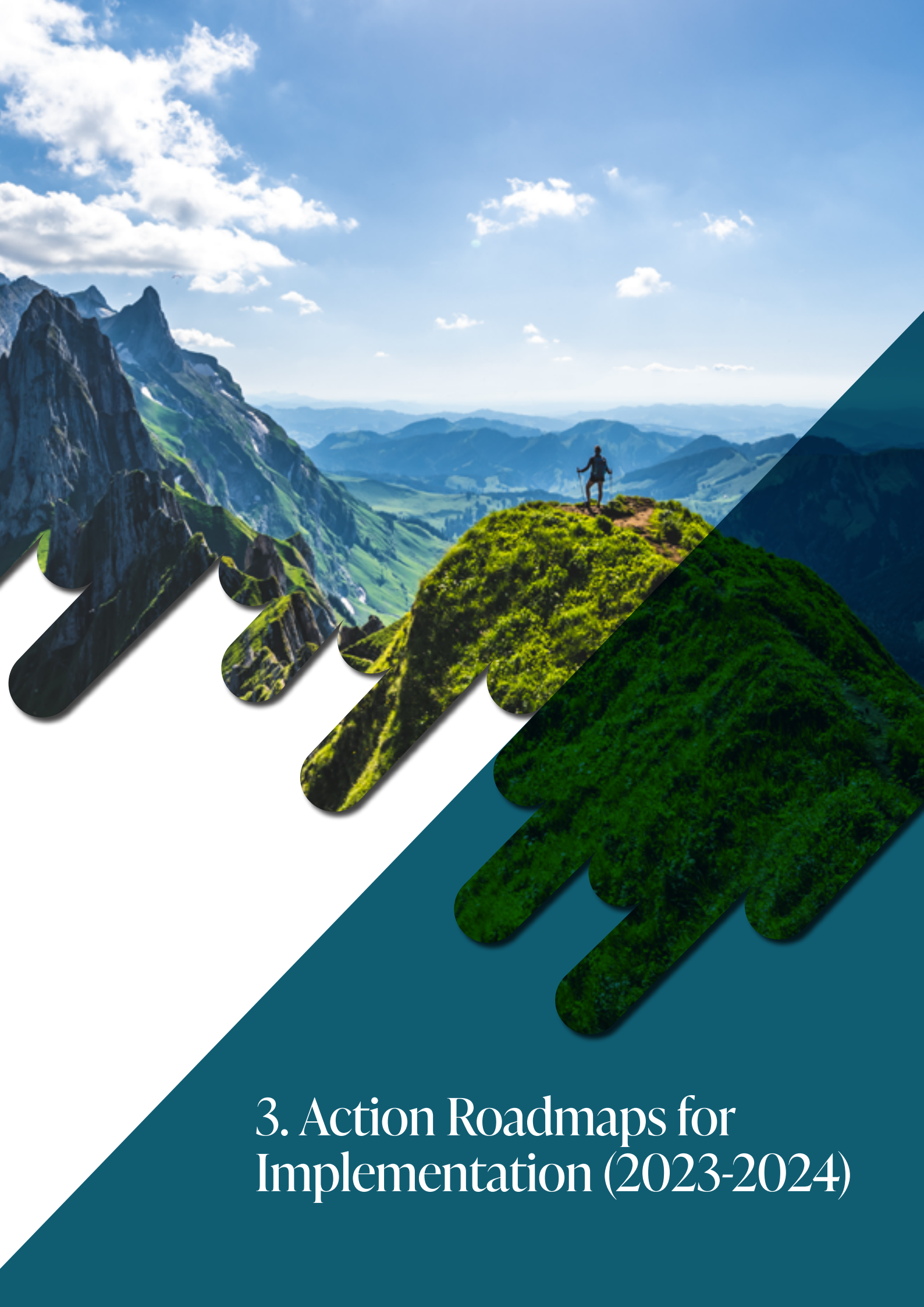
Regular monitoring of the Green Agenda indicators is essential, as monitoring was initially meant to align with the 2020 Global Biodiversity Framework (GBF). WB6 are still in the process of establishing and submitting specific targets and indicators for the UNCBD guiding framework F.

To integrate environmental sustainability into regional development, the following key actions will need to be implemented:

- Develop comprehensive green infrastructure networks between urban, peri-urban, and rural areas, enhancing biodiversity corridors and ecosystem services;
- Restore natural habitats through large-scale projects focused on wetlands, riparian zones, and degraded landscapes;
- Promote nature-based solutions (NbS) which can significantly increase urban green cover and biodiversity
- Establish cross-border/boundary ecological corridors crucial for facilitating species migration and genetic exchange, which are essential for climate adaptation.

The increase of forest coverage is vital for carbon sequestration, biodiversity conservation, and enhancing ecosystem resilience. The following actions are central to increasing forest coverage in the region:

- Implementation of afforestation and reforestation of degraded lands, former agricultural areas, and urban spaces, using native and climate-resilient tree species;
- Promotion of community-based forestry with the intention to involve and engage local population in forest management and conservation;
- Integration of agroforestry systems into agricultural landscapes and significant increase in tree cover, including improvement of soil health;
- Strengthening forest protection policies as essential to safeguard existing forests from deforestation and degradation;
- Considering urban forests and green areas.
- Coordinate rapid reduction of harmful impacts from energy and transport on biodiversity with NECP, energy poverty reduction strategies and other aspects listed hereby.
- Land use indicators (eventually added into GAWB) to be accompanied with biodiversity considerations in order to inform biodiversity policies and measures.



3. Action Roadmaps for Implementation (2023-2024)

3.1 Climate Action Roadmap

Progress in implementing the Roadmap across the actions and the region

Action 1	Align with the EU Climate Law with a vision of achieving climate neutrality by 2050

The Climate Change Laws (CC Laws) are meant to provide legally binding commitments for the implementation of climate actions. They present an initial tool to implement mandatory actions in regulating the adoption of policy documents and creation of monitoring systems related to climate change impact, mitigation and adaptation to climate change actions and outcomes. The Western Balkans Six (WB6) CC Laws are expected to be aligned with the European Climate Law[2] by 2025, and to demonstrate continuous improvements by 2030.

Three of the WB6 adopted CC Laws (**Albania** in 2020[3], **Montenegro** in 2019[4], and **Serbia** in 2021[5]). **Kosovo*** is expected to adopt the CC Laws in 2024[6]. **North Macedonia** prepared the draft of the document, however its adoption by the government is pending. **Bosnia and Herzegovina** did not draft any CC Laws, while **Montenegro** prepared the draft of the new CC Law whose adoption is expected in 2024. Changes to CC Law of **Serbia** are expected to be adopted by 2026. Table 3.1.1 below presents the known status of alignment of the legal framework on climate change in the WB6.

Table 3.1.1 Information on the Known Status of CC Laws Adoptions in the WB6

	Law	Adopted	Comments
Albania	Climate Change Law	2020	-
Bosnia and Herzegovina	-	-	No draft available
Kosovo*	Climate Change Law		Adoption expected in 2024
Montenegro	Law on Protection from Negative Impacts of Climate Change	2019	Draft of new law available: Law on Protection from Negative Impacts of Climate Change and Protection of Ozone Layer; Adoption expected in 2024
North Macedonia	Climate Change Law	-	Draft available
Serbia	Climate Change Law	2021	Adoption of changes expected in 2027

Source: Author's interpretation from literature[3,4,5,6]

2 https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32021R1119
3 https://climate-laws.org/document/law-no-155-2020-on-climate-change_1817
4 https://epa.org.me/wp-content/uploads/2021/09/Zakon-o-zastiti-od-negativnih-uticaja-klimatskih-promjena.pdf
5 https://climate-laws.org/documents/serbian-law-on-climate-change_2bbd?id=serbian-law-on-climate-change_7d49
* This designation is without prejudice to positions on status, and is in line with UNSCR 1244/1999 and the ICJ Opinion on the Kosovo declaration of independence.
6 https://www.kuvendikosoves.org/Uploads/Data/Documents/Lawno.08-L-250_xaVNFBSw9X.pdf

Action 2	Set forward-looking 2030 energy and climate targets

Five of WB6 set their targets for GHG emission reduction through the nationally determined contributions (NDCs). Their second revised version was submitted to the United Nations Framework Convention on Climate Change (UNFCCC)[7], with **Albania**, **Bosnia and Herzegovina**, **Montenegro**, **North Macedonia** submissions in 2021, and **Serbia** in 2022. **Bosnia and Herzegovina**, **Montenegro**, **North Macedonia** and **Serbia** provided their targets for GHG emission reduction with respect to 1990, while **Albania** did not explicitly set its targets. Scenarios of emissions for **Albania** show the increase of GHG emissions compared to the past values, however the rates differ depending on the implemented measures. These provided the assessment of future emissions compared to 2005. The 1990 values of GHG emissions are available under GHG Inventories at the UNFCCC. **Kosovo*** is not part of the UN, hence it does not have the obligation to set NDCs. As part of its draft CC Law, **Kosovo*** states its targeted GHG values for 2030. Table 3.1.2 below presents derived values for GHG emissions by WB6 and the status of commitments for changes in GHG emissions by 2030.

Table 3.1.2 GHG Emissions (Mt CO2eq[8]) by WB6 in 1990 and 2030, and their total value, derived from pledges in NDCs. Where values are not explicitly available for 1990 and 2030, they are retrieved using targeted reductions in NDCs and values presented in reports (National Communications (NCs)[9]). Total contribution by WB6 to reduction of GHG emissions for the WB6 is presented in the last row.

	1990	2030	Commitments and intentions
Albania	4.340[a]	11.9871[b]	Increase expected, no targets set
Bosnia and Herzegovina	34.040	22.739	Reduction by 33.2% (and up to 36.8%)
Kosovo*	*No data*	8.950[c]	No NDC, intended reduction as specified
Montenegro	5.383	3.499	Reduction by 35%
North Macedonia	12.478	6.058	Reduction by 51.45%
Serbia[d]	81.526	54.396	Reduction by 33.3%[e]
Total (WB6)	**138.933**	**108.388**	**Reduction by 22%**

[a] *Value derived from GHG Inventories for Non- Annex I parties (UNFCCC).*

[b] *Value derived from NDC (2021) from scenario with implemented measures for GHG reductions.*

[c] *Value derived from draft National Energy and Climate Plan (NECP) of Kosovo*.*

[d] *Second Biennial update Report of Serbia to the UN Framework Convention on Climate Change, December 2023 without LULUCF*

Source: Author's interpretation from literature[4,5]

WB6 committed to reduce their GHG emissions by 22% compared to 1990, according to current data and commitments available. The share of GHG emissions and the share in reductions is unevenly spread amongst the WB6. On 15 December 2022, the Energy Community Ministerial Council adopted 2030 GHG emission targets (Decision 2022/02/MC-EnC[10]), with targets on the net GHG emission reduction including land use, land-use change and

7 https://unfccc.int/NDCREG

8 Million tonnes of carbon dioxide equivalent

9 https://unfccc.int/non-annex-I-NCs

10 https://www.energy-community.org/dam/jcr:421f0dca-1b16-4bb5-af86-067bc35fe073/Decision_02-2022-MC_CEP_2030targets_15122022.pdf

forestry (LULUCF[11]), with the increased share of energy production from renewable sources and increase in energy efficiency. With this, assessments show that reductions in net GHG emissions are over 40% in five Western Balkans Six, except for the planned increase in **Albania**. The increase in share of energy production from renewable resources is planned in all WB6. In 2005, the average share of energy production from renewable sources was 24.8%, while the 2030 target is at 42.7%. The sustainability of natural systems in the future climate changing conditions should be ensured through adaptation to climate change planning. In conclusion, WB6 do not coordinate fully their mitigation and adaptation policies.

Energy and climate targets are integrated through NECPs.

Table 3.1.3 Energy Community 2030 net Greenhouse Gas Emissions target[12]

Contracting Party	2030 Target for net Greenhouse Gas Emissions compared to 1990 levels	
	decrease (%) below 1990 levels	million metric tons of carbon dioxide equivalent
Albania	+53.2%	12.00 MtCO2eq
Bosnia and Herzegovina	-41.2%	15.65 MtCO2eq
Georgia	-47.0%	20.50 MtCO2eq
Kosovo*[a]	-16.3%	8.95 MtCO2eq
Moldova	-68.6%	9.10 MtCO2eq
Montenegro[b]	-55.0%	2.42 MtCO2eq
North Macedonia	-82.0%	2.20 MtCO2eq
Serbia	-40.3%	47.82 MtCO2eq
Ukraine	-65.0%	309.00 MtCO2eq
Overall	**-60.9%**[c]	**427.64 MtCO2eq**[d]

[a] *Target of Kosovo* is compared to 2016 levels*
[b] *Target of Montenegro excludes LULUCF emissions and removals*
[c] *The base year used for Kosovo* in the calculation of the percentage reduction figure is 2016*
[d] *The absolute target figure represents the sum of the individual Contracting Parties' targets*
Source: Energy Community Secretariat, The Clean Energy Package Targets[13]

Action 3	Develop and implement integrated Energy and Climate Plans

NECPs include targets on reduction of GHG emissions, increase in share of energy production from renewable resources and increase of energy efficiency. Energy Community Secretariat (EC Secretariat) facilitates the NECP process[13]. All NECPs should be adopted by 30 June 2024. Drafts are developed by Western Balkans Six and submitted to the EC Secretariat, which than provides the Secretariat's Recommendation Document, after which the NECP can be adopted. The progress on NECPs drafting and adoption is presented in Table 3.1.4.

11 https://www.epa.ie/our-services/monitoring--assessment/climate-change/ghg/lulucf/
12 https://www.energy-community.org/implementation/package/CEP.html (accessed at 28 August 2024)
13 https://www.energy-community.org/implementation/package/CEP.html

Albania and **North Macedonia** adopted their NECPs. **Bosnia and Herzegovina**, **Kosovo*** and **Serbia** submitted their NECP drafts to the EC Secretariat and Recommendations were provided by the EC Secretariat in the last quarter of 2023.

Table 3.1.4 Progress in NECPs Development and Adoption in WB6[14]

	NECP status
Albania	2022-2030 NECP adopted in 2021.
Bosnia and Herzegovina	2025-2030 NECP draft submitted in 2023. Bosnia and Herzegovina received Secretariat's Recommendation in December 2023.
Kosovo*	2025-2030 NECP draft submitted in 2023. Kosovo* received Secretariat's Recommendation in December 2023.
Montenegro	NECP draft under development.
North Macedonia	2021-2030 NECP adopted in 2022.
Serbia	2025-2030 NECP adopted in July 2024.

Source: Energy Community Secretariat, Governance and National Energy and Climate Plans[14]

Action 4 Prepare and implement climate adaptation strategies

Climate change adaptation (CCA) planning is implemented through policy documents, strategies, programmes and plans. National Adaptation Plan (NAP) is a policy document which lays down measures to develop and maintain the adaptation mechanism. Adaptation policy documents are submitted to UNFCCC[15].

EU Adaptation Strategy adopted in 2021[16] has four principal objectives: to make adaptation smarter, faster and more systematic, and to improve international action on adaptation to climate change. With this, adaptation to climate change should be (1) smarter adaptation, i.e. rely on science and implement the latest scientific knowledge in adaptation planning, (2) faster adaptation, i.e. choose priorities for investments in most urgent measures which will improve the resilience to unavoidable impacts, and (3) more systematic adaptation, i.e. mainstream climate resilience considerations and solutions into policies, regulations and methodologies of sectors vulnerable to climate change and involve local governments into the adaptation process as climate change has impact on all levels of governance and society.

Development of adaptation policy documents in **Kosovo***, **Montenegro** and **Serbia** are regulated by the Western Balkans Six CC Laws. **Serbia** adopted its Climate Change Adaptation Programme (CCAP) in 2023. **Kosovo*** is expected to adopt the CC Law in 2024. Its draft defines the obligation to develop an adaptation policy document. **Montenegro** expects to adopt the new CC Law, which defines a two-year timeframe for adoption of a NAP. The NAP development process in **Albania** is underway, as initiated by Albania's first adaptation policy document which lays down the adaptation process development. Albania continues to work on the development of its adaptation strategy as one of the objectives under a project fund-

14 https://www.energy-community.org/implementation/package/NECP.html
15 https://napcentral.org/submitted-naps
16 https://climate.ec.europa.eu/eu-action/adaptation-climate-change/eu-adaptation-strategy_en

ed by the Green Climate Fund (GCF). **Bosnia and Herzegovina** adopted its 2021-2030 NAP. **North Macedonia** predicted the NAP development as part of the 2021-2025 Action Plan of Long-term Strategy on Climate Action, however the NAP draft is still unavailable. Review of progress in adaptation policy documents in WB6 is presented in Table 3.1.5.

Table 3.1.5 Progress in Adaptation Policy Documents in WB6

	Adaptation Policy Status
Albania	Climate Change NAP is adopted. It lays down the adaptation planning process, ensuring funding as well. The objective of *Advancing Albania's planning for medium and long-term adaptation through the development of a National Adaptation Planning (NAP) process* project funded through the GCF is to develop the NAP Strategy and its implementation plan.
Bosnia and Herzegovina	2021-2030 NAP adopted in 2021.
Kosovo*	Development and adoption of the Strategy for Climate Change Adaptation and development of the CCA Action Plan are regulated by the Climate Change Law. It is expected that the Law will be adopted in 2024.
Montenegro	NAP development initiated. The draft Law on Protection from Negative Impacts of Climate Change and Protection of Ozone Layer foresees NAP adoption within two years of the Law adoption.
North Macedonia	NAP is not adopted, and the draft is not available. NAP development is identified within the 2021-2025 Action Plan of Long-Term Strategy on Climate Action.
Serbia	2023-2030 Climate Change Adaptation Programme (CCAP) and 2024-2026 Action Plan were adopted in 2023. The CCAP was adopted within two years after CC Law adoption, as was stipulated by the Law.

Source: Author's interpretation

Common priority sectors for adaptation to climate change in currently available adaptation policies as listed in Table 3.1.5. above are agriculture, health, and natural systems, i.e. forestry/biodiversity. **Albania** and **Bosnia and Herzegovina** also include measures for tourism and water management. **Serbia** plans to include measures related to adaptation in tourism through developing the Strategy for Environmental Protection which is the main strategic document for the implementation of GAWB. For water management, the CCAP initiated the adaptation process using a systematic approach, i.e. by introducing changes to the methodology for disaster risk assessment. This is expected to enable a joint approach to Disaster Risk Reduction (DRR) and adaptation. Other sectors included in the CCAP are road infrastructure, energy and urbanism.

Development of adaptation policies shows progress as systematic approaches are being introduced to the adaptation process. Responsibilities for adaptation are transferred to sectors vulnerable to climate change. Such approaches are more present in the recently adopted policy documents.

WB6 would benefit greatly from strengthening early warning capacities, i.e. capacities of hydrometeorological services, and climate change monitoring systems[17], as recognised by NAPs and NCs. However, limited funding is available for such improvements. Approximate estimates for WB6 for adaptation implementation investment show that $37.2 billion is required (25.5% of total in Serbia, 18.3% in Bosnia and Herzegovina, 17.2% in North Macedonia, 16.1% in Albania, 15.3% in Montenegro, 7.5% in Kosovo*). Major challenges are to get the funds and to coordinate the adaptation process amongst different sectors for systematic implementation. Key achievements in implementation of adaptation process is to integrate climate change information, climate hazards vulnerability and risk assessments into DRR management plans and spatial plans, as well as in local level planning. For this reason, strengthening of capacities for vulnerability and risk assessment to climate hazards and adaptation planning as integrated component of policy documents and plans is necessary, including enabling local self-governments to integrate adaptation in a systematic way.

Action 5	Align with the EU Emission Trading System and/or introduce other carbon pricing instruments

Within this Action, it has been assessed that only Montenegro has introduced carbon pricing. However, the price level remains significantly lower than that of the EU Emission Trading System (EU ETS)[18]. The European Commission is currently preparing the "Impact assessment for the establishment of a regional ETS in Energy Community Contracting Parties", with further developments anticipated at the Energy Community level, under the Energy Community Decarbonisation Roadmap.[19]

It is important to note that the EU ETS is supported by complementary investment mechanisms, such as the Modernisation Fund[20], and the Just Transition Fund, the latter operating independently of the EU ETS. These mechanisms are available to EU Member States.

To accelerate decarbonisation of the WB6, the introduction of EU investment mechanisms or similar financial support will be essential[21].

- It can be expected that all WB6, will establish the necessary rules governing the fundamental building blocks of MRVA by 2025, ensuring emission monitoring begins in 2026.
- In the frame of the Growth Plan for the Western Balkans: Proposed deadline for development, adoption and full implementation of the MRV package is June 2026.
- Implementation of Directive 2003/87/EC-part, Commission Implementing Regulation (EU) 2018/2066, and Commission Implementing Regulation (EU) 2018/2067 ensures all elements for full implementation.

17 https://www.worldbank.org/en/region/eca/publication/western-balkans-6-ccdr
18 https://www.energy-community.org/news/Energy-Community-News/2023/07/05.html
19 "Impact assessment for the establishment of a regional Emission Trading System in Energy Community Contracting Parties" is now available at the link: https://www.energy-community.org/news/Energy-Community-News/2025/01/14.html
20 https://modernisationfund.eu/how-it-works/
21 https://www.rcc.int/docs/717/hamburg-declaration-on-the-green-agenda-for-the-western-balkans

Action 6	Increase opportunities for deployment of nature-based solutions to mitigate and adapt to climate change

Tracking the actions and measures related to Nature-based Solutions (NbS) is limited owing to the approximate consideration of the NbS context, however this is expected to change due to EU Adaptation Strategy which highlights the importance of NbS implementation as sustainable and adaptive solutions, which provide more benefits with lower costs in long-term. The NbS by its definition are adaptive to climate change with the contribution to climate change mitigation[22]. The International Union for Conservation of Nature (IUCN) provided standards for NbS as a framework guideline[23], which lays down instructions for the verification process. WB6 do not have established procedures for verification of measures if they rely on the NbS concept. A repository of implemented NbS case studies does not exist. Approximate naming of measures as NbS, without adopted procedures for verification may lead to maladaptation and impact increase in vulnerability and net-GHG emissions.

The *ADAPT: Nature-based Solutions for Resilient Societies in the Western Balkans* project (under the IUCN Regional Office for Eastern Europe and Central Asia (ECARO, IUCN) implemented actions related to incorporating the NbS standards into the individual legislation and policies[24] in the future. The NbS are recognised as sustainable solutions for adaptation with contributions to climate change mitigation. Through the implementation of GAWB, WB6 enhance the use of NbS concept, and more progress is expected in the future. Current relevant actions to improving the implementation of NbS which contribute to climate actions are listed in Table 3.1.6.

Table 3.1.6 Actions Related to the NbS Concept in the WB6

	Action Related to NbS Concept
Albania	Adopted NAP includes ecosystem-based adaptation (EbA) measure for water management. Two projects with implementation on the ground in forestry restoration and prevention of land degradation led by IUCN (joint project, IUCN ECARO, North Macedonia and Albania).
Bosnia and Herzegovina	EbA for agriculture included in NAP. Study on opportunities for introduction of the NbS concept into policy framework implemented (IUCN, 2022)[25].
Kosovo*	Study on Enhancing NbS in Kosovo* implemented (IUCN, 2023)[26]
Montenegro	The draft Law on Protection from Negative Impacts of Climate Change and Protection of Ozone Layer anticipates a mandatory review and potential introduction of the concept of NbS as part of the future NAP.

22 https://research-and-innovation.ec.europa.eu/research-area/environment/nature-based-solutions_en
23 https://portals.iucn.org/library/node/49070
24 https://www.iucn.org/sites/default/files/2022-05/adapt-nature-based-solutions-for-resilient-societies-in-the-western-balkans-midterm-review-2021_0.pdf
25 https://portals.iucn.org/library/sites/library/files/documents/2022-009-En.pdf
26 https://portals.iucn.org/library/node/51400

	Action Related to NbS Concept
North Macedonia	Deployment of NbS in forestry for increasing carbon sinks -- NDC plans for large contribution to sinks from LULUCF by 2030. Project in forestry restoration and prevention of land degradation in collaboration with IUCN (joint project, IUCN ECARO, North Macedonia and Albania).
Serbia	The NbS concept is included as an opportunity for adaptation with mitigation co-benefit in CCAP[27]. One measure is designated explicitly to address systematic changes to enable restoration of degraded lands by implementing the NbS. The NbS concept is recommended under the agriculture sector. While still under development, the Strategy of Environmental Protection plans for measures to increase opportunities for deployment of NbS under both mitigation and adaptation objectives. The project on forest landscape restoration through the implementation of NbS led by IUCN, is being implemented as one of the region's pioneering initiatives in NbS.

Source: IUCN, Nature-based Solutions for Resilient Societies in the Western Balkans[25]

Implementation of NbS is expected to contribute to fulfilment of commitments of UN Conventions (UNFCCC, UNCCD, CBD) in an integrated way, as well as to contribute to DRR for increasing climate hazards. NbS is considered as an umbrella concept which includes natural (green) and combined (green-grey) solutions amongst different sectors, and can provide multisectoral co-benefits and contribute to reduction of net-GHG emissions. NbS can be implemented within large scale (for example, river flood management) as well as small-scale solutions (for example, urban greening). For successful NbS implementation amongst sectors the following is required: (1) to adopt the NbS definition, (2) to provide a methodology (standard) to assess whether measures fit the NbS concept, and (3) to use regulation instruments to require that implementation of all measures is evaluated against the NbS concept.

Action 7	Ensure participation of WB economies in the European Climate Pact or consider development of a similar mechanism

WB6 do not have designated coordinators for the European Climate Pact, which would enable further progress in their participation in this mechanism[28]. There are no registered ambassadors from WB6[29], as the criteria prescribe that participants must be from EU. There is no information on development of any similar mechanism for the WB6.

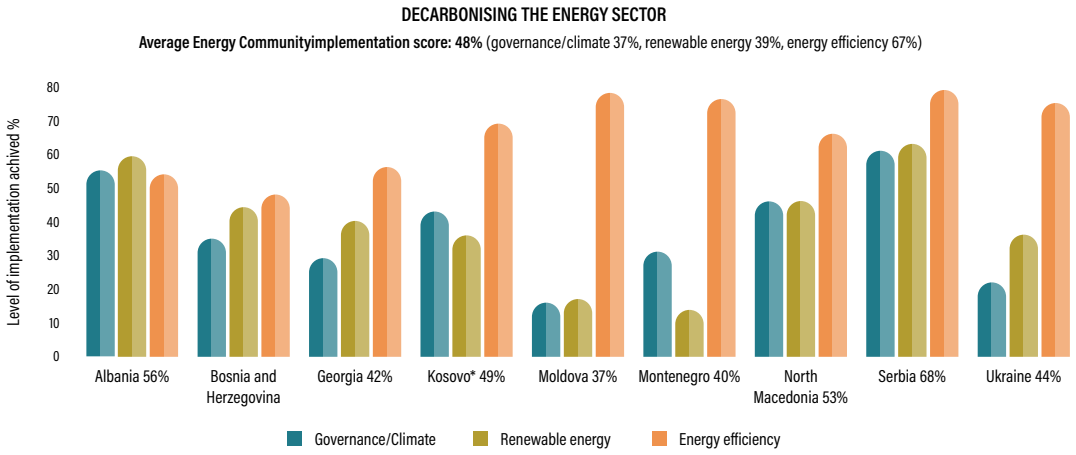
27 https://www.klimatskepromene.rs/wp-content/uploads/2021/10/NBS_CC_SERBIA_English.pdf
28 https://climate-pact.europa.eu/meet-community/get-touch-country-coordinators_en
29 https://climate-pact.europa.eu/get-involved/meet-our-ambassadors_en

3.2 Energy Roadmap

Action 8	Review and revise, where necessary, all relevant legislation to support progressive decarbonisation of the energy sector

Legislative Implementation score for Decarbonisation of the energy sector[30]

Figure 3.2.1 Decarbonising the Energy Sector



Status: 1 November 2023
Source: Energy Community, Implementation Report[30]

Detailed assessment per WB6 and per policy document including:

1. National Energy and Climate Plans
2. Greenhouse Gas 2030 Target
3. Economy-level systems for climate reporting
4. Economy-level greenhouse gas emission policies and measures / adaptation
5. Long-term strategy and climate neutrality

is provided in the comprehensive table in the Appendix 2.

Implementation of the systems for climate reporting (MRVA) is of critical importance for WB6. While high performers have implementation between 48% and 67%; North Macedonia (25%) and Bosnia and Herzegovina (14%) are lagging behind. It is to be considered that regional cooperation with maximum efforts invested to accomplish this implementation across the entire region is a crucial benefit for all Western Balkans Six.

30 Energy Community, Implementation Report 2023 (data on 1 November 2023)

Action 9	Prepare an assessment of socio-economic impact of decarbonisation at the individual economy and regional levels

"The Governance Regulation in the Energy Community requires Contracting Parties to develop integrated National Energy and Climate Plans (NECPs). The NECPs include objectives and targets and respective policies and measures for all five dimensions of the Energy Union, which are closely related and mutually reinforcing, namely:

- decarbonisation (including renewable energy);
- energy efficiency;
- energy security;
- internal energy market; and
- research, innovation and competitiveness."[31]

"The mandatory structure and the content of the NECPs is outlined in Annex I of the Governance Regulation and includes the following:

- Overview and process for establishing the Plan;
- Economy-level objectives and targets;
- Policies and measures;
- Current situation and projections with existing policies and measures;
- Impact assessment of planned policies and measures."

NECP is subject of Strategic Environmental (and social) Impact Assessment (SESIA). Western Balkans Six are invited to provide SESIA for policies and measures envisaged by NECP. However, NECP is only a comprehensive set of policies and measures aiming to facilitate five dimensions of the Energy Union as listed above. Therefore, NECP related SESIA is not equivalent to comprehensive assessment of socio-economic impact of decarbonisation at the individual and regional levels as envisaged by the GAWB but it is an important component to it.

Powering the Future of the Western Balkans with Renewables[32] published by Agora Energiewende and developed by Enervis energy advisors GmbH with contribution from IEEFA attempts to demonstrate costs and benefits of a somewhat more ambitious decarbonisation than envisaged by NECP. The major finding of the study is that "Making Western Balkans Six power systems CO_2 free by 2045 is possible and would save money". The study is based on data and solutions available in public domain without deeper consideration of proprietary commercial solutions that may facilitate even more ambitious decarbonisation pathway with

31 https://www.energy-community.org/implementation/package/NECP.html (at 29 August 2024, Montenegro NECP has not been available at the website. Other WB6 submitted draft NECP and received comments from Secretariat. No draft NECP considers decarbonisation ambition beyond 2050 target and none takes into consideration risks (energy security, competitiveness, etc.) of prolonged use of existing carbon intensive energy assets.

32 Enervis (2022): Powering the Future of the Western Balkans with Renewables. Study on behalf of Agora Energiewende

eventual more benefits in terms of economic development, security of supply and competitiveness beyond obvious environmental benefits.

GIZ Green Agenda: Decarbonisation of the Electricity Sector in the Western Balkans project aims to facilitate decarbonisation by knowledge transfer, capacity development and better understanding of training needs. It is focused on grid operators, regulatory authorities and ministries as well as training institutions and networks.

Action 10	Prioritise energy efficiency and improve it in all sectors

Green Agenda implementation in the context of energy efficiency needs to be properly included in monetary and fiscal frameworks prepared for the region by IFIs. Fiscal considerations, security of property rights and energy security are key prerequisites for meaningful improvements in energy efficiency.

In all Western Balkans Six, primary energy consumption (PEC) and final energy consumption (FEC) targets are set to reduce overall availability of energy for WB6 and therefore limit economic growth potential. There is only modest improvement in efficiency of energy transformation that is envisaged in the Western Balkans Six:

Table 3.2.1 Primary energy consumption (PEC) and final energy consumption (FEC) targets

	FEC / PEC (Nov 2023 estimate)	FEC / PEC (2030 target)	Coal proportion in PEC (2023)[33]	Minimal proportion of forms of energy where PEC=FEC within energy statistics
Albania	89.9%	92.3 %[34]	10%	>40%
Bosnia and Herzegovina	63.8%	66.77%	54%	>26%
Kosovo*	58.8%	66.67%	54%	>14%
Montenegro	75.9%	79.35%	31%	>33%
North Macedonia	75.3%	86.96%	25%	>13%
Serbia	63.3%	66%	43%	>17%

Source: Calculated based on the Energy Community, Annual Implementation Report[30]

Western Balkans Six appear to have relatively high transformation efficiency from primary energy consumption (PEC) into final energy consumption (FEC) targets. The reason for this is considerably high proportion of primary energy that is delivered for final energy consumption (PEC=FEC) without any further transformation. The most notable example is solid biomass (fuel wood) that is delivered for final energy consumption as it is. As a consequence, fuel wood consumption contributes substantially to the notion that the use of renewable energy is substantial. However, transformation of fuel wood into useful form of energy – heat – is inefficient. It is to be considered that less than 25% of fuel wood energy actually converts into heat for space heating or cooking. That creates two distinctive perceptions: (1)

33 Calculated based on the Energy Community Annual Implementation Report, November 2023

34 Albania FEC / PEC ration may actually decrease once it addresses its energy security problem with some sort of a large scale combustion plant.

renewable energy targets are achieved in sustainable way and (2) there is a problem with energy efficiency of heating devices.

Hydro power, solar energy and wind energy also have (statistical) transformation efficiency of 100% (that is PEC=FEC). Assuming growth of wind and solar energy within statistical energy balances, WB6 are looking at (statistical) improvement in transformation efficiency (FEC/PEC ratio). This is, however, very modest improvement that is to be achieved at very high cost. Wind and solar energy within Western Balkans Six geography achieve lesser utilisation rate per unit of installed capacity than in Baltics, Black Sea or Mediterranean. Unit of installed capacity in the Western Balkans Six cost more than elsewhere in the EU due to almost twice higher Weighted Average Cost of Capital (WACC). Therefore, utilisation rate is critical for competitiveness of investments.

As a consequence, there are two distinct problems to be addressed by energy efficiency intervention in the region as follows:

1. Low efficiency of transformation of lignite into electricity (and eventually useful district heating services). Western Balkans Six with high lignite share in energy mix demonstrate lower transformation efficiency. This problem is clearly visible in energy statistics. There is also low transformation efficiency of natural gas into electricity and district heating service but with lesser impact due to relatively small share of natural gas in the energy mix (with notable exception of North Macedonia);
2. Low efficiency of solid fuel (both coal and fuel wood) use in households to provide heat for space heating and cooking. Energy statistics only report on volume of fuels delivered to residential customers and not about conversion efficiency into useful heat. As a consequence, nominal energy consumption per square meter of space is exceptionally high, directing policy attention to energy efficiency of buildings.

Action 11	Transposition and full enforcement of the Energy Performance of Buildings Directive

Transposition and full enforcement of the Energy Performance of Buildings Directive is assessed in the Appendix 2 Table according to the Energy Community Implementation Report from November 2023. Transposition and full enforcement scores are very high: between 52% and 86% against requirements of EPBD and the Governance regulation.

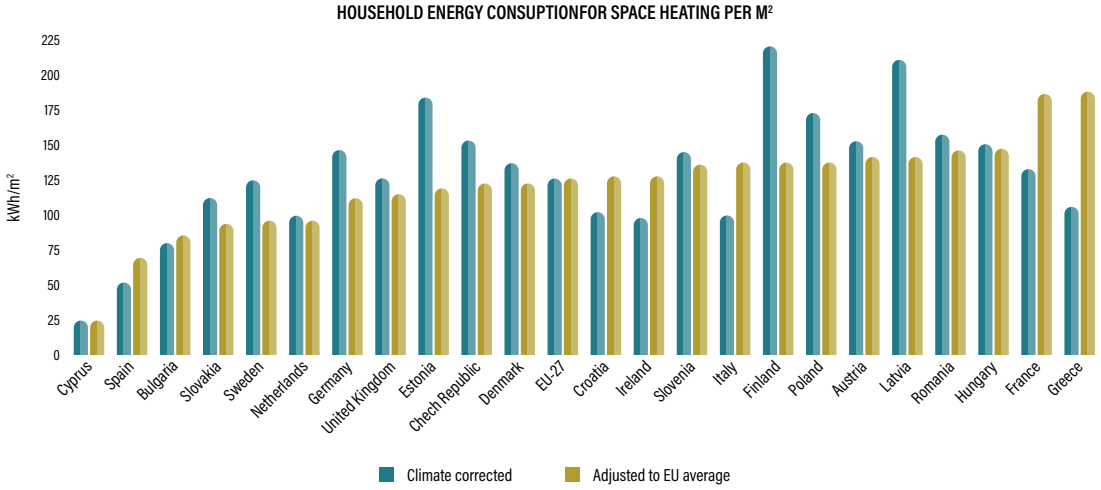
The World Bank study from 2021[35] takes into consideration various options for enforcement of the EPBD.

There are very few accurate and comparable measurements of energy efficiency of the building stock in Western Balkans Six. Serbia District Heating Association reported specific energy consumption for space heating of 125.45 kWh/m^2 per year using their sample of over 46 million square meters[36] of heated space that includes 650599 households. That is only slightly above the EU's average consumption (that is 125.0 kWh/m2 per year as a result

35 https://www.energy-community.org/dam/jcr:d16f0354-d06a-4bd6-ac73-64a7a3a2c19c/WSEE_WB_112021.pdf
36 https://www.toplanesrbije.org.rs/uploads/ck_editor/files/izvestaj%202022%20sajt.pdf

of massive investments in building renovations and use of public funds over many years as demonstrated by Figure 3.2.2. bellow) and better than is some EU member states.

Figure 3.2.2 Household energy consumption for space heating per m²



Source: Earth Observation Environment (ACRI-ST)

Action 12	Support private and public buildings renovation schemes and secure appropriate financing

Although various support, loan and lease programmes are made available at different governance levels (as well as some local utilities) for renovation of buildings, it remains difficult to explain the absence of private investments into these kinds of projects. Commercial ESCO arrangements are minimal or entirely missing from building renovation. Population owns billions of euro equivalent in bank deposits with minimal interest but refrain from investing into building renovations. It seems that tax regime and security of property rights as well as security of contract are holding back these investments.

Industrial and commercial buildings developed focus on investing into site specific renewable energy (small solar PV installations, small wind turbines, biomass heat only boilers, heat pumps) as a result of inadequate security of energy supply (gas, electricity, heat) and experience of sudden spikes in electricity prices. Large, energy intensive industries in the region reduced or stopped their operations, making interventions in energy efficiency (if completed in the past) obsolete.

Inadequate energy security, flooding risks, insecure property rights and regulatory uncertainty are taking the toll and preventing investments altogether.

Building renovation schemes are assessed by the Energy Community (Implementation Report, November 2023) as presented in the table in Appendix 2.

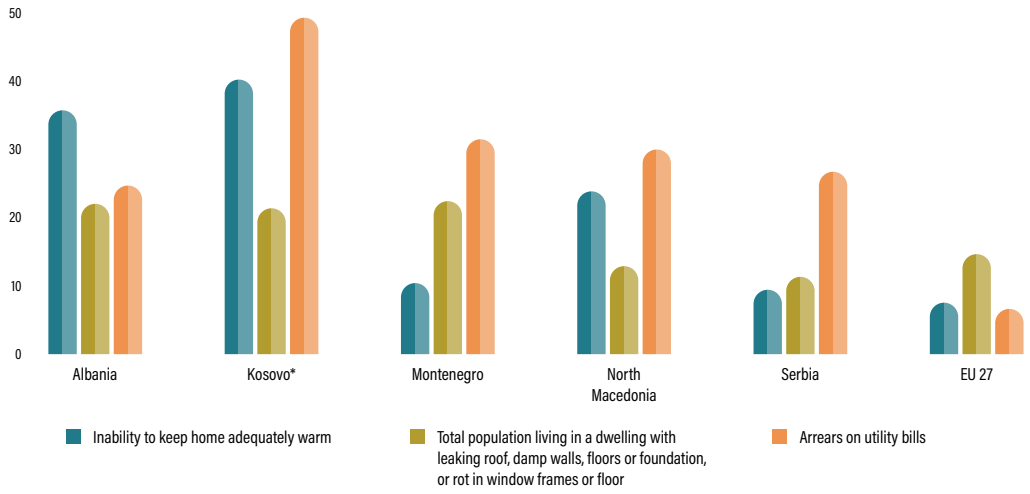
It turns out that a major challenge is to direct funds available for building renovation to those households that are not capable of investing from their own capacities. Most of funds and renovation schemes are focused on households with income and capacity to conduct invest-

ment on their own but may look to acquire some financial leverage. It seems that the region is missing opportunity to tackle energy poverty from the perspective of energy efficiency of buildings that host energy poor households[37].

Fine-tuning of energy efficiency support schemes targeting energy poor households obviously encounters trade-off between intervention to building or intervention to heating device. Taking into account the prevalence of (inefficient) solid fuel stoves and availability of cost-effective replacement options, it seems that a balanced approach makes sense.

The Survey of Income and Living Conditions (SILC) indicates correlation between energy poverty, inefficient heating devices and critical insufficiencies of the building (roof leakage, condensation, or dump creation). This survey reveals relatively robust application of building standards in Serbia and North Macedonia (and probably Bosnia and Herzegovina) that have legacy of well applied former Yugoslavia building standards.

Figure 3.2.3 Selected SILC indicators for the WB6 (latest available year) and EU 27 (for 2020)[38]



Source: RES Foundation[38]

Action 13	Increase the share of renewable energy sources and provide the necessary investment conditions

Access to non-recourse investment funding framework dedicated to coal phase-out[39] in the Western Balkans Six is a critical aspect for increase in renewable energy share, decarbonisation and the energy security of the region.

Increase in the share of renewable energy sources has to be considered from broader perspective taking into consideration security of supply, economic development and competitiveness. Productivity potential, utilisation rates and costs of deployment of various forms

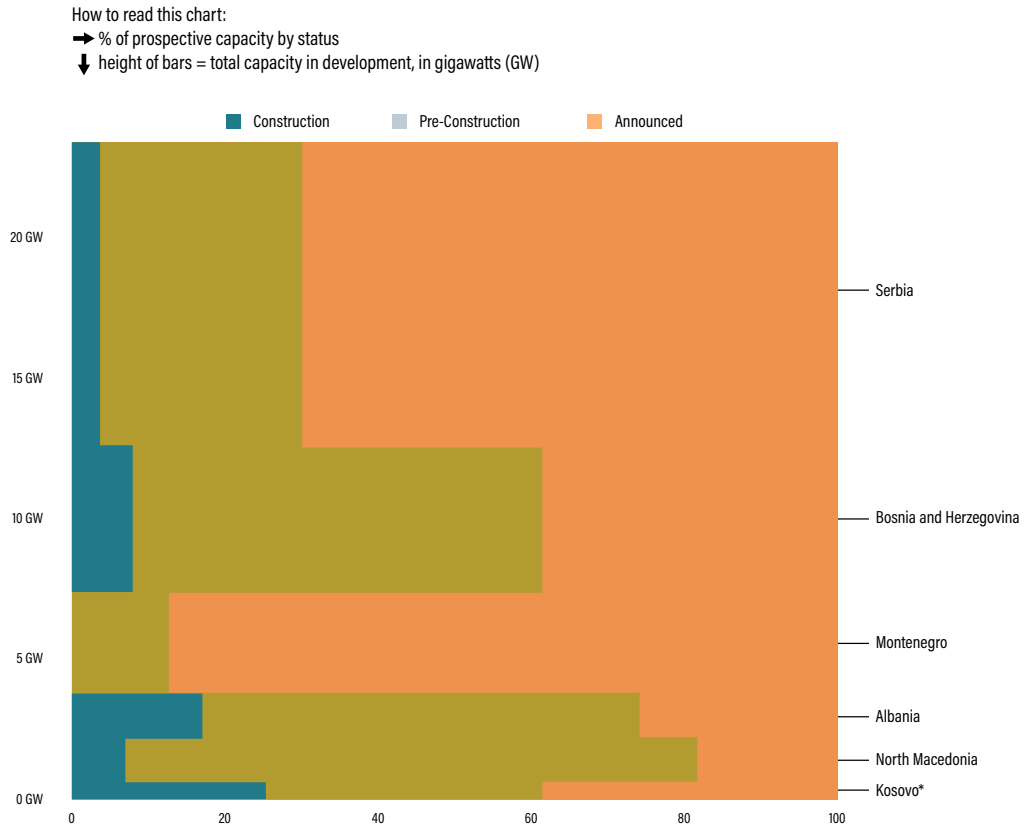
37 https://www.resfoundation.org/tackling-the-immediate-challenges-of-energy-poverty-in-the-western-balkans-the-possible-role-for-the-eu/
38 https://www.resfoundation.org/wp-content/uploads/2023/09/Tackling-the-Immediate-Challenges-of-Energy-Poverty-in-the-Western-Balkans.-The-possible-role-for-the-EU.pdf
39 Designed in accordance with https://modernisationfund.eu/

of renewable energy have to be scrutinised and focus should be placed on relative competitiveness taking into consideration superb wind and solar potentials in the Mediterranean and the Black Sea basins.

Table in the Appendix 2 provides renewable energy capacity change 2021/2022 and implementation of renewable energy rules and regulations that are assumed as necessary investment conditions by the Energy Community Secretariat.

Although implementation of renewable energy rules and regulations that are assumed as necessary investment conditions in the assessment by the Energy Community Secretariat range between 44% and 63%[40] (see Table in the Appendix 2), actual construction of new renewable energy capacities remains small.

Figure 3.2.4 Status of prospective utility-scale solar & wind power capacity, in GW



NOTE: Data includes only solar projects phases with a capacity od 20 megawatts (MW) or more and wind project phases with capacity of 10 KW or more.

Source: Global Energy Monitor

As a consequence, renewable energy share in the energy mix is dominated by inherited hydro power and use of solid biomass.

40 Implementation in Montenegro is assessed at 14% only; Montenegro has recently adopted Renewable Energy Law that significantly improves the score.

Table 3.2.2 Share of various renewable energy sources in Gross available energy in 2021 as reported by the Energy Community at November 2023

	Share of solar thermal, solar PV, wind and geothermal renewable energy within Gross available energy in 2021	Share of primary solid biofuels (predominantly fuel wood) in Gross available energy in 2021	Share of hydro power in Gross available energy in 2021
Albania	0.7%	6%	33%
Bosnia and Herzegovina	0.5%	17%	8%
Kosovo*	0.4%	13%	0.9%
Montenegro	2.6%	14%	16%
North Macedonia	0.7%	8%	5%
Serbia	0.6%	10%	6%

Source: Energy Community, Implementation Report 2023 (data on 1 November 2023)[30]

While hydro power in the Western Balkans Six is Europe-wide competitive energy source, it depends on land cover and climate. Land cover is seriously affected by acidification from existing lignite fired power plants, erosion, land sliding and devastation of quality of forests due to excessive harvesting for fuel wood. It turns out that land use patterns and impacts are affecting further development of hydro power investments in the region as well as market value of existing hydro power capacity. Meaningful hydro power investments[41] are achieved in Albania and actually under construction in Bosnia and Herzegovina.

Fuel wood emerges as the largest renewable energy source in the Western Balkans Six. Its excessive use is also a key aspect of the energy poverty and low energy efficiency in the region. If all household appliances for fuel wood use in the region are eventually compliant with eco-label / eco design regulations that are part of the Energy Community acquis, total use of fuel wood may be reduced by three times, creating a significant gap in the overall renewable energy share.

41 Lot of hydro power resources and potential investments are cross-border/boundary in nature. Taking into consideration delicate political relations in the region, it turns out that negotiating optimal use of existing capacity and eventually investments into new hydro power capacity is difficult. Even hydro power resources entirely located within it, may not be used in optimal way due to internal administrative arrangements and fiscal issues.

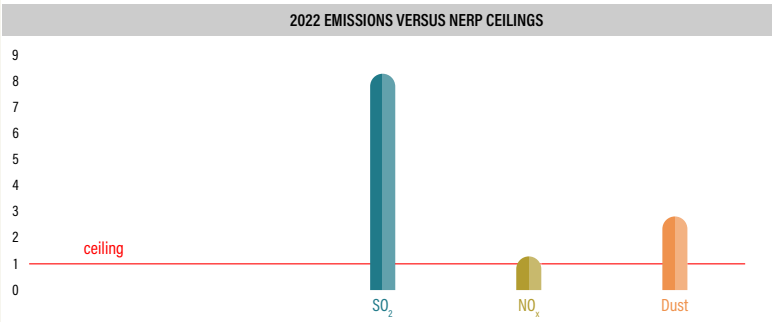
Action 14	Decrease and gradually phase out coal subsidies, strictly respecting state aid rules

As described in the Table in Appendix 2.

In addition to traditional subsidy schemes[42] (land expropriation for lignite mining, liquidity support, price control[43], etc.), lack of enforcement of NERP and LCPD obligation including closure of power plants for which LCPD derogation expired is to be considered as additional state aid scheme. This form of state aid is particularly difficult as it increases uncertainty for any alternative investments into renewable energy or energy efficiency by incumbent power companies or eventual competitors.

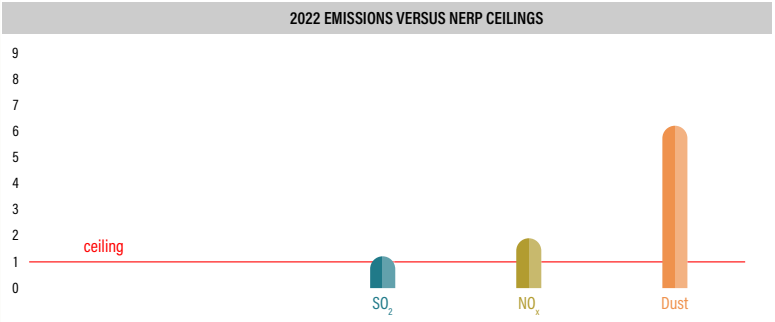
Table 3.2.3 Large Combustion Plants (LCPD) emissions versus National Emission Reduction Plans (NERP) ceilings[44]

Bosnia and Herzegovina



	SO_2	NO_x	Dust
2022 emissions by all plants under the LCDP	206.037	16.238	5.353
Annual change	-3,5% ↓	-14,4% ↓	-23,9% ↓
2022 emissions by all plants under the NERP	182.692	12.022	4.927
Annual change	-0,8% ↓	-16,7% ↓	-18,9% ↓

Kosovo*



	SO_2	NO_x	Dust
2022 emissions by all plants under the LCPs	13.547	16.806	5.453
2022 emissions by all plants under the NERP	13.547	16.806	5.453
Annual change	-7,4% ↓	-3,7% ↓	-9,0% ↓

42 https://www.undp.org/sites/g/files/zskgke326/files/migration/tr/Fossil_Fuel_Subsidies_F.pdf

43 For some further (but not entirely sufficient) analyses one may consider the findings of the "Analysis of Direct Subsidies to Coal and Lignite Electricity Production for the year [...] in the Energy Community Contracting Parties":
For the years 2021/2022 as of Sep 2023: https://www.energy-community.org/dam/jcr:1a15066f-1c55-44ae-8ca0-34ef37ff6999/Final%20report%20Dijana%20Ristovic-28.09.2023.pdf
For the year 2020 as of May 2020: https://www.energy-community.org/dam/jcr:9548dd16-b9ed-4bcc-a562-4ebd5061b082/Coal_Subsides_Study_070222.pdf
For the years 2018/2019 as of Dec 2020: https://www.energy-community.org/dam/jcr:482f1098-0853-422b-be93-2ba7cf222453/Miljevi%C4%87_Coal_Report_122020.pdf
Or: https://www.undp.org/sites/g/files/zskgke326/files/migration/tr/Fossil_Fuel_Subsidies_F.pdf

44 Energy Community Implementation Report, November 2023

Montenegro[45]

TOTAL EMISSIONS FROM LARGE COMBUSTION PLANTS IN 2022

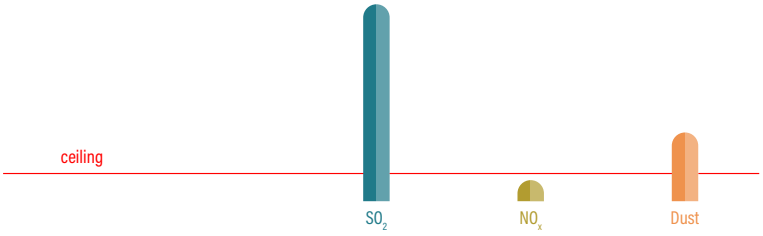
Total SO_2 emissions from LCPs in 2022
46.502
+14,8% ↑

Total NO_x emissions from LCPs in 2022
3.954
+14,3% ↑

Total dust emissions from LCPs in 2022
3.954
+11,3% ↑

North Macedonia

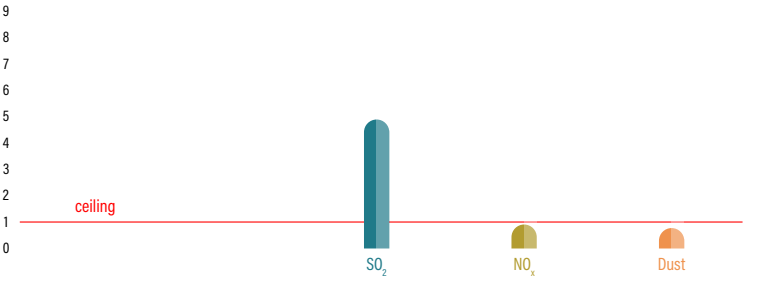
2022 EMISSIONS VERSUS NERP CEILINGS



2022 emissions by all plants under the LCPD	115.331	6.337	4.282
2022 emissions by all plants under the NERP	115.33	6.337	4.282
Annual change	+38,9% ↑	+38,9% ↑	+38,9% ↑

Serbia

2022 EMISSIONS VERSUS NERP CEILINGS



2022 emissions by all plants under the LCDP	305.684	34.092	6.353
Annual change	+8,9% ↑	-5,3% ↓	-15,0% ↓
2022 emissions by all plants under the NERP	261.288	31.794	4.911
Annual change	+4,5% ↑	-3,7% ↓	+2,2% ↑

Source: Energy Community, Implementation Report[30]

Total emissions of 687101 tons of SO2 and 77437 tons of NOx (as reported in the Table above[46]) are a significant level of acid emission with inevitable effects on forests, biodiversity, erosion and sliding as well as significant impact on building environment: corrosion of components and devastation of building envelope. This falls beyond usually reported health impacts. Acidity also affects the quality of agriculture and forestry soils, hence reducing productivity and nutrition potential. As a consequence, both LULUCF carbon emissions offsets

45 Montenegro: the only coal fired power plant had 20000 hours derogation from LCPD obligation that expired in November 2020. Therefore, emissions persist while there is no NERP ceiling.

46 More details available: https://bankwatch.org/wp-content/uploads/2023/06/2023_06_28_Comply-or-close.pdf

and adaptation to climate change impacts (flooding, forest fires, draughts, excessive heat, etc.) are more complicated.

Continued operation of both underground and open pit lignite mines also contributes to methane emissions despite all Western Balkans Six being part of the Global Methane Pledge.

Action 15	Ensure participation in the Coal Regions in Transition initiative for the Western Balkans

Nominal participation in the Coal Regions in Transition initiative for the Western Balkans Six is established and all with lignite coal fired power plants participate. However, the initiative still needs to yield tangible investments and tangible outcomes in the region.

All relevant regions that host large-scale lignite mining and lignite power generation participate in the initiative as shown in the table below.

Table 3.2.4 Coal Regions in Transition in the Western Balkans[47]

	Region
Bosnia and Herzegovina	Tuzla canton, Srednjobosanski canton, Zeničko-Dobojski canton, Ugljevik region, Gacko region
Kosovo*	Pristina District
Montenegro	Pljevlja region
North Macedonia	Bitola region, Kičevo region
Serbia	Kostolac region, Kolubara region, Obrenovac region, Pomoravlje region

Source: Energy Community, Regional Initiatives[47,48]

The World Bank / Energy Community Public Perception Survey on Western Balkans Coal Regions in Transition[48] reveals that: just under half of respondents (44%) expect the Just Transition to succeed, 80% of respondents answered that they are "not familiar" with the Just Transition concept, 69% of respondents reported that they are "not familiar" with the efforts of Western Balkans Six to support and develop sustainable energy; the top two main concerns of respondents in both coal and non-coal regions are: job losses and rising unemployment (57%) and increased electricity and heating prices (53%); 33% of respondents believes that improvement of local environmental conditions is the most important outcome of the Just Transition.

More fundamentally, basic prerequisite for just transition within coal regions is that transition is actually planned and implemented. Activities that are observed up to now are intended to preserve lignite fired power generation and not to phase out coal. There are, broadly, two groups of activities:

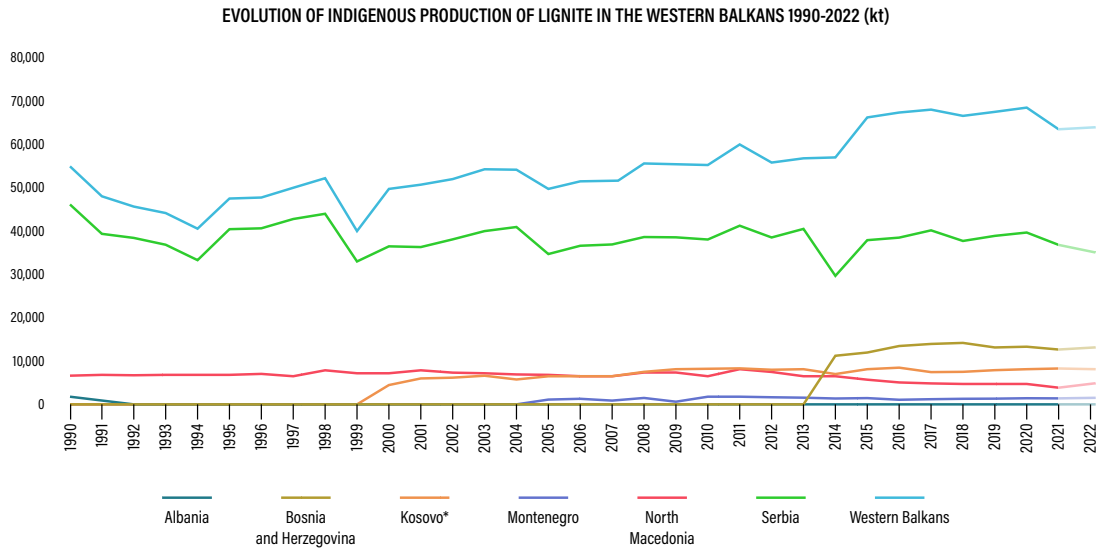
- Activities focused on preserving actual coal fired power generation by increasing public subsidies including financial support to overcome consequences of floods,

47 https://www.energy-community.org/regionalinitiatives/Transition/coal.html#
48 https://www.energy-community.org/regionalinitiatives/Transition/coal.html: Public Perception Survey

lack of enforcement of LCPD obligations, price control that serves as a barrier to entry of alternative energy supply, support for land expropriation to expand lignite mine open pits, refraining from realistic planning of alternative energy supply that may support security of supply and affordability of energy, consequently rising concerns;

- Further investments into lignite power generation and lignite mines including investments supported by sovereign guarantees.

Figure 3.2.5 Evolution of indigenous production of lignite in the WB6



Source: EuroStat[49]

Until recently (2022), indigenous lignite production in the Western Balkans Six has been growing. Technical failures in December 2021 caused certain setback in Serbia while it remains to be seen if or when commissioning of new Kostolac B3 lignite fired power plant with associated investments into expansion of lignite mines as well as planned support to open pits expansion in Kolubara region are going to result in revamp of lignite production. Planned overhauls of existing lignite fired power plants in Kosovo* and Montenegro may further support actual increase in lignite production and use.

Most comprehensive initiative to displace lignite from power generation combines a range of gas fired power plants envisaged by the Turk Stream / Balkan Stream gas pipeline developments eventually supported by Chinese export of equipment and services under Belt and Road Initiative. A number of Western Balkans Six (Bosnia and Herzegovina, Montenegro, North Macedonia[50], Serbia) are actively engaged in gas fired power plant planning. Gas fired power plants with Russian investments are already commissioned in North Macedonia and

49 https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Production_of_lignite_in_the_Western_Balkans_-_statistics#What_is_lignite_and_how_important_is_this_fossil_fuel_in_the_Western_Balkans.3F

50 https://bankwatch.org/wp-content/uploads/2024/02/2024_02_15_North-Macedonia-must-ditch-its-unrealistic-gas-plans.pdf

Serbia. Although Balkan Stream project indicates inclusion of Kosovo* in various presentations, it was not possible to trace any active gas fired power plant development there. There are reports about eventual development of gas fired power plants in Albania that are not directly connected to Turk Stream / Balkan Stream infrastructure.

In parallel course of events there is a significant activity to propose new utility-scale wind and solar projects. "As of March 2024, prospective utility-scale solar and wind capacity reached 23 GW in the Western Balkans, marking a 70% increase from the figures documented by GEM last year."[51] That is comparable to the prospective capacity in Germany which is a mature and very well developed mature market for wind and solar investments. "However, China is the leading foreign investor with a 2.5 GW portfolio of solar and wind projects in the region, including the 2 GW Bor wind and solar farms in Serbia, intended to power a copper mine and smelter."[52] While it seems that investors are attracted with well developed and developing high voltage grid (with EU funding) and prospects of public subsidies, it is very difficult to see how these high expectations for intermittent energy (with low utilisation rates) combined with very low actual delivery mount to security of supply required for population and industry or to competitive energy supply to eventually sustain economic growth.

One alternative is to engage valuable hydropower capacity (existing or planned) for balancing solar and wind capacity in the region in order to compete with far better wind and solar resources elsewhere in Europe. Opportunity cost of that strategy (if it is really going to be pursued) is potentially enormous not only for Western Balkans Six (in terms of lost export revenues) but also for the EU (in terms of lost valuable hydropower support to European grid and security of supply).

Action 16	Develop programmes for addressing energy poverty and financing schemes for household renovation and providing basic standards of living

Critical characteristics of the energy poverty prevalence in the Western Balkans Six are:

- High proportion of energy expenditure in total household expenditures that exceeds 10% for most of households. Households that are covered by some form of (unsustainable) implicit support scheme related to the district heating services[53] indicate energy expenditures somewhat bellow 10%. In case support scheme is removed, most of these households may sink into energy poverty situation;
- Considerable reduction in living space during cold winter periods that may reduce living space to below 10 square meters per person;

51 https://bankwatch.org/wp-content/uploads/2024/07/RTTTWesternBalkans-2024_v7.pdf
52 Ibid
53 These arrangements include: better than average access to subsidised public transport, better than average access to medical services, better than average access to vulnerable customer support and low electricity consumption that qualify for lower electricity tariffs in multi-tier electricity tariff system (in Serbia).

- Portion of energy poor households rely on fuel wood supply from open (grey) market while those who own their own dedicated forests incur opportunity costs of excessive fuel wood consumption for relatively poor quality of heating services;
- Excessive level of indoor pollution that causes excessive health problems followed by excessive health expenditures;
- Gender issue since woman are disproportionally exposed to indoor pollution near solid fuel cooking devices;
- Households living in more densely populated suburban areas are exposed to outdoor pollution due to use of waste, lignite, rubber or plastics in residential heating devices in the neighbourhood;
- Energy poor households are more often exposed to blackouts and power supply failures during extreme weather situations that may be accompanied with greater risks of floods, erosion and landslides;
- Energy poor settlements are affected by inadequate quality of electricity supply (lower voltage) due to excessive load during cold weather periods that in turn contributes to excessive grid loses and greater probability of failure;
- Energy poor housing is more exposed to mould and dump, inadequate ventilation and greater incidence of air transmittable disease as well as respiratory infections.

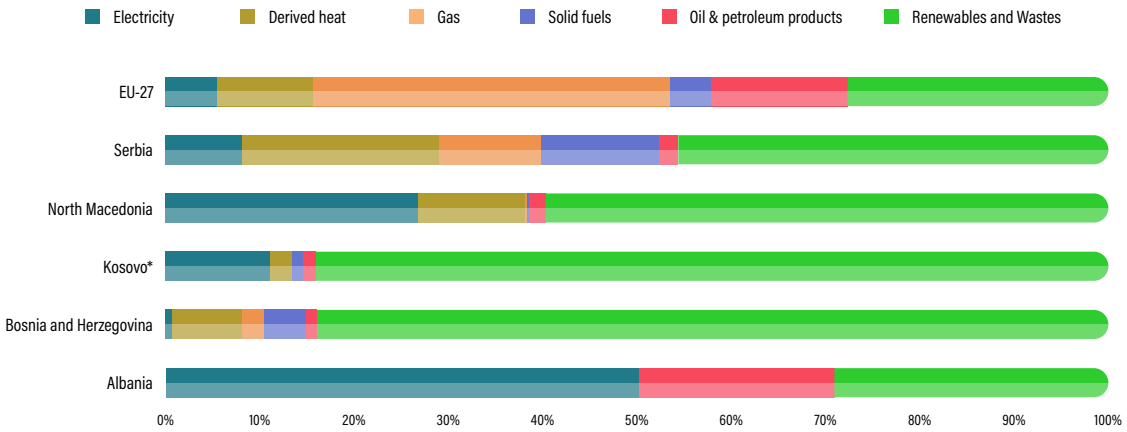
Energy poverty is the energy policy challenge as indicated by the IEA energy policy review of the Western Balkans Six from 2008 as well as the key formation documents of the Energy Community Treaty and the only report of the European Commission to the European Parliament on the Energy Community Treaty (submitted in 2011). It needs to be addressed within a comprehensive energy policy framework[54].

Persistent energy poverty and strong correlation between retail prices of electricity and the open market prices of fuel wood limit potential of other critical policies including decarbonisation, renewable energy investments, energy efficiency, etc. Financial and monetary analyses of the energy sector in the region are consistently missing to take into consideration key causal relation: retail price of electricity[55] – open market price of fuel wood - opportunity cost of fuel wood – energy poverty incidence – human suffering – socio-political tensions.

In technical terms, correlation between energy poverty and grid loses (that are driven by weather related overloads) as well as probability of technical failures and opportunity costs in electricity trading need to be explored in detail.

54 Persistent Energy Poverty in Western Balkans https://www.ogel.org/article.asp?key=3448
55 Or lost security of supply

Figure 3.2.6 Share of fuels in the final energy consumption in the residential sector for space heating, 2019. Eurostat[56]



	Albania	Bosnia and Herzegovina	Kosovo*	North Macedonia	Serbia	EU-27
Electricity	50,2%	0,4%	11,0%	26,6%	8,0%	5,3%
Derived heat	0,0%	7,6%	2,3%	11,6%	20,9%	10,1%
Gas	0,0%	2,2%	0,0%	0,1%	10,7%	38,0%
Solid fuels	0,0%	4,7%	1,2%	0,3%	12,6%	4,2%
Oil & petroleum products	20,6%	0,9%	1,4%	1,7%	2,1%	14,5%
Renewables and Wastes	29,2%	84,2%	84,2%	59,9%	45,7%	27,9%

Source: Smarter Stoves Project[57] *according to Eurostat data*

56 North Macedonia data for 2018 as data for 2019 was not available. No available data for Montenegro.
57 https://smarterstoves.resfoundation.org/wp-content/uploads/2022/02/Smarter_Stoves_Report.pdf

3.3. Sustainable Transport Roadmap

3.3.1. Progress in implementing the Roadmap across the actions and the region

Action 17	**Support the development of smart transport infrastructure, promote fostering of innovative technologies (such as paperless transport, artificial intelligence, multimodal passengers ticketing, mobility as a service, border/boundary crossing applications, 5G corridors, etc.)**

Based on OECD[58][59] methodology and indicators, smart transport in the Western Balkans Six is rated with average value of 1.6 (maximum rating is 5). Development of smart transport is in an initial phase in all Western Balkans Six. Several WB6 updated their policy frameworks to reflect greening objectives and align with the targets and measures of the Smart and Sustainable Mobility Strategy (SSMS) for the Western Balkans Six. Further efforts are needed, as transport sector is the second source of greenhouse gas emission in all Western Balkans Six, encompassing two thirds of overall share together with the energy sector. Additionally, there is an increasing trend for emission levels caused by transport[60].

Albania implemented the ITS Directive 2010/40/EU partially, and more effort is required to reach full implementation[61]. Albania continues preparing an ITS strategy for rail and maritime transport.

In **Bosnia and Herzegovina**[62]**,** the Framework Transport Strategy 2030 was updated in 2022 and measures and targets related to greening transport were integrated, which is in line with the SSMS for the Western Balkans Six.

Kosovo* adopted its new Multimodal Transport Strategy (MMTS) 2023-2030 in 2023. MMTS has a clear focus on smart transport and transport sector greening, thereby integrating policy objectives from key regional documents such as the Green Agenda for the Western Balkans and SSMS. The MMTS greening measures are integrated into the National Energy and Climate Plan (NECP) of Kosovo*.

Montenegro continued to support development of smart transport systems. Based on the Programme for the Development and Introduction of ITS in Road Transport for 2022-2026 adopted in 2022, a set of guidelines known as the Rulebook was formulated. With the support from EBRD, Montenegro is looking to develop a Traffic Data Collection System, which would strengthen data collection on traffic flows in road transport and allow for better planning, management and safety.

58 https://westernbalkans-competitiveness.oecd.org/methodology/
59 https://westernbalkans-competitiveness.oecd.org/indicators/TRANSPORT_QL08/
60 Transport Community: Strategy for Sustainable and Smart Mobility in the Western Balkans, Transport Community Treaty Permanent Secretariat's Staff Working Document, July 2021
61 OECD: Competitiveness and Private Sector Development Western Balkans Competitiveness Outlook 2024: Albania, www.oecd-ilibrary.org/deliver/541ec4e7-en.pdf?itemId=%2Fcontent%2Fpublication%2F541ec4e7-en&mimeType=pdf
62 https://westernbalkans-competitiveness.oecd.org/methodology/

North Macedonia continued with efforts to support development of smart transport systems. The Strategy for ITS was prepared and sent to the government for adoption[63]. It also allocates the necessary budget for each action and sets the 2032 timeline[64]. In the second half of 2023, the Ministry of Transport and Communications launched a call for the deployment of ITS on the south part of Corridor X.

Serbia started to work on the new transport strategy in June 2022 and it is necessary to prioritise its finalisation and adoption in line with the agreed SSMS targets[65].

Action 18	Implement the Regional Action Plan for Rail Reforms

The Rail Action Plan primarily focuses on policy reform and the rail system improvements, with the opening of rail market as one of the most critical components of the plan and an integral element of the TCT[66]. The reforms in railway sector are important, as this mode of transport is recognised as energy efficient, with lower levels of greenhouse gas (GHG) emissions and large freight capacity when compared to other modes. According to the Transport Community (TC) Action Plan, the overall progress is assessed as slow to moderate[67]. In 2023, progress varied from 2% to 12%, with the open rail market at the domestic level in five out of WB6, while twelve private railway undertakings were established across these five regional. Within the six actions in the Rail Sector of the TC Action Plan, the greatest progress was noted in the modernisation of rail infrastructure.

Albania, Kosovo* and Montenegro made consistent strides in implementing the actions specified in the Rail Action Plan. Their progress is slow; however, they possess detailed analysis of the sector with challenges and recommendations for the future.

Albania made progress in updating and aligning its rail regulation more closely with the EU's Rail Action Plan to boost long distance and cross-border/boundary passenger rail[68]. These have paved the way for the establishment of key institutions, such as the National Investigating Body (NIB), the regulatory body – Rail Regulatory Agency (RRA), and the separation of the Rail Company (HSH) into four separate entities responsible for infrastructure, freight operations, passenger operations, and vehicle maintenance. Primary challenges in **Albania** include the lack of human resources and budgetary allocations for the new institutions, in

63 Transport Community (2023), Action Plans and the EU Acquis Progress Report 2023, https://www.transport-community.org/reports/action-plans-and-the-eu-acquis-progress-report-2023/

64 Ministry of Transport and Communications (2023), Presentation of ITS Strategy for North Macedonia, https://www.transport-community.org/wpcontent/uploads/2023/04/Ministry-of-transport-and-communications-WB-PP-presentation-nmJH-JL-04.04.2023-Skopje.pdf

65 COMMISSION STAFF WORKING DOCUMENT: Serbia 2023 Report, Accompanying the document Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions 2023 Communication on EU Enlargement policy, https://op.europa.eu/en/publication-detail/-/publication/92407d24-7eee-11ee-99ba-01aa75ed71a1/language-en

66 Transport Community: 2023 Annual Operational Report, 2024, www.transport-community.org/wp-content/uploads/2024/04/Annual-Operational-Report-2023.pdf

67 Transport Community: Action Plans and the EU Acquis Progress Report 2023, www.transport-community.org/wp-content/uploads/2023/12/Action-Plans-and-EU-Acquis-Progress-Report-2023-WEB.pdf

68 Transport Community (2023), Action Plans and the EU Acquis Progress Report 2023, https://www.transport-community.org/wp-content/uploads/2021/06/Strategy-for-Sustainable-and-Smart-Mobility-in-the-Western-Balkans.pdf

addition to a strong emphasis on fresh infrastructure projects that overshadow reform efforts.

Bosnia and Herzegovina has advanced significantly in updating and aligning its rail regulation more closely with the TCT Rail Action Plan. Several pieces of its legislation were adopted during the assessment period. The restructuring of the Bosnia and Herzegovina's Entity of the **Republika Srpska**'s railway company *Zeljeznice Republike Srpske*, which began in 2017, is still ongoing and is set to be completed by the end of 2024[69]. The restructuring aims to establish a holding company divided into three sectors: transport of passengers, transport of freight and infrastructure management. On the other hand, railway market in Bosnia and Herzegovina's Entity of the Federation of Bosnia and Herzegovina remains vertically integrated and closed to competition.

Kosovo* advanced in updating and aligning its rail regulations more closely with the TCT Rail Action Plan[70]. The Railway Regulatory Agency of Kosovo* published a few legislative acts that mainly pertain to the technical specifications of interoperability. Preparatory work for drafting the new Railway Law and Railway Safety and Interoperability Law is still ongoing.

Montenegro planned to carry out monitoring of the implementation of the Programme for Railway, however it has not been conducted yet. The government is working on a new three-year Programme for Railway Infrastructure 2024-2026, whose adoption is expected soon.

North Macedonia made significant progress with the opening of its rail market at individual- and international levels in 2023. However, in September 2024, North Macedonia reversed the liberalisation with the intention to save ZRSMT train operator from financial collapse[71]. According to the new law, the private and foreign operators will be able to provide public passenger and freight services only after the accession of **North Macedonia** to the European Union.

Serbia is a frontrunner in the transposition of the EU railway legislation. Significant progress was made in the interoperability and safety areas. The main achievement is the adoption of the Railway Interoperability Law as well as Amendments to the Railway Law. Progress was made with strengthening the role and capacity of the Railway Directorate following amendments to the Law on Railways[72].

Two sub-actions of the Rail Action Plan, namely (i) establishing the Network of Infrastructure Manager(s) (IMs), and (ii) level crossing safety improvements, directly align with the regional connectivity agenda. Both are progressing well due to good cooperation and coordination amongst the regional partners. The WB6 actively participated in establishing the Network of Infrastructure Managers. One of the main concerns expressed was the lack of human

69 SEE News (2023), "Bosnia's Serb Republic seeks full ownership of Zeljeznice RS", https://seenews.com/news/bosnias-serb-republic-seeks-full-ownership-of-zeljeznice-rs-report-1234258

70 OECD: Competitiveness and Private Sector Development Western Balkans Competitiveness Outlook 2024: Kosovo*, www.oecd-ilibrary.org/deliver/ff74ae0e-en.pdf?itemId=%2Fcontent%2Fpublication%2Fff74ae0e-en&mimeType=pdf

71 https://www.railwaygazette.com/policy/north-macedonia-reverses-rail-market-opening-to-save-national-operator/67706.article

72 COMMISSION STAFF WORKING DOCUMENT: Serbia 2023 Report, Accompanying the document Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions 2023 Communication on EU Enlargement policy, https://op.europa.eu/en/publication-detail/-/publication/92407d24-7eee-11ee-99ba-01aa75ed71a1/language-en

resources. To address this, the TC Secretariat will support the establishment of a Regional Centre of Excellence, responsible primarily for training and education of operational, industry and policy experts.

Action 19	Define rail freight and inland waterway transport corridors

On the margins of the Connectivity Summit in Budva, Montenegro in May 2023, the EU Commission signed high-level agreements with **Bosnia and Herzegovina, Montenegro, North Macedonia** and **Serbia** to improve transport links. The agreements adapt the TEN-T by linking it to the Western Balkans Six. This is a major step towards greater transport connectivity between the European Union and the Western Balkans Six.

In June 2024, the European Council adopted a revised regulation on EU guidelines for the development of TEN-T[73]. The Western Balkans-Eastern Mediterranean Corridor is one of the corridors in the new regulation[74]. The regulation specifies nine European Transport Corridors, one of which is the Western Balkans-Eastern Mediterranean Corridor.

In 2023, regional partners and EU Member States achieved no progress regarding the rail agreements. In fact, all planned rail border/boundary agreements between the Western Balkans Six and the EU which are listed in the Action Plan remain unchanged, despite expressed interest from the Western Balkans Six. Responses from the neighbouring EU member states were either very slow or absent[75]. As a milestone for connectivity in the Western Balkans Six, **Montenegro** and **Serbia** have commenced joint border/boundary control operations at the recently modernised Joint Rail Border/Boundary Station Bijelo Polje[76]. This initiative marks the end of separate border/boundary checks at stations on either side of the border/boundary, streamlining rail traffic between the two. This operational shift, in accordance with agreements and implementing protocols between the governments of Montenegro and Serbia, leverages the recently upgraded facilities in Bijelo Polje. The joint rail Border/Boundary Crossing Point (BCP) *Hani i Elezit* was made functional by **Kosovo*** authorities during the previous assessment period. However, the start of joint operations is pending due to the ongoing rehabilitation of the rail track at the crossing point with **North Macedonia** and re-establishment of the cross-border/boundary rail traffic. Another positive development was the initiation of talks between **Bosnia and Herzegovina** and **Serbia** for an agreement on joint rail border/boundary crossings.

On 8 December 2023, the WBIF Operational Board endorsed a 680 million EUR investment package to support five flagship investments in rail transport and renewable energy in the

73 https://www.consilium.europa.eu/en/press/press-releases/2024/06/13/trans-european-transport-network-ten-t-council-gives-final-green-light-to-new-regulation-ensuring-better-and-sustainable-connectivity-in-europe/

74 Regulation (EU) 2024/1679 of the European Parliament and of the Council of 13 June 2024 on Union guidelines for the development of the trans-European transport network, amending Regulations (EU) 2021/1153 and (EU) No 913/2010 and repealing Regulation (EU) No 1315/2013, https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L_202401679

75 Transport Community: Action Plans and the EU Acquis Progress Report 2023, 2023., www.transport-community.org/wp-content/uploads/2023/12/Action-Plans-and-EU-Acquis-Progress-Report-2023-WEB.pdf

76 https://www.transport-community.org/news/montenegro-and-serbia-open-joint-rail-border-crossing-in-bijelo-polje/

Western Balkans Six[77]. The approved new projects cover sustainable transport as priority sector, namely the reconstruction of the Corridor VIII railway line in Albania and the rehabilitation of Bar–Vrbnica railway line in Montenegro. These projects will contribute to an upgrade of the Western Balkans Six railway transport to match the TEN-T standards and ensure integration with the EU railway network.

Overall progress in waterborne transport and multimodality is slow to moderate. Based on the data received as of 2023, the core inland waterway ports within the extended TEN-T network in the Western Balkans Six continue to meet all requirements except for clean fuel availability. There have been no changes since the 2021 and 2022 conclusions.

The Core Maritime Ports of Bar (ME) and Durres (AL) maintained a high level of compliance with most indicators in 2023. At Durres Port, the non-compliance issue is primarily attributed to limited rail connectivity. Only the eastern port terminal is currently linked to the rail network. **Albania** is in the final stages of the tendering procedure for the implementation of Vessel Traffic Monitoring and Information System (VTMIS). The Port of Vlore in **Albania** is the only comprehensive maritime port in the Western Balkans Six.

In **Bosnia and Herzegovina**, the Flagship I project focused on the rehabilitation and upgrade of the facilities in the Port of Brcko is currently in progress. The project for demining of the right Bank of the Sava River in **Bosnia and Herzegovina** is in the preparation phase.

The Multimodal Transport Strategy (MMTS) of **Kosovo*** 2023-2030 includes provisions for waterborne transport. The formulation of the Transport Law is underway and encompasses waterborne transport and other transportation modes[78]. Given the landlocked geographical position of Kosovo* and the absence of navigable rivers or lakes, the transposition of waterborne transport legislation was not a high priority in the assessment period.

In **Montenegro**, the Port of Bar achieved compliance with several key indicators, including rail connections, reception facilities for ship-generated waste, terminal availability, and the roll-out of the VTMIS.

The decision to enlarge the TEN-T Extension Network with four Serbia's inland waterway ports will amplify the importance of investments in ports and rivers to maintain the necessary TEN-T key performance indicators in **Serbia**. Several ports located along the Danube and Sava rivers in **Serbia** show promising potential to attain "core" or "comprehensive" port status within the ongoing TEN-T revision process. Specifically, the Port of Pancevo situated on the Danube fulfils the criteria for inclusion in the Core Network, while the Port of Smederevo, the Prahovo Port on the Danube, and the Port of Sremska Mitrovica on the Sava are candidates for inclusion in the Comprehensive TEN-T Extension Network.

77 https://www.wbif.eu/news-details/new-investments-approved-under-economic-and-investment-plan-western-balkans

78 Transport Community (2023), Action Plan and the EU Acquis Progress Report 2023, https://www.transport-community.org/wp-content/uploads/2023/12/Sustainable-and-Smart-Mobility-Strategy-Report_designed.pdf

Action 20	Define an overall strategy to shift traffic from road to more environmentally friendly modes

Measures defined under the Sustainable and Smart Mobility Strategy (SSMS) have been amongst key topics at the various meetings organised by the TCT Secretariat. According to TCT Secretariat[79] the following green, multimodal, and/or innovative milestones were completed by the end of 2023:

- Capacity building focused on the implementation of the SSMS – strengthening capacities of municipal associations in advising local authorities and ministries of transport on Sustainable Urban Mobility Plan (SUMP) development and implementation
- Deployment of the SSMS for the Western Balkans Six – organise discussions related to the SSMS for the Western Balkans Six and the EU, climate change, mitigation, and adaptation in the transport sector.

A CONNECTA-financed project *Deployment of smart and sustainable mobility in the Western Balkans* was implemented from March 2022 until October 2023 and the following results were obtained:

- Analysis of baseline scenario of the SSMS for the Western Balkans Six roadmap;
- Development of two separate impact scenarios – (1) a Do-Something scenario which involves partial implementation of the SSMS, and (2) the Decarbonisation scenario which involves full implementation and achievement of targets by 2050;
- Action Plans and economy-level Targets for each of the Western Balkans Six which include analysis aimed at prioritising actions included in the SSMS for the Western Balkans Six and the subsequent action plan for each of the WB6 to reach their individual targets.

Albania made significant progress in advancing towards environmentally sustainable transport. The Sectorial Strategy of Transport and Action Plan 2021-2025 includes specific emission reduction targets by different modes of transport[80]. The ToR for new Sectorial Strategy of Transport is in the process of preparation.

Bosnia and Herzegovina took some steps to advance towards an environmentally sustainable transport system. The Framework Transport Strategy (FTS) for 2016-2030 was revised with the support of technical assistance in 2022 to include measures that encourage modal shift, reduced emissions from the transport sector, and the uptake of low and zero-emission vehicles. The official adoption of this revision is still pending[81].

79 Transport Community: 2023 Annual Operational Report, 2024., www.transport-community.org/wp-content/uploads/2024/04/Annual-Operational-Report-2023.pdf

80 OECD: Competitiveness and Private Sector Development Western Balkans Competitiveness Outlook 2024: Albania

81 OECD: Competitiveness and Private Sector Development Western Balkans Competitiveness Outlook 2024: Bosnia and Herzegovina

Kosovo* took some steps to advance towards an environmentally sustainable transport system. The Multimodal Transport Strategy (MMTS) for 2023-2030 emphasises policies aimed at supporting the uptake of cleaner vehicles, and digitisation to reduce greenhouse gas emissions and enhance the transport system's efficiency[82]. More specifically, the MMTS promotes the uptake of alternative fuel vehicles and sets targets for their shares by 2030, as well as targets for lorries and buses abiding by the Euro 5 or higher standards by 2030.

Montenegro took steps to advance towards an environmentally sustainable transport system. In 2024, the Transport Development Strategy is set to undergo an update incorporating sustainability elements. This would be a positive sign of adaptation of the policy framework to international and European standards. However, it remains to be seen the extent to which this update will contain a comprehensive set of measures aimed at supporting the transport sector greening and the full alignment with the Green Agenda for the Western Balkans and the SSMS.

North Macedonia took several steps to advance towards an environmentally sustainable transport system. The Transport Strategy 2018-2030 (NTS 2018-2030) includes the objective to introduce green mobility and logistics focused on the environmental performance of the transport sector. The NTS 2018-2030 specifies environmentally-friendly and low-carbon transport measures, and shifting freight and passenger transport from road to rail.

Serbia took steps to advance towards an environmentally sustainable transport system. Serbia implemented various measures to address the climate impact of the transport sector. It continues to implement initiatives aimed at decarbonising road transport, standing as the sole WB6 that released a green bond in 2021. The funds raised from this bond were primarily dedicated to transport projects that prioritise environmentally-friendly modes of transport such as railways and inland waterways. The issuance of the green bond facilitated the acquisition of three trains and the reconstruction of 79.4 kilometres of railway[83].

Action 21	Identify the EU technical standards and ensure their implementation and digitalisation of all transport modes

The following achievements were realised under Action 21:

- Digitalisation in waterborne transport and multimodality: ports of Durres (AL) and Bar (ME) diligently worked towards implementing various initiatives related to infrastructure, digitalisation, and environmental sustainability. Notably, both ports were dedicated to enhancing the interoperability of their IT systems;
- Introduction of legislation applicable to inland waterways: the results are very diverse. Serbia reported having aligned a major portion of the legislation applicable to inland waterway section of the Action Plan for Waterborne Transport and Mul-

82 OECD: Competitiveness and Private Sector Development Western Balkans Competitiveness Outlook 2024: Kosovo*, www.oecd-ilibrary.org/deliver/ff74ae0e-en.pdf?itemId=%2Fcontent%2Fpublication%2Fff74ae0e-en&mimeType=pdf

83 Balkan Green Energy News (2024), "Serbia spends most of green bond proceeds in transport, water, wastewater sectors.", https://balkangreenenergynews.com/serbia-spends-most-of-green-bond-proceeds-in-transport-water-wastewater-sectors/

timodality and Annex I of Treaty. In contrast, other WB6 are significantly lagging in this regard;

- Road border/boundary crossings - the Customs Administration of Kosovo* is taking steps towards fostering transport digitalisation and improving data sharing systems.

The implementation score across the measures of ITS is presented in Table 3.3.1.

Table 3.3.1 ITS Measures – Monitoring Mechanism – Implementation Score (%)[84,85]

Measure	Albania		Bosnia and Herzegovina		Kosovo*		Montenegro		North Macedonia		Serbia	
Year	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023
Rail interoperability	33	33	33	40	53	53	60	60	53	53	73	80
Road border/ boundary crossing/ common crossing measures	33	53	33	47	33	53	33	53	53	60	53	60
Rail border/ boundary crossing/ common crossing measures	67	67	33	67	67	67	67	67	33	67	67	67
ITS Deployment on Core/ Comprehensive Road Network	61	61	28	28	28	28	33	39	56	67	56	62
Actions related to infrastructure, digital and green elements of seaports	66	71	0	0	0	0	33	66	0	0	0	0
Legislation applicable to inland waterways	0	0	0	0	0	0	0	0	0	0	100	100
Introduction of digital solutions to improve multimodality	0	0	33	43	0	0	0	0	0	0	66	76

Source: Transport Community, Action Plan and Progress Report[85,86]

84 Transport Community: Action Plans and the EU Acquis Progress Report 2022, https://www.transport-community.org/wp-content/uploads/2022/11/Action-Plans-Progress-Report-1.pdf

85 Transport Community: Action Plans and the EU Acquis Progress Report 2023, https://www.transport-community.org/wp-content/uploads/2023/12/Action-Plans-and-EU-Acquis-Progress-Report-2023-WEB.pdf

Action 22 Implement the Regional Transport Facilitation Action Plan

The moderate progress was achieved in 2023. The greatest advancement in 2023 regarding the regulatory, infrastructure and operational measures for improving the functioning of the road border/boundary crossing points (BCPs) on the Extended TEN-T Network in the Western Balkans Six is the introduction of one-stop shop concept at the BCP Qafe Thane/Kjafasan between **Albania** and **North Macedonia**. Progress was also made by signing the bilateral agreement between **Kosovo*** and **North Macedonia** on introducing joint controls on the road BCPs. Improvements were introduced to the operation of the one-stop-shop at the BCP Tabanovce-Presevo between **North Macedonia** and **Serbia**. Other pairs, **Albania**-**Montenegro** and **Kosovo***-**North Macedonia** took an active part during 2023 in discussing models of joint controls. Smaller progress on joint BCPs was noted at the official level for **Bosnia and Herzegovina**-**Montenegro** and **Bosnia and Herzegovina**-**Serbia**.

The progress in transport facilitation in 2023 is presented in Table 3.3.2.

Table 3.3.2 Transport Facilitation – Monitoring Mechanism – Implementation Score (%)[86]

Measure	Albania	Bosnia and Herzegovina	Kosovo*	Montenegro	North Macedonia	Serbia
Rail border crossing/common crossing Measures	67	67	67	67	67	67
Road border crossing/ common crossing Measures	53	47	53	53	60	60
OVERALL SCORE	**60**	**57**	**60**	**60**	**63**	**63**
ADVANCEMENT DURING THE REPORTING PERIOD, YEAR 2023	**10**	**24**	**10**	**10**	**3**	**3**

Source: Transport Community, Action Plan and Progress Report[87]

Action 23 Implement the Regional Road Safety Action Plan

The overall progress is moderate. The statistics reveals that 1,246 lives were tragically lost in the Western Balkans Six in 2022. While there was a slight decrease in road deaths, indicating a reduction of 5% compared to the baseline year of 2019, it is crucial to emphasise that three out of WB6 experienced an increase in fatalities. Data for lives tragically lost in 2023 are provisional for some and may be subject to minor changes in 2024. See Table 3.3.3 for the number of fatalities per year from 2019 to 2023.

86 Transport Community: Action Plans and the EU Acquis Progress Report 2023, https://www.transport-community.org/wp-content/uploads/2023/12/Action-Plans-and-EU-Acquis-Progress-Report-2023-WEB.pdf

Albania is developing a new Road Safety Strategy, however it has not been adopted yet.

In **Bosnia and Herzegovina**, the draft Road Safety Framework Strategy and Action Plan for 2021-2025 has been drafted and is currently undergoing review by the Road Safety Council. Bosnia and Herzegovina's Entity of the **Republika Srpska** is working on updating its Road Safety Strategy, as the previous expired in 2022. However, the new strategy's development process has experienced challenges and its adoption, initially planned for 2023, was delayed.

Kosovo* continued efforts to ensure safe transport. The proposed Road Law envisions establishing the Road Safety Agency as a component of the new framework within the Ministry of Transport. The Multimodal Transport Strategy (MMTS) Action Plan foresees the development of Programme for Road Safety 2023-2030. There is a need for increased investments to improve the crash data system, as it is not compliant with the Common Accident Data Set (CADaS). No plans were finalised for this purpose in the assessment period.

In **Montenegro**, the Ministry of Interior developed the Road Traffic Safety Improvement Strategy (2023-2030) and a corresponding two-year Action Plan (2023-2024), which are pending adoption by the government. The *Technical Assistance for Capacity Support to the Transport Sector and EU Acquis Alignment in Montenegro* project facilitated establishing a working group and provided technical expertise. This project also includes an analysis of Montenegro's current institutional structure and road safety management. The expected outcome is the development of a model for the future Road Traffic Safety Agency, aiming to enhance road safety coordination and monitoring. Montenegro completed the alignment and transposition of legislation with the EU Directive 2008/96/EC on Road Infrastructure Safety Management.

North Macedonia drafted the Law on Road Safety, established a high-level coordination body consisting of experts and defined the Road Safety Agency. The Agency will be responsible for drafting a new Road Safety Strategy. The Ministry of Interior is the responsible body for collecting road safety data. The quality of collected data is improving, however it is still not fully compliant with the CADaS.

In October 2023, **Serbia** adopted the Road Safety Strategy 2023-2030 and its Action Plan 2023-2025. Serbia aligned with key international documents. The Law on Road Traffic Safety was amended in September 2023, introducing stricter penalties for road safety violations. The primary objective is to achieve a 50% reduction in road deaths and serious injuries by 2030 and adopt the Vision Zero approach[87]. In 2023, the EU High-Level Group on Road Safety approved the TCT proposal, inviting Serbia to join the Community Database on Accidents on the Roads in Europe (CARE)[88]. As a result, Serbia became the first in the WB6 to participate in the European Union CARE expert group for traffic safety.

In each WB6, an internal mechanism between the police and the judiciary is in place to enforce road safety legislation.

87 UNECE (2023), RSPR Policy Dialogue and How to move forward road safety system: Serbia's Road Safety Strategy 2023-2025, https://unece.org/sites/default/files/2024-01/SIII_Serbia%20RSS_MT.pdf

88 Transport Community (2023), EU high-level group approves Serbia's inclusion in the Community Database on Road Accidents, https://www.transport-community.org/news/eu-high-level-group-approves-serbias-inclusion-in-the-community-database-on-road-accidents/ (accessed on 15 May 2024).

The lead Road Safety Agency plays a key role in mobilising resources to coordinate multisectoral partnerships and consult with a wider group of stakeholders to achieve agreed targets in road safety. The situation remains unchanged. There is still only one operational Road Traffic Safety Agency in the region (in **Serbia**).

The adoption of the draft law for establishing a road safety agency in **North Macedonia** is pending the government approval. In **Kosovo***, drafting the new Law on Roads is still ongoing. Supported by EU technical assistance, both **Albania** and **Montenegro took** first steps towards reviewing their institutional structure. The establishment of such agencies requires strong political support from all stakeholders involved.

Table 3.3.3 Number of Fatalities 2019-2023[89]

	Year					% change 2019/2023
	2019	2020	2021	2022	2023	
Albania	227	181	197	164	192	-15
Bosnia and Herzegovina	261	244	255	222	**	
Kosovo*	113	81	111	106	106	-6
Montenegro	47	48	55	77	78	66
North Macedonia	132	125	116	124	127	-4
Serbia	534	492	521	553	502**	-6
WB6	**1.314**	**1.171**	**1.255**	**1.246**		

***Note: The figures for 2023 are provisional for some RPs and may be subject to minor changes after April 2024 when the official data are released.*

Source: Transport Community, Road Safety Statistics[90]

Action 24 Implement the Road Action Plan

The overall progress was slow to moderate. Progress was made across the region in various aspects of road maintenance.

Albania attained a notable milestone by signing four-year road maintenance contracts, covering the entire network until 2026. Positive steps were made through the construction of the Traffic Control and Monitoring Centre, which is currently underway. Additionally, there are ongoing efforts to enhance climate resilience by planning interventions for 27 bridges, which is expected to commence by the end of 2023.

Bosnia and Herzegovina continues its multiyear maintenance plans with ongoing three-year planning and four-year maintenance contracts.

Kosovo* advanced through preparing the strategic framework for the development of transport sector. Notably, in January 2023 the MMTS was approved, including all Road Action Plan measures. The Strategy Action Plan is being prepared and is expected to be approved soon. The draft Law on Roads is being finalised and is expected to be sent for adoption soon. The

89 Transport Community: Road Safety Statistics: Number of Fatalities for 2023, https://www.transport-community.org/wp-content/uploads/2024/03/Fatalities-for-2023-Transport-Community.pdf

approval of the Administrative Instruction on ITS is still pending, awaiting the adoption of the Law on Roads.

Montenegro made positive efforts to establish Road Asset Management System (RAMS) and finalised the medium-term plan for construction, reconstruction, and maintenance of the road network for 2024-2027. While progress is steady, continued efforts and timely execution are crucial to achieve the desired outcomes of the Road Action Plan. Additionally, **Montenegro** made positive efforts to finalise a medium-term plan for road network development, reconstruction, and maintenance (2024-2027).

North Macedonia made limited progress on the road maintenance measures, while additional efforts regarding climate resilience and alternative fuels will be necessary to adopt the deliverables of implemented projects.

Serbia is making steady progress towards implementing the measures outlined in the Road Action Plan. **Serbia** marked significant progress, including the drafting and readiness to pilot the Service Level Agreement (SLA).

Action 25	Develop and implement climate resilience plans for Western Balkan economies' transport networks

To continue supporting the Road Action Plans related to improving climate resilience, the TCT Secretariat commenced providing technical assistance (TA) in January 2023 to prepare a risk assessment and the Resilience Plan for the Road Network. The project has been completed at the end of 2023.

The progress in development and implementation of climate resilience plans for Western Balkans Six transport networks is presented in Table 3.3.4 below. The general objective of this assignment was to contribute to the reduction of climate change risks in transport infrastructure networks in the Western Balkans Six while raising awareness on the climate proofing needs, strengthening capacities both in terms of technical and institutional capacities based on the European Commission technical guidance on climate-proofing of infrastructure projects for the period 2021-2027.

Table 3.3.4 Development and Implementation of Climate Resilience Plans – Monitoring Mechanism – Implementation Score (%)[90]

Measure	Albania	Bosnia and Herzegovina	Kosovo*	Montenegro	North Macedonia	Serbia
Adopt guidelines and methodologies for climate change and natural hazard road network vulnerability assessment	33	0	0	0	0	33

90 https://www.transport-community.org/wp-content/uploads/2023/12/Action-Plans-and-EU-Acquis-Progress-Report-2023-WEB.pdf

Measure	Albania	Bosnia and Herzegovina	Kosovo*	Montenegro	North Macedonia	Serbia
Development of Resilience Action Plan for Road Core and/ or Comprehensive Network	33	33	33	33	33	33
Undertake risk-based vulnerability interventions for the most vulnerable sections of the indicative extension of Core and/or Comprehensive TEN-T Networks in Western Balkans	67	33	33	33	33	66

Source: Transport Community, Action Plan and Progress Report[91]

Action 26	Promote preparation and implementation of Sustainable Urban Mobility Plans for urban areas in the Western Balkans

Policies to make transport more environmentally sustainable are slowly gaining momentum in the region. Several of the WB6 updated their policy frameworks to reflect greening objectives and align with the targets and measures of the SSMS for the Western Balkans Six. Further efforts are needed to capitalise on this momentum[91].

Transport ministers and mayors of the South East European parties and observing participants of the Transport Community, having met at the Green Mobility Summit in Sarajevo on 6-7 June 2024, confirmed their commitment to green mobility. Therefore, they pledged to promote zero-emission mobility, transport digitalisation and continue investing in the development of indicative extension of TEN-T Network in full compliance with the newly adopted TEN-T Regulation and sustainability standards[92].

Less than a year since it was launched, the EU-funded *City Network in the Western Balkans* project, initiated by the City of Sarajevo and supported by GIZ and NALAS, achieved its first significant success: two joint efforts under the projects, worth over 1.85 million EUR, were developed as part of a learning and exchange process[93]. The urban mobility, CITYMOVE project, was approved for financing under the first call of Interreg Adrion. The project, led by the City of Bar, will improve cities' infrastructure through the installation of new software (smart parking in Bar and Biograd) and improvement of urban mobility through the introduction of modern equipment (in Mostar, Novi Pazar, Bar, Sveti Nikole, Gubbio, Mat and Kantanos-Selino). As part of the project, a cross-border/boundary Car-Free Day will be organised for promotion of healthy lifestyles in eight locations as well as local bicycle races in all partner cities and an Urban Mobility Day in three locations. Safe walking and cycling maps will be created as part of the project. Additionally, a transnational Sustainable Mobility Plan will be

91 https://westernbalkans-competitiveness.oecd.org/methodology/
92 Declaration for Green Mobility of South East European Parties and Observing Participants, GREEN MOBILITY SUMMIT OF SOUTH EAST EUROPEAN PARTIES AND OBSERVING PARTICIPANTS, 6-7 June 2024, Sarajevo, https://www.transport-community.org/wp-content/uploads/2024/06/GMS_Declaration_final_web.pdf
93 http://www.nalas.eu/strong-big-wins-for-the-eu-project-city-network-in-the-western-balkans-strong/

published that will document modern solutions in this area, and local urban mobility plans in partner cities will be created and/or updated.

The leading project partner is the Municipality of Bar, while other partners include the cities of Mostar, Biograd na Moru, Novi Pazar, the municipalities of Sveti Nikole, Gubbio, Kantanos and CIHEAM-MAICH. Associated partners are NALAS and the Municipality of Leskovac,. Additionally, there are several regional initiatives s in this field, such as GIZ ORF ETF ProSUMP project[94], which promotes the implementation of sustainable urban mobility plans across the WB6.

In Serbia, the Ministry of Construction, Transport and Infrastructure is implementing the LIID programme[95], which will support the development of nearly 30 sustainable urban mobility plans at the local level. Additionally, the Standing Conference of Towns and Municipalities is providing technical support to three local self-governments- Vranje, Bajina Basta and Svilajnac in preparing their sustainable urban mobility plans (SUMPs) through the project: "Sustainable and Inclusive Service Delivery at the Local Level"[96,97] ,funded by Sweden.

Action 27	Define sustainable mobility solutions at the regional level including plans for deployment of alternative fuels

Renewable energy share in the transportation sector is currently near zero, and none of the WB6 adopted the Alternative Fuel Directive Regulation. The use of alternative fuels (e-charging stations, et al.) is presented in Table 3.3.5 below.

Albania did not implement the Alternative Fuel Infrastructure Directive. However, Albania took steps to deploy e-charging stations and offers incentives for electric vehicles (EVs). In June 2023, a nationwide tender was initiated to establish electric vehicle charging stations (EVCSs) as part of the NECP[98]. **Albania** offers a few incentives to purchase new and EVs and encourage the phase-out of older highly polluting vehicles. New vehicles (manufactured in 2020 and later) are exempt from paying the annual vehicle tax, while new EVs can be imported without customs duty or paying for the value added tax (VAT). They are also exempt from annual turnover tax and can be registered at no initial cost[99].

The Strategy for Environmental Protection of **Bosnia and Herzegovina** identifies actions that promote the uptake of biofuels and other renewable fuels[100]. The zero-emission vehicles were actively encouraged through financial incentives for the purchase of new EVs and

94 https://rralur.si/en/projects/prosump-regionalna-izmenjava-znanja-in-dobrih-praks-o-celostnih-prometnih-strategijah-v-drzavah-zahodnega-balkana/
95 https://www.afd.fr/en/carte-des-projets/liid-local-infrastructure-institutional-development-serbia
96 https://salarinternational.se/salar/whatwedo/allprojects/projects/preparingserbianlocalgovernmentsfortheeu.69076.html
97 https://salarinternational.se/salar/whatwedo/allprojects.68321.html
98 SEENews (2023), Albania opens tender for installation of EV charging stations, https://seenews.com/news/albania-opens-tender-for-the-installation-of-ev-charging-stations-824901
99 Exit.Al (2022), Old Cars Dominate Albanian Roads, https://exit.al/en/old-cars-dominate-albanian-roads/
100 Stockholm Environment Institute (2024), Development of the Environmental Strategy and Action Plan of Bosnia and Herzegovina, https://www.sei.org/projects/bosnia-herzegovina-environmental-policy/

hybrid vehicles. The value of incentives for the EV purchase is 5,000 EUR, and 2,500 EUR for the purchase of plug-in hybrid vehicles or full hybrid vehicles[101].

Kosovo* is considering adopting regulations that incentivise the import and purchase of EVs. The VAT and vehicle tax reductions were recommended to get EVs to represent 5% of all vehicles by 2030[102].

In **Montenegro**, the Ministry of Capital Investments launched efforts to develop a strategy, feasibility study, and an environmental impact assessment for the use of alternative fuels in Montenegro. This initiative aims to provide suitable recommendations for transposing relevant directives. These activities are anticipated to commence in 2024. Montenegro also introduced incentives to encourage the use of low- and zero-emission vehicles.

In **North Macedonia**, the Energy Law implemented the provisions and obligations from the Third Energy Package of the EU regarding the Directive for Renewable Energy Sources and their use in transport. However, essential provisions regarding the use of biofuels have not been transposed yet.

Serbia continues to implement initiatives aimed at decarbonising road transport. Owners of electric and hybrid vehicles are exempt from annual motor vehicle taxes and can benefit from toll discounts. Subsidies are provided for various categories, including hybrid passenger vehicles, plug-in hybrid electric vehicles (PHEVs), and fully electric vehicles. Additionally, subsidies and incentives are extended to public transport and taxi fleet upgrades, specifying criteria such as fully electric, hybrid, or compressed natural gas drives or meeting at least EURO 6 engine standards for exhaust emissions. In 2023, the subsidies for acquiring new electric and hybrid vehicles were doubled. The total subsidies available amount to approximately 2.5 million EUR, a significant increase from the previous year's allocation.

Table 3.3.5 Use of Alternative Fuels – Monitoring Mechanism – Implementation Score (%)[103]

Measure	Albania	Bosnia and Herzegovina	Kosovo*	Montenegro	North Macedonia	Serbia
Enhance use of alternative fuels (e-charging stations et al.)	67	33	33	67	33	100

Source: Transport Community, Action Plan and Progress Report[104]

101 Sarajevo Times (2022), "The FBiH government allocates money to citizens for the purchase of electric cars", https://sarajevotimes.com/the-fbih-government-allocates-money-to-citizens-for-the-purchase-of-electric-cars/

102 Kosovo* Energy (2024), It Is Recommended to Remove VAT, Customs and Excise for Electric Cars, https://kosovo.energy/rekomandohet-largimi-i-tvsh-se-doganes-dhe-akcizes-per-veturatelektrike/ (Accessed: 5 February 2024)

103 https://www.transport-community.org/wp-content/uploads/2023/12/Action-Plans-and-EU-Acquis-Progress-Report-2023-WEB.pdf

Action 27a	Define a plan for deployment and building of charging stations for electric vehicles

CONNECTA and TCT Secretariat provided dedicated TA to support deployment of e-charging stations on the corridors. This led to progress in finalising CONNECTA's TA project on e-charging by August 2023, which is expected to help WB6 begin deploying e-charging stations[104].

The deployment of electric vehicles charging stations (EVCSs) on the TEN-T road network in the Western Balkans Six is uneven: **Serbia** already has 19 EVCSs in use on its TEN-T highways and plans to construct more. **Bosnia and Herzegovina** has five EVCSs on its TEN-T road network, **Kosovo*** has one and **North Macedonia** two EVCSs, while there are no EVCSs on the TEN-T road network in **Albania** and **Montenegro**.

The density of EVCSs in relation to the overall length of paved roads (including TEN-T roads) in the RPs varies from 0.15 EVCS/100 km (**Kosovo***) to 0.69 EVCS/100 km (**Montenegro**). This is a very low density (considering that the EU member state average is at 6.5 EVCS/100 km, although in the EU it also varies considerably amongst the member states). However, due to a very low penetration of the EVs in the region, there are no acute problems in EV charging[105].

Plans of the authorities for the deployment of EVCSs exist in **Serbia** and are soon expected in **Albania** and **Montenegro**. The latter two already implemented relevant studies.

Specific legal and institutional frameworks for the deployment of EVCSs do not exist in all WB6. The existing EVCSs were placed based on current general construction, power supply, other legal acts, however rather than facilitating the deployment of EVCSs, the existing legal context impedes it. Gradually though, the missing legal framework is under development in some of the WB6 (e.g. **Serbia**).

In some, e.g. in **Albania** (for EVCSs installed and owned by municipalities), **Kosovo*** and **Montenegro** (only during the first year of owning new EVs) e-charging services are free of charge for the EV car owners. In **Bosnia and Herzegovina** and **Serbia** e-charging is free on the EVCSs placed along the TEN-T roads. In **North Macedonia** e-charging is not free of charges as there are only private EVCSs. The payment methods and the level of charges are not the same everywhere and are determined by the commercial approach of each provider.

In identifying suitable EVCS locations along the extended TEN-T road network in the WB6, a total of 158 EVCSs were designated across 134 locations, with 24 locations featuring double EVCSs on both sides of the road. The distribution of these EVCS locations is as follows: 23 in **Albania**, 22 in **Bosnia and Herzegovina**, 9 in **Kosovo***, 14 in **Montenegro**, 19 in **North Macedonia**, and 71 in **Serbia**[106].

104 Transport Community: Sustainable and Smart Mobility Strategy in the Western Balkans, Progress Report, November 2023, www.transport-community.org/wp-content/uploads/2023/12/Sustainable-and-Smart-Mobility-Strategy-Report_designed.pdf

105 Transport Community: Development of indicative TEN-T extension of Comprehensive and Core Network in Western Balkans, 2023, www.transport-community.org/wp-content/uploads/2023/12/TEN-T-Report-2023-WEB.pdf

106 Transport Community: STRATEGIC FRAMEWORK FOR DEPLOYMENT OF ECHARGING STATIONS ON TEN-T NETWORK, 20 December 2023, https://www.energy-community.org/dam/jcr:2235e89a-8140-4df4-8009-1f87c2b92861/TCT%20e-charging%20stations.pdf

In **Serbia**, the amendments to the Law on Planning and Construction (the Law), ratified in July 2023, introduced the concept of electromobility. The obligation to build e-chargers was introduced through defining the construction rules in the spatial plan of the special purpose area, the spatial plan of the local self-government unit and the general and detailed regulation plans. Furthermore, the amendments to the Law outline the responsibilities of motor vehicle refuelling station owners, particularly those situated along motorways.

Action 28	Increase regional cooperation in the area of alternative fuels infrastructure development

The overall progress in regional cooperation in alternative fuels infrastructure development was limited. The alternative fuels network in the WB6 is in its infancy. Most of existing refuelling stations were established as a result of private initiatives. These stations are primarily situated in the region's major cities, reflecting current market demand. However, their presence on the TEN-T Network is minimal, primarily due to the region's limited adoption of alternative fuel directive and limited support provided to vehicles that use alternative fuels. The total number of stations with alternative fuels is presented in Table 3.3.6.

Table 3.3.6 Overview of the Total Number of Stations with Alternative Fuels

	Year							
	2022				2023			
	Electricity	CNG	LNG	Hydrogen	Electricity[107]	CNG	LNG	Hydrogen
Albania	3	0	0	0	60	-	-	-
Bosnia and Herzegovina	42	3	0	0	93	3	-	-
Kosovo*	3	0	0	0	13	-	-	-
Montenegro	18	0	0	0	49	-	-	-
North Macedonia	17	6	0	0	59	6	-	-
Serbia	55	30	1	0	85	30	1	-
WB6	138	39	1	0	359	39	1	-

Source: CONNECTA, Development of e-charging infrastructure & Transport Community, Action Plan and Progress Report [108,109]

Given that the overall compliance is almost non-existent, significant efforts will be necessary to ensure adequate deployment of alternative fuel infrastructure in the region. These efforts are outlined in the Road Action Plan, which sets clear deadlines and deliverables. **Albania** and **Serbia** took a top-down approach to initiatives to deploy EVCSs on their road networks, and at this time, the initial results have started to emerge in Serbia only.

In **Albania**, the availability of alternative fuels in ports is in the preparatory phase.

107 CONNECTA Final Report: Strategic Framework for Development e-charging infrastructure in Western Balkans, 2023.

Serbia is currently considering roll-out of small-scale pilot projects for alternative fuels in inland waterways. These projects are based on the results of various studies; however, they are not directly connected to the Core Network Ports of Belgrade and Novi Sad.

Currently, no fixed storage tank facilities for aviation biofuel are reported in Sarajevo, Podgorica, Belgrade, Skopje, Ohrid, Nis, Kraljevo or Pristina. This criterion is to be applied according to market requirements. Airports must be prepared to make alternative clean fuels available when the need arises, as cited in the regulation "for air transport infrastructure: capacity to make available alternative clean fuels".

Alternative clean fuels for airport ground services (e-mobility, hydrogen, CNG, LPG) are available to some extent in Belgrade, Sarajevo, Skopje, Nis and Kraljevo airports.

In 2023, the TCT Secretariat organised a Joint Workshop on Alternative Fuels and Sustainable Mobility, a collaborative effort between TCT and the Energy Community Secretariat[108]. Three spheres of cooperation amongst energy and transport sector emerged from the discussions: a) Aligning Policy (Laws and Strategies), b) Alternative fuel and infrastructure, c) Fuel quality.

108 Transport Community: 2023 Annual Operational Report, 2024.

3.4 Circular Economy Roadmap

3.4.1 Progress in implementing the Roadmap across the actions and the region

Action 29	Improve sustainability of primary production of raw materials

The WB6 offer tremendous geological potential for primary raw materials (PRMs). A sizable fraction is already being exploited.

Individual deposits in the Western Balkans Six are categorised by the RESEERVE[109] project following the INSPIRE Directive (2007/2/EC)[110]. Owing to previous and ongoing mining and metallurgical activities, the Western Balkans Six possess an abundance of primary and secondary mineral resources. There are significant amounts of iron, nickel, antimony, zinc, copper, lead, chromium, and lithium.

Secondary raw material (SRM) resources are abundant in the Western Balkans Six, particularly in the form of mining and processing waste. SRM resources are dispersed over 5,892 hectares of land and comprise 1,461 waste sites. Ninety-four percent of these sites (1,371 out of 1,461) are landfills for mining waste and they span over 3,308.26 hectares of land. The remaining sites include landfills of slag and ash, red mud dams, and flotation tailings[118]. These can provide precious metals such as copper, gold, chromium, and rare earth elements. After calculating metal reserves, further research is needed to determine how to reprocess the waste generated from mining. Resource efficiency and the long-term growth of the mining industry depend on effective waste management and the use of SRMs.

Large-scale SRMs, including bauxite, Albanian phosphate rocks, magnesium, antimony, titanium, and lithium are particularly well-known in the Western Balkans.

WB6 displays a strong political commitment to re-industrialisation and a favourable investment climate. The Western Balkans Six have improved their legal frameworks in the areas of business environment and raw material sector. More reforms of the environmental policy, land planning, mineral laws, and regulations about exploration and mining are needed to achieve harmonisation with spatial planning laws and to establish a coherent mineral policy and strategy for their sustainable use and reserves conservation. Stakeholders have emphasized the need to focus on strategic objectives, including but not limited to resource efficiency, sustainable management of mineral resources, extension of mine life, accessibility to diminishing mineral resources, and the importance of designating mineral deposits of public interest. Outdated equipment in existing mines and social acceptance of project implementation are both obstacles to the long-term expansion of the mining sector.

There are two possible approaches to increase sector acceptance in the community: (1) broad public discourse, and (2) specific and transparent permitting procedures. It is essential to communicate effectively both with the government and communities. In the mining

109 The RESEERVE project, https://www.europe-geology.eu/project/reseerve/

110 Directive 2007/2/EC of the European Parliament and of the Council of 14 March 2007 establishing an Infrastructure for Spatial Information in the European Community (INSPIRE)

industry, the most frequently used mindset style is the linear economic model. Mining waste needs to be appropriately managed to achieve sustainable development. For example, it is possible to reuse mining detritus for construction and restoration projects. Additionally, the survival of mining industry depends on maintaining high environmental standards.

Nowadays, there are various procedures for certifying the sustainability of mining activities, like the Global Reporting Initiative (GRI), Bettercoal, etc. These are mostly initiatives aimed at large companies, especially those in conflict zones or developing countries. However, they can be quite complicated and costly, making them less practical for small and medium-sized mining operations, which are more common in WB6.

The expected outcomes of sustainability standards include promoting a unified Western Balkans Six perspective on sustainability in the non-energy extractive sector, implementing a voluntary sustainable mining management initiative, integrating mining sustainability concepts into legislation, building trust, improving societal acceptance, contributing to local community development, enhancing resource efficiency, promoting best practices, and streamlining application processes.

Given the social and environmental risks of mining, sustainable standards set clear expectations for the industry. These cover various topics, including greenhouse gas (GHG) emissions, water management, and economic impacts, along with specific recommendations for the mining sector, like addressing land use change emissions and breaking down community investments by mine sites.

The mining sustainable standards also require reporting on mining-specific issues, such as tailings management and risk mitigation in conflict zones. Furthermore, mining companies are required to detail their strategies for mine closure and decommissioning, which is an essential component of sustainable mining practices. The closure of a mine represents the final stage of the mining process, encompassing the halting of operations, reclamation of mining sites, rehabilitation of both environmental and social impacts, and relinquishment of the site. It is imperative to establish a sustainable framework in the Western Balkans Six aimed at facilitating the development and implementation of policies, practices, and guidelines that promote sustainable mining, mine closure, and the mitigation of environmental and security issues[111].

The mining industry is increasingly recognising the importance of adopting innovative and efficient strategies to optimise operations and mitigate environmental impacts. Recent technological advancements are revolutionising traditional mining methods, leading more companies to invest in these solutions. The benefits of these technologies, such as Mining Drones, Virtual Reality, 3D Printing, 3D Mapping, Artificial Intelligence, Automation, and Digital Twinning, include enhanced productivity, improved safety protocols, and substantial cost savings. In the years ahead, it will be crucial for mining companies to incorporate these technologies into their practices to remain competitive and meet the growing demands for sustainability and efficiency. Additionally, the application of innovative technologies for extracting critical resources from mining waste is vital for promoting sustainability within the

111 Peck, P., & Balkau, F. (2005). Mining for closure: policies, practices and guidelines for sustainable mining practice and closure of mines

mining sectors of Western Balkans Six. Embracing these technological advancements is essential for the mining industry to thrive in an evolving landscape.

The mining industry within the Western Balkans Six exhibits varying levels of vulnerability to the European Union's Carbon Border Adjustment Mechanism (CBAM)[105]. Montenegro and Bosnia and Herzegovina, which are significantly reliant on coal and aluminium exports, are confronted with considerable risks. Similarly, Serbia and North Macedonia, which depend on coal-generated electricity as well as iron and steel exports, are likely to experience comparable challenges. Conversely, Kosovo* and Albania, characterised by distinct export profiles, are anticipated to encounter less severe repercussions. Notably, Serbia has initiated measures to tackle these issues, with its Chamber of Commerce and Industry facilitating specialised training programmes for the impacted sectors, including mining. Furthermore, the Bosnia and Herzegovina's Entity of the Federation of Bosnia and Herzegovina has put forth proposals for analogous technical support.

The adoption of renewable energy sources, utilisation of green hydrogen, improvement of energy efficiency, use of recycling of materials, and encouragement of green public procurement are strategies that can contribute to the development of circular economy and reduction of greenhouse gas emissions from mining industry as energy-intensive sectors.

Action 30	Apply an industrial ecosystem approach to attain environmentally sustainable, balanced economic recovery

The circular economy guiding principles seek to reduce material consumption by averting losses at every stage of the lifecycle of a product. Reintroducing end-of-life items into the manufacturing and consumption processes aims to close biological and technological cycles in the industry and ultimately extend the life of materials.

The region's green regulations, which encourage companies to implement circular economy, progressively find their way into strategic plans. Nevertheless, there are still several limitations regarding how these measures can be operationalised. As a regional instrument for advancing green industry in the WB6, the Common Regional Market (CRM) 2021–2024 Agenda[112] can assist in strengthening the foundation for sustainable industry in the region.

It is necessary to develop a comprehensive strategy in the Western Balkans Six to improve resource and energy efficiency and revolutionise manufacturing processes. WBCIF in close cooperation with RCC, encourages activities to improve resource and energy efficiency, especially in small and medium-sized enterprises in WB6.

The prior industrial policy strategies in the Western Balkans Six were characterised by a broad, horizontal approach that encompassed all sectors, which stands in contrast to the current emphasis on specific sectors within industrial policy. Although these strategies were formally endorsed by the governments, their implementation has been lacking, with no government achieving substantial structural transformation initiatives.

112 RCC, First Meeting of the Western Balkans Green and Circular Economy Stakeholders Platform, 16 May 2024 Podgorica, Montenegro

In recent years, the Western Balkans Six have begun to take significant steps towards establishing a coherent industrial policy, primarily through the adoption of smart specialisation strategies. These strategies aim to identify and enhance a select number of key sectors by leveraging industrial, educational, and innovation policies to capitalise on their distinct advantages and strengths. The Vienna Institute for International Economic Studies has supported the development and execution of these strategies within the Western Balkans Six[113]. Its research has identified six of the most important industrial sectors in WB6: agri-food, textiles, automotive, energy, tourism, and information technology.

In **Bosnia and Herzegovina**, different strategic documents recognise the value of circular economy in industry. The concept of circular economy is included in the Development Strategy of the Federation of Bosnia and Herzegovina. Meanwhile, the Industrial Development Strategy of the Republika Srpska emphasizes clean technology and the importance of circular economy.

In parallel, North Macedonia, Montenegro, and Albania are prioritising circular economy approaches. North Macedonia's Plan for Integrated Waste Management and Montenegro's Roadmap for Circular Economy are designed to align with European Union goals. Montenegro is also working to improve the knowledge and capabilities of public administrations to facilitate green procurement practices. Additionally, Albania has released a roadmap for green procurement, while Kosovo* has set up a Public Procurement Regulatory Commission. Furthermore, Kosovo's* Development Strategy 2030 prioritises inclusivity, social cohesion, and sustainable economic advancement.

Serbia has developed a Low-carbon Development Strategy alongside a waste management programme aimed at enhancing its municipal waste infrastructure. Beginning in January 2024, Serbia mandates the implementation of green public procurement for a range of products, which encompasses photocopier paper, printers, scanners, air conditioning units, laptops, cleaning products (hard surface cleaning products, textile cleaning products, etc).

A significant approach to bringing circular economy ideas into factories and industries is by developing eco-industrial parks. The Eco-Industrial Parks project, working with the International Finance Corporation (IFC), European Commission, and Western Balkans Investment Framework (WBIF), plans to build five of these parks in the Western Balkans Six. This project aims to make industrial parks better at running and organising themselves, so they can meet the standards needed for Eco-Industrial Parks.

It is necessary to ensure sufficient and subsidised financial resources to support effective policies. Businesses should be aware of the financing possibilities available for circular economy activities. Waste management infrastructure and green energy generate most expenditures, however acquisition of technology and other high-risk endeavours also require greater assistance. As a result, **North Macedonia** and **Serbia** have each established the Green Bond Framework to finance environmental protection initiatives. In Montenegro, in coordination with the Central Bank of Montenegro, efforts to develop the Roadmap to Sustainable Financing have been intensified. Special support has been provided to companies through the Programme Line for the Promotion of Circular Economy, offering financing and assis-

113 OECD (2024), Western Balkans Competitiveness Outlook 2024: Regional Profile, Competitiveness and Private Sector Development, OECD Publishing, Paris, https://doi.org/10.1787/170b0e53-en

tance for the transition to "green" business practices. A total of €3 million has been allocated in 2024 for the implementation of Competitiveness Improvement Programme.

Several service-related trading opportunities, such as waste management, recycling, refurbishing, remanufacturing, reuse, and repair, may become available when economy transitions to circular economy. The foundation for circular economy initiatives like eco-design, eco-labelling and green procurement may be established by putting in place standards to reduce trade barriers for these services.

Action 31	Develop circular economy strategies looking at the entire lifecycle of products

Recently, Western Balkans Six have been working on implementing the circular economy concept. **Albania** adopted a document dubbed A Roadmap towards the Circular Economy of Albania with the help from OECD. This Roadmap gives important advice on three main topics: helping small and medium-sized businesses use circular economy methods; dealing with plastic waste, especially in the marine environment; and using economic tools like fiscal support, taxes, fees, etc.

Development of the roadmap for circular economy is currently underway in **Bosnia and Herzegovina** with the assistance of UNDP.

Kosovo* developed and adopted the Circular Economy Roadmap in 2023 with the assistance from UNDP[114]. There are six priority sectors identified in the Roadmap: food and forest systems, creative and retail industries, built environment, and manufacturing sector. The Roadmap also presents horizontal areas that support and strengthen the priority sectors and further the shift towards circular economy, acknowledging the interdependence of these sectors. Water and waste management, transportation, green public procurement, digitalisation, energy, and education for sustainable and circular practices are amongst the topics addressed in the Roadmap as well.

Montenegro adopted its Circular Transition Strategy until 2030 along with the Action Plan for 2023-2024, in July 2024. Of the activities outlined in the Action Plan, 23% have been fully implemented, 52% partially (with a deadline for completion by the end of 2024), and 25% remain outstanding. The Ministry of Economic Development of Montenegro, in collaboration with the World Bank, will launch a pilot project for local roadmaps for circular transition, covering three regions (northern, central, and southern). This project aims to conduct a thorough situational analysis and provide recommendations to accelerate sustainable economic development, with a focus on transforming business models based on circular economy principles. Additionally, the Montenegro Chamber of Commerce has established the Circular Economy HUB (CE HUB), which serves as a focal point for circular ideas and solutions. Following the adoption of the Action Plan (2023–2024) and the Roadmap toward a Circular Economy in Montenegro, the CE HUB will function as a knowledge and expertise center for exchanging best practices, accessing local and global circular experiences, and staying informed about events and activities related to the circular economy.

114 UNDP (2023), Circular economy roadmap of Kosovo*

The Roadmap towards Circular Economy was also created and approved by **North Macedonia** in collaboration with OECD in 2024. The Roadmap provides essential policy suggestions for five core areas: construction, biomass and food, mining and metallurgy, textiles, and circular business models for SMEs.

After the Circular Economy Programme was adopted, **Serbia** took strides to start the transition towards circular economy and started working on its implementation. With support from the Ministry of Environmental Protection and Standing Conference of Towns and Municipalities, some local municipalities (Sombor, Pancevo, Bujanovac, Medvedja, Kruševac) created maps of their circular economies in 2023 and 2024. With funding from the Global Environmental Fund (GEF), the Ministry of Environmental Protection and UNDP are working together to implement the *Reducing the carbon footprint of local communities by applying the principles of the circular economy in Serbia - Circular Communities* project implemented from March 2022 to March 2027. The goal of this initiative is to encourage and promote circular economy in local communities.

A circular economy offers a new perspective on how businesses can operate while improving both financial performance and sustainability. It challenges the common belief that business activities lead to waste. Instead, it promotes principles that focus on eliminating waste and pollution, keeping resources and products in use for longer, and restoring natural ecosystems.

Adopting a circular economy not only enhances a company's competitiveness but also helps identify cost-saving opportunities. It builds strong relationships with suppliers and customers and encourages proactive responses to climate change and sustainability goals.

Action 32	Make further progress in the construction and maintenance of waste management infrastructure for cities and regions

The WB6 continue to dedicate attention to compliance with the European directives. Every WB6 set goals for recycling or separate collection of end-of-life products. Furthermore, they either implemented or plan to implement extended producer responsibility (EPR) schemes soon because the EPR schemes provide opportunities for additional funding through the polluter-pays principle for the proper management and separate collection of end-of-life products. EPR schemes seek to shift the burden of paying for product management expenses from the public sector to producers and consumers.

North Macedonia and **Serbia** installed EPR systems for packaging waste. **Serbia**, the **Brcko District of Bosnia and Herzegovina**, and **Bosnia and Herzegovina's Entity of the Republika Srpska** developed EPR systems for electrical waste and electronic equipment. In **Bosnia and Herzegovina**, **Montenegro**, and **Serbia** all relevant regulations are in place, however there are issues with implementation in the areas of separate collection of textile and hazardous household waste.

Legislation for waste prevention programmes was adopted in **Albania**, Bosnia and Herzegovina's Entity of the **Federation of Bosnia and Herzegovina**, **Brcko District of Bosnia and Herzegovina**, **Kosovo***, and **Montenegro**. The implementation of these programmes

remains a significant challenge. In 2023, **Serbia** adopted sub-regulations related to the management of construction and demolition waste.

Merely a tiny portion of waste in the Western Balkans Six is recycled while the majority is dumped in landfills. In comparison to the EU average of 48.6 %in 2022, the recycling rates of municipal waste in the WB6 are low, with the maximum value at 17% in **Albania**. **Kosovo*** is especially affected by this, as 98% of waste is disposed of in landfills[115]. The main reasons for this disparity include inadequate infrastructure for sorting, collecting and recycling waste, lack of finance at the local level, and low public awareness and participation in the process. Even though separation of waste at the source is prescribed by law, there is no organised system in place for collecting different waste, and this legal commitment is only partially implemented. A few small-scale experimental projects for waste separation at the source were launched by municipalities throughout the region, although it is uncertain how successful these are. The bulk of the limited recyclable waste collection is done by the informal sector[116].The informal sector needs sufficient equipment and training.

The waste management infrastructure lacks the necessary funding to function, operate, and advance. While recycling and recovery rates remain extremely low in the region, new legislative and policy frameworks are progressively implemented to ensure more efficient waste management. In certain WB6, waste management infrastructure is modernised with the construction of new recycling facilities, sanitary landfills in **Serbia** and **Albania**, and composting facilities in **Kosovo***[117] and **Albania**[118]. Additionally, **Albania** invested into development of new incinerators[119].

While there are existing initiatives to enforce waste management policies, one persistent issue facing the entire region is the lack of reliable and accessible waste data. Collection of precise data is essential for efficient waste management planning, including the creation of EPR systems, and for deliberating wisely on infrastructure investments. Regretfully, estimates of the amount of waste generated frequently depend on variables such as the local population. Although statistical surveys are undertaken, occasional impediments are lack of precision and insufficient response rates. Furthermore, lack of weighing equipment in numerous dump sites increases the ambiguity of information regarding the volume of waste that is processed there. Mapping and eliminating illegal dumpsites play a significant role in mitigating air and water pollution, in addition to preserving the quality of the agricultural land on site, or in their vicinity. Reducing methane emissions from these illegal dumpsites is also an obligation under the Global Methane Pledge as an international initiative. Collaboration with foreign partners was the main driver of progress in this field.

115 OECD (2024), Western Balkans Competitiveness Outlook 2024: Regional Profile, Competitiveness and Private Sector Development, OECD Publishing, Paris, https://doi.org/10.1787/170b0e53-en
116 UNDP (2023), Circular economy roadmap of Kosovo*
117 UNDP (2023), Circular economy roadmap of Kosovo*
118 OECD (2024), A Roadmap towards Circular Economy of Albania, OECD Publishing, Paris, www.oecd.org/content/dam/oecd/en/publications/reports/2024/03/a-roadmap-towards-circular-economy-of-albania_0fd9c3a4/8c970fdc-en.pdf
119 OECD (2024), A Roadmap towards Circular Economy of Albania, OECD Publishing, Paris, www.oecd.org/content/dam/oecd/en/publications/reports/2024/03/a-roadmap-towards-circular-economy-of-albania_0fd9c3a4/8c970fdc-en.pdf

Action 33	Design and implement consumer-targeted initiatives to raise awareness of citizens on waste prevention, separate collection and sustainable consumption

Awareness-raising campaigns are essential for achieving strategic waste management objectives in the Western Balkans Six. It is imperative to actively promote all facets of circular economy, including sustainable production and consumption.

All adopted roadmaps to circular economy (for **Serbia**, **Kosovo***, **Montenegro**, **North Macedonia)** stress the importance of raising public awareness and leveraging the public as a crucial driver for the advancement of circular economy. **Bosnia and Herzegovina** has initiated development of its circular economy roadmap, and recently endorsed environmental strategies of both entities prioritise the promotion of circular economy principles as a key objective. However, integration of these practices by municipalities, citizens and businesses is still at a low level.

Kosovo* showed progress in this area. As highlighted by the civil society[120], **Kosovo*** recognises waste pollution as a significant issue impacting the environment, public health, and economy[121]. Various initiatives are implemented to increase awareness, with a focus on educating citizens, especially the youth, on circular economy concepts and waste management. The challenges within the local waste management system are acknowledged, underscoring the importance of improved infrastructure and waste reduction strategies. Addressing packaging waste is a key priority, with the integration of circular economy principles as crucial in tackling these challenges.

Action 34	Conclude and implement a regional agreement on the prevention of plastic pollution, including specifically addressing the priority issue of marine litter

At Tirana Berlin Process Summit 2023, the Western Balkans Six Leaders endorsed the *Regional Joint Statement on Prevention of Plastic Pollution, including Marine Litter*.[122] The Joint Statement reflects the commitment of the region to protect biodiversity and water ecosystems by addressing plastic pollution including marine litter based on best circular economy practices to prevent, reduce, reuse, and recycle.

Further on, the RCC worked closely with the Western Balkans Six to develop a detailed Regional Action Plan which translates the region's political commitment into practical measures and recommendations aimed at safeguarding biodiversity and water ecosystems from plastic pollution, including marine litter.

120 https://adelphi.de/system/files/document/giz-2023-kosovo-reusable-packaging-systems-and-women-participation.pdf, page 32

121 GIZ (2023), Circular economy in Kosovo*. Opportunities for reusable packaging systems and women's participation

122 https://www.berlinprocess.de/uploads/documents/regional-joint-statement-on-preventing-plastic-pollution-including-marine-litter-bp-summit-2023_1697614083.pdf

This plan outlines six main goals, 26 specific actions, and 100 activities to implement the Joint Statement. It also identifies sources of marine litter, important areas, strategies, and recommendations for improving regulations and infrastructure.

According to the Barcelona Convention, **Albania**, **Bosnia and Herzegovina**, and **Montenegro** are required to take action to reduce marine litter. However, an analysis showed that they did not fully implement the proposed measures.

Bosnia and Herzegovina launched the Coastal Area Management Programme (CAMP BA) for the City of Neum to address plastic pollution in the Adriatic Sea. CAMP goal is to put in place the systems that will encourage sustainable development along the coastline.

The Strategy of Integral Management of the Coastal Area 2015–2030 in **Montenegro** lays out strategic objectives such as safeguarding the environment, landscapes, and cultural assets; developing infrastructure to prevent pollution; fostering the growth of the coastal economy; enhancing the coastal zone management system; and bolstering social cohesion and human resources. The Strategy's primary goals are blue growth promotion and the preservation of marine habitats.

In **Albania**, plastics were designated as a priority area with substantial policy relevance. The Albania's Roadmap for Circular Economy[123] includes plastics as one of its specific target areas, with an emphasis on marine pollution. **Albania** also seeks to fulfil plastics-related requirements and targets as stated in its Plan for Integrated Waste Management (2020–2035). There are fixed goals for recovering waste from plastic packaging, with percentages rising over time.

Due to insufficient waste management systems, the region suffers from poor rates of plastic sorting and recycling, which causes significant amounts of plastic packaging to remain in the environment. The German Agency for International Cooperation (GIZ) supports the *Integrated Waste Management and Marine Litter Prevention* project[124] to assist the Western Balkans Six in reducing marine litter through coordinated strategies and approaches.

Action 35	Further implement Smart Specialisation Strategies, place-based, innovation-led transformation agendas for sustainability

The development of novel concepts and society's progress depends heavily on scientific research. It is a cornerstone of intelligent specialisation, which emerged as a major area of interest for European industrial and regional growth. The Western Balkans Six are focused on the Smart Specialisation Strategy (S3). The Joint Research Centre of the European Commission[125] and the WB6 collaborate closely to develop intelligent specialisation plans. The pace of progress varies depending on the economy: **North Macedonia** completed its S3 implementation in late 2023; **Albania**, **Kosovo***, and **Bosnia and Herzegovina** still work

123 OECD (2024), A Roadmap towards Circular Economy of Albania, OECD Publishing, Paris, https://www.oecd.org/en/publications/a-roadmap-towards-circular-economy-of-albania_8c970fdc-en.html

124 GIZ. (2022). Integrated Waste Management and Marine Litter Prevention in the Western Balkans. https://www.giz.de/en/downloads/giz2022-factsheet-marine-litter.pdf

125 JRC (2022), Smart Specialisation in the Western Balkans the first thematic workshop on agri-food, https://publications.jrc.ec.europa.eu/repository/bitstream/JRC130187/JRC130187_01.pdf

on implementing their S3s; **Montenegro** and **Serbia**, who have S3s in place since 2019 and 2020 respectively made considerable progress[126].

Although smart specialisation recognises the need for skill development, in order to meet S3 priority targets, local workforces must be trained or retrained, which calls for a focus on human capital development and collaboration with educational institutions. The goal of all current S3 activities is to strengthen local capacity to support digital and green transitions, as well as entrepreneurial and inventive capabilities. There are a few initiatives that focus on modernising study plans and curriculum. However, higher education or vocational programmes in the WB6 are not successfully linked with S3 objectives.

A few of the WB6 set up centres of excellence to help with their elaborated strategies for specialisation. For example, **Montenegro** established a centre of excellence for food safety digitisation, while a biotechnology centre is under development in **Serbia**. With sufficient funding, these centres could improve the region's capacity to carry out competitive scientific research in the fields that are essential to EU integration and regional growth. More cooperation and funding are needed to find opportunities and promote development.

To effectively guide research and innovation at the regional and individual-levels, smart specialisation necessitates efficient monitoring and evaluation procedures. It also seeks to advance the region's whole economy by taking a wide perspective on innovation rather than restricting it to technology-driven methods. Partnerships for equitable green and digital transitions can be formed through innovation for place-based transformations.

126 OECD (2024), Western Balkans Competitiveness Outlook 2024: Regional Profile, Competitiveness and Private Sector Development, OECD Publishing, Paris, https://doi.org/10.1787/170b0e53-en.

3.5 Depollution Roadmap

3.5.1 Progress in implementing the Roadmap across the actions and the region

Action 36	Finalise the process of ratification of Convention on Long-range Transboundary Air Pollution and its protocols

Five of the WB6 ratified the Convention on Long-range Transboundary Air. **Kosovo*** is the only one from the Western Balkans Six that did not ratify the Convention[127] due to not being the part of UN. The status of protocol ratification is provided in Table 3.5.1[128] below and there is no progress compared to 2022.

Table 3.5.1 The Status of Ratification of Convention on Long-range Transboundary Air Pollution

Title	Entry into force	Status of ratification	Albania	Bosnia and Herzegovina	Kosovo*	Montenegro	North Macedonia	Serbia
1999 Protocol to Abate Acidification, Eutrophication and Ground-level Ozone and its 2012 amended version	17 May 2005	Original protocol					✓	
	7 October 2019	Amended version						
1998 Protocol on Persistent Organic Pollutants (POPs) and its 2009 amended version	23 October 2003	Original protocol						
		Amended version, annexes I, II		✓	✓	✓		
	20 January 2022	Amended version, annexes I, II, III, IV, VI, VIII						
1998 Protocol on Heavy Metals and its 2012 amended version	29 December 2003	Original protocol				✓		✓
	8 February 2022	Amended version						
1994 Protocol on Further Reduction of Sulphur Emissions	5 August 1998						✓	
1991 Protocol concerning the Control of Emissions of Volatile Organic Compounds or their Transboundary Fluxes	29 September 1997						✓	
1988 Protocol concerning the Control of Nitrogen Oxides or their Transboundary Fluxes	14 February 1991		✓				✓	
1985 Protocol on the Reduction of Sulphur Emissions or their Transboundary Fluxes by at least 30 per cent	2 September 1987		✓				✓	

127 CHAPTER XXVII: ENVIRONMENT 1. Convention on long-range transboundary air pollution Geneva, 13 November 1979, STATUS AS AT: 16-07-2024 09:15:35 EDT, https://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg_no=XXVII-1&chapter=27&clang=_en

128 https://unece.org/protocols

Title	Entry into force	Status of ratification	Albania	Bosnia and Herzegovina	Kosovo*	Montenegro	North Macedonia	Serbia
1984 Protocol on Long-term Financing of the Cooperative Programme for Monitoring and Evaluation of the Long-range Transmission of Air Pollutants in Europe (EMEP)	28 January 1988		✓	✓		✓	✓	✓

Source: Author's interpretation from official web site[129]

Action 36a	Support modelling to establish economy-wide emission reduction commitments for the five main pollutants covered by the NEC Directive and the Gothenburg Protocol under the Convention on Long-range Transboundary Air Pollution

The measurement status for the five main pollutants covered by the NEC Directive and the Gothenburg Protocol ($PM_{2.5}$, NO_x, SO_2, NH_3 and NMVOCs) in the WB6 is presented in Table 3.5.2.

Table 3.5.2 Overview of Pollutants Measured at Monitoring Stations in the WB6

	Pollutants covered by NEC Directive					Other pollutants										
	$PM_{2.5}$	NO_x	SO_2	NH_3	NMVOCs	PM_{10}	O_3	Pb	CO	H_2S	NO	NO_2	CH_4	C_2H_6	C_6H_6	THC
Albania		✓	✓			✓	✓	✓								
Bosnia and Herzegovina	✓	✓	✓			✓	✓		✓	✓						
Kosovo*	✓		✓			✓	✓		✓			✓				
Montenegro	✓	✓	✓			✓	✓		✓		✓	✓	✓	✓		✓
North Macedonia	✓	✓	✓			✓	✓		✓		✓	✓				
Serbia	✓	✓	✓			✓	✓	✓	✓		✓	✓			✓	

Source: Author's interpretation

Air pollution is a major environmental and health risk in the WB6 with transboundary pollution processes affecting the EU as well. This region is considered one the European air pollution hot spots due to $PM_{2.5}$, SO_2, O_3 and NO_2 levels frequently above the legislation limits. Detailed analysis of the external costs associated with air pollution impact ($PM_{2.5}$, O_3

and NO_2) on health in selected urban areas of the Western Balkans Six was conducted using different methodologies and with the aim to assess the inequalities associated with air pollution between the WB6 and the EU 27[129]. The costs of morbidity attributed to PM in 26 WB6 cities amounted to 150 million EUR, which is equivalent to 45 EUR per capita and 5.7 million EUR per city. An analysis of the sources contributing to $PM_{2.5}$ in a subset of the WB6 cities suggests that reductions in the energy sector generated pollution are likely to lead to the highest health and economic benefits followed by reductions in agriculture and residential combustion.

No substantial progress is noted compared to 2022, however there is a degree of progress through the implementation of two projects:

- *EU4green*[130] (implemented by the Environment Agency of Austria; duration: 2022-2025). The goal of the project is to provide support to the WB6 in implementing the Green Agenda;
- *Partnership for Improving Air Quality in the Western Balkans*[131] (implemented by UNICEF, Swedish EPA, and Swedish Meteorological and Hydrological Institute (SMHI); duration: 2022-2026). The goals of the project are to increase the use, access and visualisation of already collected air quality data, improved capacity for guidance of local self-governments regarding air quality management and creating an emissions inventory ahead of action plan and dispersion modelling.

During 2023 and by June 2024, the following activities under the *EU4green* and *Partnership for Improving Air Quality in the Western Balkans* projects were carried out:

- An in-depth analysis of the available WB6 air pollutant emission inventories (submitted under the Air Convention) and the corresponding estimates used in the IIASA GAINS model;
- Discussion of differences in the emission estimates: GAINS vs. data reported under the Air Convention;
- Development of emission reduction commitments (ERCs)[132] for SO_2, NO_x, NH_3, NMVOC and $PM_{2.5}$ for 2020-2029 and by 2030 and beyond for the WB6[133];
- Basing the ERCs on a premature mortality related target as for the commitments set in the NEC Directive;

129 Belis, Claudio A., et al. "Assessment of health impacts and costs attributable to air pollution in urban areas using two different approaches. A case study in the Western Balkans." Environment International 182 (2023): 108347.

130 https://eu4green.eu

131 https://www.naturvardsverket.se/en/international/cooperation/bilateral/western-balkans/

132 International Institute for Applied Systems Analysis (IIASA) developed preliminary Emission Reduction Commitments (ERCs) for the pollutants SO2, NOx, PM2.5, NH3 and NMVOCs for each WB6. The approach taken is consistent with the one that the EU Commission had taken for the derivation of emission reduction commitments for 2030 for EU Member States. The aim is to cut the number of premature deaths caused by air pollution in the region by 50% (compared to 2005) by 2030, aligning with the EU's broader environmental goals. The 50% reduction target is set for the West Balkans region as a whole and the Greenhouse gas – Air pollution Interactions and Synergies (GAINS) model optimisation method identifies specific measures that together achieve the target in the most cost-effective way. Examples for these specific measures include: cleaner residential boilers, flue gas cleaning in industry and efficient application of mineral fertilisers.

133 https://eu4green.eu/working-together-for-cleaner-air-reducing-emissions-in-the-western-balkans/#:

- Calculation of the cost-effective means of achieving the suggested ERCs using the GAINS model;
- Guidance documents for improving air quality in the WB6 were developed;
- A workshop was held on 15-16 November 2023 in Tirana, Albania with the aim to discuss the requirements for ecosystem monitoring under the Directive (EU) 2016/2284 (NECD) and a presentation was held to discuss monitoring ecosystem indicators in the WB6.

Action 37	Develop and implement Air Quality Strategies

Compared to 2022, the progress is at a low level. The WB6 are in the process of preparing new strategies (Kosovo*) or adopting them (Montenegro), while others have environmental public policy documents covering air quality issues and undertake activities to develop new specific public policy documents.

In **Albania**, the policy framework on air quality is developed, with the Plan on Air Quality Management (2019-2026) and the Strategy on Ambient Air Quality (2014-2024) in place. However, implementation reports are not regularly developed, and a functional monitoring system of the Plan on Air Quality Management implementation is lacking[134]. Some activities were nevertheless undertaken, such as expanding capacities through training of responsible institutions.

Advances in the legal framework are underway in **Bosnia and Herzegovina** through the planned adoption of the proposed Law on Air Protection which is expected at the end of 2024. The Law will establish a unified air quality management system and regulate emissions from industrial plants. Air pollution objectives and targets were also included in the economy-level and entities' Environmental Self-assessment Action Plans (ESAPs).

While the revision and update of the Strategy on Air Quality (2013-2022) is yet to be conducted in **Kosovo***, its priorities to address air pollution are expected to be outlined in the upcoming Strategy for Environmental Protection and Sustainable Development (2022-2031)[135], which is still in the drafting process. The strategy's focus is on the energy and transport sector generated pollution. Other efforts included initiatives to mitigate household pollution, raise awareness amongst citizens, and enhance technical and human capacities for control of transport sector generated pollution.

In **Montenegro**, the new 2029 Air Quality Strategy was prepared in 2020. However, its adoption was delayed by several years and is still pending[136]. This undermines the progress

134 European Commission (2023), European Innovation Scoreboard 2023: Economy Profile Albania, European Commission, https://ec.europa.eu/assets/rtd/eis/2023/ec_rtd_eis-economyeconomy-profileal.pdf

135 OECD: Competitiveness and Private Sector Development Western Balkans Competitiveness Outlook 2024: Kosovo*, www.oecd-ilibrary.org/deliver/ff74ae0e-en.pdf?itemId=%2Fcontent%2Fpublication%2Fff74ae0e-en&mimeType=pdf

136 OECD: Competitiveness and Private Sector Development Western Balkans Competitiveness Outlook 2024: Montenegro, www.oecd-ilibrary.org/deliver/ead1588e-en.pdf?itemId=%2Fcontent%2Fpublication%2Fead1588e-en&mimeType=pdf

achieved by implementing over 75% of the measures outlined in the preceding 2013-2020 strategy. Under the draft 2029 Strategy, three new air quality plans covering municipalities where air pollution exceeds limits are planned to be developed. These are expected to be tailored to local sources or air pollutants.

Promisingly, **North Macedonia** is strengthening its air quality policy framework through the development of the Plan for the Protection of Ambient Air 2024-2028[137]. Furthermore, following the mid-2021 amendments to the Law on Ambient Air Quality, which outline government competencies and local-level procedures for the preparation and adoption of air quality plans, several local air quality plans were adopted.

Serbia adopted its first Air Protection Programme 2022-2030 along with the 2022-2026 Action Plan. This comprehensive initiative is designed to reduce health impacts from poor air quality by 50% by 2030 compared to 2015 levels,by reducing exposure to air pollution. Additionally, it will help Serbia align with the EU`s air pollution regulatory standards, thereby minimising harm to both public health and ecosystems. [138].

Action 37a	Increase the uptake of Best Available Techniques in accordance with the Industrial Emissions Directive

Alignment with the EU's Industrial Emissions Directive (IED) is incomplete across WB6, with progress made in **North Macedonia** through the preparation of the Law on Industrial Emissions, and in **Serbia** with the preparation of the revised draft of the new Law on Integrated Pollution Prevention and Control (IPPC), both pending adoption. However, most WB6 lack legally binding emission limit values in environmental permits for industrial installations. Frameworks in Serbia and Bosnia and Herzegovina foresee the introduction of best available techniques (BATs) to decrease air pollutants and heavy metal emissions from industrial processes[139].

Based on membership in the Energy Community, the thermal power plants are required to comply with the EU Industrial Emissions Directive (IED) by January 2028. Currently, none of the WB6 is on the way to comply with these obligations[140].

In **Serbia**, the IED Serbia *Green Transition - Implementation of the Directive on Industrial Emissions in Serbia 2021-2027* project represents the third phase of cooperation between the Ministry of Environmental Protection, Centre for Cleaner Production of the Faculty of Technology and Metallurgy of the University of Belgrade and Swedish Agency for International Development Cooperation (SIDA). This project exemplifies continued support for the implementation of regulation on integrated prevention and control of environmental pollution by

137 OECD: Competitiveness and Private Sector Development Western Balkans Competitiveness Outlook 2024: North Macedonia, www.oecd-ilibrary.org/deliver/8207326d-en.pdf?itemId=%2Fcontent%2Fpublication%2F8207326d-en&mimeType=pdf

138 OECD: Competitiveness and Private Sector Development Western Balkans Competitiveness Outlook 2024: Serbia, www.oecd-ilibrary.org/deliver/3699c0d5-en.pdf?itemId=%2Fcontent%2Fpublication%2F3699c0d5-en&mimeType=pdf

139 OECD: Western Balkans Competitiveness Outlook 2024: Regional Profile https://www.oecd-ilibrary.org/deliver/170b0e53-en.pdf?itemId=%2Fcontent%2Fpublication%2F170b0e53-en&mimeType=pdf

140 https://bankwatch.org/wp-content/uploads/2023/06/2023_06_28_Comply-or-close.pdf

promoting the transition of Serbia's industry to green technologies[141]. The main goal of the project is to provide assistance and support to competent authorities and companies in the implementation of the Directive. The project provides technical and administrative support to the Ministry of Environmental Protection and other authorities in the preparation of draft integrated permits for selected companies, as well as preparation of regulation, amendments and parts of the negotiating position in the field of industrial pollution.

Action 38	Establish an adequate air quality monitoring system, including through accreditation of air quality monitoring networks

A network of air quality stations is in place in all WB6, largely covering atmospheric pollutants in line with the EU requirements (NO_x, NMVOCs, SO_x, NH_3, $PM_{2.5}$, PM_{10}), with information promptly made available online. Nevertheless, continuous monitoring at major industrial installations is not guaranteed for all types of pollutants. Furthermore, monitoring stations rarely cover the whole territory, while the maintenance of measuring devices is often challenging.

In **Albania**, the implementation of 2014 Air Quality Strategy is still pending and the 2019 Plan on Air Quality Management does not provide a functional monitoring system. Monitoring stations do not cover the whole territory of Albania as there are only seven automatic air monitoring stations located in main cities. However, even from these few monitoring stations data is not reported in real time and monitoring is not carried out during the entire year[142]. Equipment necessary for air quality monitoring of all monitoring stations was repaired in 2023, allowing the operationalisation of all seven fixed and one mobile station, after they had been inactive for various periods due to a lack of funding to undertake repairs. Monitoring of air pollutants remains to be fully aligned with the EU standards[143].

Air quality continues to be a significant concern in **Bosnia and Herzegovina**. Air quality data management and monitoring were considerably improved, however it is still insufficient. According to the 2023 Annual Report on Air Quality in the Federation of Bosnia and Herzegovina, the total number of air quality monitoring stations is 32, which is an increase by five compared to 2022[144]. Some analysers are dilapidated, with operators often lacking funds to service them or purchase new, which may be the reason for the absence of measurement results of a certain pollutant in 2023. Federal Hydrometeorological Institute analyses the collected data daily and publishes daily reports. The Institute plans to start preparing and publishing regular monthly reports in 2024.

Air quality continues to be a major health threat in **Kosovo***. Air monitoring and reporting practices are expected to improve with the adoption of the bylaw outlining criteria and

141 https://iedserbia.org/o-projektu/
142 COMMISSION STAFF WORKING DOCUMENT Albania 2023 Report, https://neighbourhood-enlargement.ec.europa.eu/system/files/2023-11/SWD_2023_690%20Albania%20report.pdf
143 European Commission (2023), European Innovation Scoreboard 2023: Economy Profile Albania, European Commission, https://ec.europa.eu/assets/rtd/eis/2023/ec_rtd_eis-economyeconomy-profileal.pdf monitoring system
144 www.fhmzbih.gov.ba/PUBLIKACIJE/zrak/izvjestaj-2023.pdf

methodology for air quality monitoring[145]. Air quality is currently monitored by 12 stations across two zones, while continuous monitoring at major industrial installations does not take place for all types of pollutants. Moreover, maintenance of measuring devices is frequently challenging due to limited human and financial resources.

The network for air quality monitoring in **Montenegro** consists of nine stations[146]. Calibration of monitoring equipment is still done by a laboratory in Croatia. There are plans to improve data collection and management capacities at both individual- and local levels, with the support of donor funding[147].

North Macedonia has an air quality monitoring network with 22 stations, one of which is mobile[148]. The air quality monitoring network was modernised, and four new monitoring stations were installed[149]. Obsolete measuring instruments were replaced and new $PM_{2.5}$ measuring instruments were installed on each urban monitoring station. North Macedonia's Ministry of Environment and Physical Planning is an associate member[150] of the European Network of Air Quality Reference Laboratories AQUILA[151] and follows AQUILA activities. Parameters, such as heavy metals, benzene and polycyclic aromatic hydrocarbons (PAHs), need to be monitored regularly. Currently, only indicative monitoring of these parameters is in place. The available data is reported to the European Environment Agency (EEA).

Serbia has an air quality monitoring system comprised of 76 stations, one of which is mobile[152]. The results are published in annual reports by Serbia's Environmental Protection Agency (SEPA). Economy-level reference laboratory is neither established nor assigned. Air monitoring is defined by the Common Air Quality Index (CAQI), developed within a project funded by the European Commission, namely the European Regional Development Fund (ERDF).

Action 39	Implement relevant EU water-related acquis (Water Framework Directive, Urban Waste Water Treatment Directive and Nitrates Directive)

WB6 continue to work on harmonisation with the relevant EU acquis. The progress is moderate compared to 2022.

Albania further strengthened its water-related legal framework through the preparation of the Law on Water Resources and the Law on Marine Strategy, whose adoption is expected mid-2024. The former is focused on the long-term protection of water resources with special

145 BCSD (2024), Turkey Circular Economy Platform, https://donguselekonomiplatformu.com/en/
146 https://epa.org.me/obavjestenja-mjerne-stanice/
147 Tuscano, J. et al. (2022), Electronic Registries for Waste Across Europe, ETC CE Report 2022/3, European Topic Centre for Circular Economy and Resource Use, https://www.eionet.europa.eu/etcs/etc-ce/products/etc-ce-products/etc-ce-report-3-2022-electronic-registries-for-waste-across-europe
148 https://air.moepp.gov.mk/?page_id=1351
149 Ministry of Finance (2022), Economic Reform Programme 2022-2024, https://enlargement.ec.europa.eu/document/download/dfef7877-a753-4844-a89b-880bb5340785_en
150 https://joint-research-centre.ec.europa.eu/about-aquila/aquila-associated-members_en
151 https://joint-research-centre.ec.europa.eu/about-aquila_en
152 http://www.amskv.sepa.gov.rs/pregledstanica.php

attention to reducing groundwater pollution, while the latter seeks to protect and preserve marine environments, including through the restoration of degraded maritime ecosystems.

Bosnia and Herzegovina prepared for adoption of specific plans for implementing EU legislation on potable water, urban wastewater and flood risk management[153].

The regulatory framework of **Kosovo*** for water supply and sanitation was amended between 2021 and 2022; subsequently, three administrative instructions were adopted in 2023, pertaining to the payment structure for water use, wastewater discharges, and the sanitary protection zones of water resources. However, these adjustments only partially transpose the EU Framework Water Directive[154].

In **Montenegro**, the Law on Waters aligns with the requirements of the Water Framework Directive, Flood Directive, Bathing Water Directive, Urban Waste Water Treatment Directive, Nitrate Directive and Groundwater Directive. It has fully transposed the WFD and demonstrates an advanced level of transposition for the other directives through the adoption of secondary legislation. The government adopted the 2023 Programme for Monitoring Surface and Ground Water. Montenegro ensured alignment of its legal framework with the Marine Strategy Directive by completing the marine environment monitoring programme and developing a database based on the Geographic Information System (GIS). Montenegro requested a transitional period to achieve full compliance with UWWT Directive until 2035, as well as for the implementation of WFD specifically related to measures required to achieve good water status related to wastewater treatment.

North Macedonia needs to continue efforts to align legislation with the EU acquis on water quality management. The slow pace of implementation and enforcement is an overwhelming, systematic weakness. Some progress was made on increasing the very low level of funding. The Urban Wastewater Treatment Directive (UWWTD) related legislation needs to be implemented to tackle water pollution. No progress was made on completing the implementation of rules and regulations, including on the designation of areas sensitive to eutrophication.

In **Serbia**, the level of alignment with the EU acquis on water quality is moderate. Overall, Serbia needs to improve its efforts to further align its legislation with the EU acquis in this sector, and to strengthen administrative capacity for monitoring, enforcement and inter-institutional coordination. Non-compliance with water quality standards remains a serious concern. The 2027 River Basin Management Plan, which aims to establish sustainable water management practices in Serbia's major basins and further align the legal framework with the EU Water Framework Directive, was prepared in 2021 and adopted in 2023. Ongoing implementation efforts prioritise safeguarding water quality by expanding wastewater treatment capacities, mitigating agricultural pollution from nutrients and pesticides, remediating contaminated sites, and implementing pollution control measures in urban areas, traffic, built infrastructure, and forestry. These efforts align with the objectives of the International Commission for the Protection of the Danube River and the International Sava River Basin Commission.

153 Commission staff working document Bosnia and Herzegovina 2023 Report, https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52023SC0691

154 European Commission (2023), EU Progress Report for Kosovo*, European Commission, https://neighbourhood-enlargement.ec.europa.eu/document/download/760aacca-4e88-4667-8792-3ed08cdd65c3_en?filename=SWD_2023_692%20Kosovo%20report_0.pdf

Action 40	Modernise water monitoring infrastructure and reach good status for all water bodies

No substantial progress is noted compared to 2022. There is an absence of systematic collection or compilation of water quality and quantity data from various institutions across the WB6, which impedes informed policy decisions regarding competitive uses of water and trade-offs amongst sectors. Furthermore, monitoring to identify emerging contaminants is widely absent across WB6.

To ensure progress on the EU water acquis, **Albania** needs to substantially increase the budgetary resources and implementation capacity of the key water agencies and adopt a capacity development plan. In addition, water quality and quantity monitoring is insufficient. The Water Resources Management Agency, together with the Environment Agency and other water monitoring agencies, should urgently plan and implement a water monitoring programme with sufficient resources[155].

Bosnia and Herzegovina collects water data for the Sava River and Adriatic Sea watersheds only. A water information system is yet to be established to ensure the systematic monitoring of ecological and chemical status of surface and ground waters. Only Bosnia and Herzegovina's Entity of the Republika Srpska has an entity-wide water information system for monitoring of water bodies, updated annually with data on water quantity, quality, allocation and water-related risks.

Kosovo* is yet to establish a transparent water monitoring system accessible to the public. While Kosovo* Environmental Protection Agency regularly collects basic data on water resources and uses them to inform water management decisions, there is a notable absence of comprehensive data and forecasting measures. This gap hampers efforts to provide effective guidance for managing water resources, especially in safeguarding the freshwater ecosystems of **Kosovo*** against competing demands from agriculture, industry, and private households.

In **Montenegro**, improvement of water monitoring framework is underway, following adoption of the programme for monitoring surface and ground waters in 2024. This will result in establishing a water information system compiling nationwide data on water quality, quantity, and allocation regimes, facilitating cross-institutional coordination and data sharing to ensure informed policy decisions about competitive water use and trade-offs across sectors.

In **North Macedonia**, there is no official water information system collecting data on water quality and quantity, impeding informed policy decisions about competitive use of water and trade-offs across sectors. The integration of water information is planned within the framework of the Environmental System managed by the North Macedonian Information Centre. Moreover, the groundwater cadastre, which aims to better manage and report on groundwater resources, is in the final stages of development.

155 OECD: Competitiveness and Private Sector Development Western Balkans Competitiveness Outlook 2024: North Macedonia, www.oecd-ilibrary.org/deliver/8207326d-en.pdf?itemId=%2Fcontent%2Fpublication%2F8207326d-en&mimeType=pdf

Serbia has a water management body (RWD with PWCs) withcompetences and responsibilities outlined in accordance with the relevant laws. However, the issue lies in the fragmentation of these competences across multiple ministries, resulting in a lack of systematic coordination and synchronised actions and , absence of a digitalised and comprehensively compiled dataset for water quality and quantity. This impedes proper implementation and monitoring of measures.

Action 41	Build the necessary infrastructure for wastewater treatment

Wastewater treatment rates trend to remain low (SDG6)[156].

In **Albania**, investments in wastewater treatment infrastructure are ongoing and they amount to 570 million EUR, out of which 51% is funded by international donors. Additional measures are planned as part of the 2023-2030 Water and Sewerage Service Sector Strategy. These will include improving the quality of water services (coverage, collection, disposal and infrastructure); sector's financial viability (water tariffs in line with the new regulation, increasing billing and collection of fees, balance between the budget and donors' fund for infrastructure projects); and capacities of relevant authorities and service companies. Weak cooperation amongst monitoring institutions was reported by the government, particularly between individual- and local levels, hence impeding effective responses in emergency situations[157].

In **Bosnia and Herzegovina**, the wastewater system remains outdated. Wastewater is largely treated and often discharged in river basins. Nevertheless, both entities are preparing changes to the legislation regulating the provision of water services. Respective programmes for improvement of water services were adopted at the entity level to develop a more sustainable water service sector. There are also several ongoing loans for water supply and sanitation infrastructure[158].

Kosovo* continues with the efforts and investments in wastewater treatment plants (WWTPs). The WWTPs in Gjilan/Gnjilane, Pristina, Fushe-Kosova/Kosovo Polje, Obiliq/Obilic, and Mitrovica/Kosovska Mitrovica are currently being operationalised, while the WWTPs for Podujeva/Podujevo and Ferizaj/Urosevac are in the planning phase. In addition, in the next five-year period a new plant is planned for the municipality of Gracanice/Graccanica, and feasibility studies are developed for the municipalities of Vushtrri/Vucitrn, Malishevë/Malisevo, Drenas/Glogovac, Lipjan/Lipljan, Rahovec/Orahovac, Therandë/Suva Reka, Viti/Vitina, Istog/Istok, Deçan/Decani, Klinë/Klina, and Kamenicë/Kamenica[159].

156 Sachs, J. et al. (2023), Sustainable Development Report 2023: Implementing the SDG Stimulus, SDG Transformation Center, https://sdgtransformationcenter.org/reports/sustainable-development-report-2023

157 OECD: Competitiveness and Private Sector Development Western Balkans Competitiveness Outlook 2024: Albania, www.oecd-ilibrary.org/deliver/541ec4e7-en.pdf?itemId=%2Fcontent%2Fpublication%2F541ec4e7-en&mimeType=pdf

158 OECD: Competitiveness and Private Sector Development Western Balkans Competitiveness Outlook 2024: Bosnia and Herzegovina, www.oecd-ilibrary.org/deliver/82e0432e-en.pdf?itemId=%2Fcontent%2Fpublication%2F82e0432e-en&mimeType=pdf

159 OECD: Competitiveness and Private Sector Development Western Balkans Competitiveness Outlook 2024: Kosovo*, www.oecd-ilibrary.org/deliver/ff74ae0e-en.pdf?itemId=%2Fcontent%2Fpublication%2Fff74ae0e-en&mimeType=pdf

Montenegro faces escalating pollution challenges, mainly stemming from untreated wastewater. Notable investments in wastewater treatment are planned. The water supply and sanitation regulatory framework saw improvements with the development of the new Law on Water Services expected to be adopted in 2025. It will regulate water supply services and municipal wastewater management while only partially aligning with the EU Water Framework Directive. Implementation of the 2020-2035 Municipal Wastewater Management Plan is under way with international support, marked by commissioning of two new municipal wastewater treatment plants in 2023 (Andrijevica and Petnjica[160]). Moreover, funding was secured for the construction of additional plants and sewerage networks[161].

In **North Macedonia**, there are plans for new investments in water infrastructure. Significant volumes of untreated wastewater are released into the environment. Agreements were signed for the construction of wastewater treatment plants in the cities of Skopje and Tetovo as well as sewerage networks in Kicevo and Bitola, with additional projects currently under development. While there are existing limitations in institutional capacities to enforce new measures and address underlying challenges, support provided as part of the UNECE-WHO Protocol on Water and Health, which North Macedonia ratified in 2023, can assist the water authorities. This support can include enhancing capacity building through providing advice for regulatory adoption, facilitating exchange, and offering technical assistance[162].

Serbia adopted the 2027 River Basin Management Plan in 2023. It aims to establish sustainable water management practices in the major basins, and it further aligns the legal framework with the EU Water Framework Directive. Ongoing implementation efforts prioritise safeguarding water quality by expanding wastewater treatment capacities, mitigating agricultural pollution from nutrients and pesticides, remediating contaminated sites, and implementing pollution control measures in urban areas, traffic, built infrastructure, and forestry.

Projects in Leskovac, Vranje, Nis, Brus and Blace, Kraljevo, Loznica, Sokobanja, Cacak, Belgrade, and Zlatibor are currently in various stages of preparation or construction, specifically focusing on water treatment and/or sludge treatment facilities. Ongoing projects, supported by the German Development Bank KfW, involve the construction and reconstruction of WWTPs in Smederevo, Pancevo, Kikinda, Pozarevac, Trstenik, Pirot, Jagodina, and Vrsac[163].

160 OECD (2023), OECD Environmental Performance Reviews: Costa Rica 2023, OECD Publishing, Paris, https://www.oecd-ilibrary.org/environment/oecd-environmental-performance-reviewscosta-rica-2023_ec94fd4e-en

161 OECD (2017), The Governance of Land Use in OECD Economies: Policy Analysis and Recommendations, OECD Publishing, Paris, https://doi.org/10.1787/9789264268609-en

162 UNECE (2024), The Protocol on Water and Health Driving Action on Water, Sanitation, Hygiene and Health, https://unece.org/environment-policy/publications/protocol-water-and-healthdriving- action-water-sanitationhygiene#:~:text=The%20UNECE%2DWHO%2FEurope%20Protocol,and%20controlling%20water%2Drelated%20diseases. (accessed on 22 January 2024)

163 OECD: Competitiveness and Private Sector Development Western Balkans Competitiveness Outlook 2024: Serbia, www.oecd-ilibrary.org/deliver/3699c0d5-en.pdf?itemId=%2Fcontent%2Fpublication%2F3699c0d5-en&mimeType=pdf

Action 42	Integrate soil protection in other policy areas and establish a regional soil partnership to improve knowledge exchange and identify examples of best practices for soil protection from pollution and degradation

The WB6 must dedicate more efforts to safeguarding soils from pollutants to maintain ecosystem health, agricultural productivity and human well-being. Industrial risk management and measures to safeguard soils from industrial pollutants vary across Western Balkans Six, and there are gaps in alignment with the EU legislation on risk management, environmental permitting and compliance.

Further plans are related to establishing the soil monitoring networks with the intention to identify and restore degraded soils.

While none of the WB6 fully aligns with the EU Seveso-III Directive on preventing major industrial accidents, most progressed by delineating specific obligations for industrial operators handling hazardous substances. A Pollutant Release and Transfer Register (PRTR) system, which aims to track the release and transfer of pollutants from industrial facilities into the environment, is currently operational in **Albania**, **North Macedonia** and **Serbia**, and is expected to be introduced to the other three. Most WB6 do not have a policy basis for systematic soil monitoring and cleaning, except in Serbia, which has an integral Information System on the condition and quality of soils with a register of contaminated sites. SEPA regularly collects data on soil monitoring and remediation of contaminated sites in order to identify potential health risks..

The Western Balkans Soil Partnership (WBSP) was established in December 2022 and is governed by the WBSP Steering Committee (WBSP SC)[164]. The WBSP SC supported the activities for soil protection and the process of harmonisation with the activities of the European Soil Partnership, and of other similar organisations. The partnership is created to preserve, protect, and restore the soils in the Western Balkans Six. This partnership aims to mobilise and involve all stakeholders and institutions in the region. The Standing Working Group for Regional Rural Development is coordinating all activities.

In **Albania**, a policy basis for soil protection does not exist, although some measures are planned with the support from international cooperation partners to manage the 23 contaminated sites presenting a potential risk to people, water and ecosystems.

In **Bosnia and Herzegovina**, soil pollution remains a significant environmental challenge. A general policy basis for soil protection does not exist either at the economy or entity level, while activities for the clean-up of contaminated sites are envisaged in both entities' ESAPs.

Kosovo* has taken preliminary steps to address soil pollution, which remains a significant environmental and health challenge. There is a lack of data collection on land use and soil quality, despite some progress made through an ad hoc project in 2020 by the Ministry of Agriculture, Forestry and Rural Development, which trained farmers in soil analysis. Monitoring of environmental aspects related to land use is also hindered by the lack of personnel.

164 https://www.fao.org/global-soil-partnership/regional-partnerships/europe/western-balkans-soil-partnership/en/

Land use management in **Montenegro** remains underdeveloped and limited progress was achieved to further develop relevant legal and policy frameworks. There are plans to strengthen soil management on regional level, with the establishment of the Western Balkans Six Soil Map.

Soil pollution remains a significant environmental challenge in **North Macedonia**.

The *EU4Green* project provided the following outputs: guidance document for identification of contaminated sites and key polluting activities, report on status of environmental laboratories in WB6 and report on status of soil monitoring in WB6[165]. These documents provided the frame for further activities in soil protection and an overview of the necessary activities based on regional cooperation and strengthening capacities.

Action 43	Prepare and sign regional agreements on transboundary air and water pollution

In the reporting period, WB6 did not prepare and sign the planned regional agreements on transboundary air and water pollution.

WB6 participated in the *Integrating Western Balkans Partners in the work of the EEA* project[166], whose main objective is to continue supporting the WB6 in the approximation process with a view to support "technical readiness" for EEA membership. This includes capacity building support in areas relevant to the implementation of the Green Agenda for the Western Balkans, supporting the European Environment Information and Observation Network (Eionet) modernisation as well as technical support for the reporting requirements. Thematic areas addressed within this project are zero pollution (air, water, soil), biodiversity and circular economy. The project partners are Eionet networks in **Albania**, **Bosnia and Herzegovina**, **Kosovo***, **Montenegro**, **North Macedonia**, and **Serbia**, coordinated by national focal points (NFPs) who are, when applicable, representatives of environment protection agency.

165 https://eu4green.eu/library/

166 https://www.eea.europa.eu/en/about/who-we-are/projects-and-cooperation-agreements/integrating-western-balkans-partners-in-the-work-of-the-eea

3.6 Sustainable Agriculture Roadmap

3.6.1 Progress in implementing the Roadmap across the actions and the region

Action 44	Align the agri-food and primary production sector with the EU standards on food safety, plant and animal health and welfare and environment, and address effluent, manure and waste management

In the domain of food safety rules, **Albania** continued to align with the EU *acquis* on food additives and identification of maximum levels for contaminants in food. Although raw milk testing was included in the 2023 official control plan, more progress is needed to improve milk quality.

Legislation on vineyards and wines aligning with the EU *acquis* was adopted, including implementing legislation setting rules for registration in the vineyards register and for declarations and information collection by operators. Further efforts in this area are needed. Institutional capacity for implementation is still low.

Albania adopted:

- Food Security Strategy 2023–2027, in June 2023. It covers all stages of the farm-to-table chain, including food and feed safety, animal health and welfare and plant health[167];
- 2022-2030 Action Plan for sustainable use of plant protection products. This Action Plan was prepared as part of the alignment of Albania's legislation with EU legislation[168];
- Law on Beekeeping No. 20/2023 in March 2023, which is partially aligned with the Regulation (EU) No. 1308/2013 and Directive 2001/110/EC relating to honey[169].

At the last meeting of the SWG Regional Expert Advisory Working Group (REAWG) on Market Standards for Fresh Fruits and Vegetables in 2024, the presented future plan includes drafting of the Law on Common Market Organisation (CMO) as well as by-laws concerning market intervention, marketing standards and producer organisations. It also sets out the competition rules, improvement of the market transparency and reduction of unfair trading, and strengthening of the administrative capacities for implementation of food quality schemes[170].

Bosnia and Hercegovina made limited progress in implementing last year's recommendations, with the adoption of the Law on Organisation of Wine Market, for which the related by-laws still need to be adopted[171].

167 https://www.fao.org/faolex/results/details/en/c/LEX-FAOC226470
168 https://www.fao.org/faolex/results/details/en/c/LEX-FAOC226517
169 https://www.fao.org/faolex/results/details/en/c/LEX-FAOC215961
170 https://seerural.org/news/the-third-interim-meeting-for-the-reawg-on-market-standards-for-fresh -fruits-and-vegetables/
171 https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52023SC0691&qid=1718226799295

In the area of general food safety, food safety rules and specific rules for feed, no progress was made in improving the current system to fulfil the public and animal health requirements for the export of bovine, ovine and caprine meat. Significant work is still necessary to align with the EU *acquis*, particularly as regards official checks, animal health and plant health[172].

In **Montenegro**, some progress was achieved over the reporting period, including the adoption of the second update of Montenegro's Strategy with Action Plan for transposition and implementation of the EU *acquis*. The Strategy includes a general action plan and a specific action plan for control and eradication of classical swine fever and the adoption of implementing legislation to align with the EU *acquis* in the food safety, veterinary and phytosanitary area.

In January 2023, the Law on Spirit Drinks was adopted and is aligned with the EU *acquis*. Amendments to the Law on Olive Growing and Olive Oil are pending adoption by the Parliament. The 2023 programme for improving the availability of food under the EU school scheme[173] was adopted[174]. **Montenegro** adopted the Law on Strong Alcoholic Drinks[175] in January 2023.

In **Serbia**, the adoption of implementing legislation in the areas of marketing standards, public and private storage, and producer organisations is still pending. A new Law on Wine was prepared and its adoption is expected in2025. In the area of general food safety **Serbia** presented an advanced draft of the Strategy and Action Plan for alignment with the EU *acquis*, which is yet to be adopted. Alignment of legislation on animal welfare with the EU *acquis* remains to be finalised. Furthermore, significant work is needed regarding field and intermediary collection of animal by-products. In April 2023, **Serbia** amended the Law on Waste Management to further align it with the EU *acquis*. **Serbia** also adopted the Rulebook on General and Special Conditions of Food Hygiene and Microbiological Criteria for Food (OG RS No 30/24[176]).

Serbia should take measures to improve implementation and avoid further loss of IPARD funds, ensure smooth rollover of entrusted IPARD measures for the 2021-2027 period, and prepare new measures. An adequate human resources capacity at the IPARD Agency needs to be secured. It needs to start the implementation of programme's new measure – *Agri-environment-climate and organic farming*[177].

The Plan 2024-2025 presented at the meeting of the REAWG on Market Standards for Fresh Fruits and Vegetables in 2024 includes adoption of the following documents[178]:

172 https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52023SC0691&qid=1718226799295
173 https://agriculture.ec.europa.eu/common-agricultural-policy/market-measures/school-fruit-vegetables-and-milk-scheme/school-scheme-explained_en
174 https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52023SC0694&qid=1718226875801
175 https://www.gov.me/dokumenta/28379716-925d-4abb-9436-d6c2c62625f2
176 http://www.minpolj.gov.rs/download/pravilnik-o-opstim-i-posebnim-uslovima-higijene-hrane-i-mikrobioloskim-kriterijumima-za-hranu/?script=lat
177 https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52023SC0695
178 https://seerural.org/wp-content/uploads/2024/04/6.-Achivement-in-2023-and-Work-plan-in-2024-25-Marketing-standards-for-FV.pdf

1. Rulebook on marketing standards for fresh fruit and vegetables (F&V);
2. Rulebook on the Register of F&V traders;
3. Rulebook on quality checks and control of fresh F&V with marketing standards.

Serbia has yet to adopt the advanced draft of its Strategy for the Transposition, Implementation and Enforcement of the European Union Acquis under Chapter 12 which covers food safety, veterinary and phytosanitary policy. This Strategy also includes a contingency plan for crisis management in the event of a classical swine fever outbreak in domestic pigs and wild animals..

North Macedonia made some progress during the observed period, notably with the preparation of the 2021-2027 Action Plan for the Strategy for Agriculture and Rural Development, including budgeting for support measures under the 2023-2027 Programme for Development of Agriculture. However, **North Macedonia** needs to align its support measures to the EU *acquis* and improve the administrative capacity in IPARD operating structures. Little progress was made on further aligning with the CMO. The legislative framework, including on spirit drinks remains to be fully aligned with the EU *acquis*. Additionally, administrative capacity remains insufficient[179]. **North Macedonia** adopted the Law on Wine (OG No. 74 from 2.4.2024[180]) and Law on Fishery and Aquaculture (OG, No. 64 from 19.3.2024[181]), harmonising its regulations with the latest EU legislation on wine products and creating the basis for further harmonisation through the by-laws.

Kosovo* increased its budget for direct payments and rural development, while the support measures need to be brought in line with the EU *acquis.* The Law on CMO remains to be adopted**.** The 2022-2027 agriculture and rural development programme is yet to be adopted as well. In terms of the quality policy, **Kosovo*** recorded some progress with the first registration of a geographical indication. Administrative Guide for honey quality and for other bee products was also adopted (OG 07/23 on 26.07.2023.[182]). No progress was made regarding animal health. Additionally, alignment is yet to be ensured for novel food and genetically modified organisms[183].

Action 45	Strengthen the official sanitary controls along the entire food chain and improve traceability and labelling of food products

In general, it is necessary that all WB6 continue upgrading food establishments and further strengthen their administrative capacity on food safety controls.

All WB6 should improve the traceability and monitoring of the movement of raw materials and products through all stages of production, processing and distribution. Traceability must become an integral part of food legislation in WB6. Special attention should be placed

179 https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52023SC0693&qid=1718227053082
180 https://www.mzsv.gov
181 https://www.slvesnik.com.mk/Issues/1654343CD9A0E24998781907DC19A99F.pdf
182 https://www.mbpzhr-ks.net/repository/docs/Udhezim_Administrativ__MBPZHR_NR.07.2023.pdf
183 https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52023SC0692&qid=1718226680115

on strengthening institutions, as well as establishing and improving automation and digitisation of processes in production and the supply chain.

The REAWG on Wine worked on harmonising wine regulation of WB6 with EU regulations as well as on the promotion of marketing and quality, including the promotion of organic grape and wine production.

The REAWG on Market Standards for Fresh Fruits and Vegetables held several meetings with an aim to present to the WB6 the need for technical support in the implementation of marketing standards for fresh fruit and vegetables and to provide an overview of the latest market standards for fresh fruits and vegetables in the South East Europe (SEE).

Albania achieved limited progress over the reporting period. It made progress on designing and adopting the food safety economy sectoral policy. While the Veterinary and Plant Protection Authority increased its veterinary staff, the reform of veterinary sector remains incomplete. Significant work is still needed to establish the necessary capacity on passive and active surveillance, including reliable assessments of disease prevalence. Substantial work is also required on data analysis and on the design, planning, and implementation of effective systems for disease prevention and/or eradication. **Albania** needs to upgrade the animal register. While Albania approved an action plan for the sustainable use of plant protection products, the Law on Plant Health remains to be adopted[184]. The recommendation from REAWG for Market Standards for Fresh Fruits and Vegetables is that the Law dated 11 July 2018 on Food Labelling and Consumer Information, which is in force, should be harmonised with EU regulations[185].

Bosnia and Herzegovina made no progress regarding market placement of food, feed and animal by-products. **Bosnia and Herzegovina**'s food and feed control system is not yet aligned with the EU *acquis.* Reforms are still needed to align with the EU *acquis* in the area of phytosanitary policy as well as with regards to official checks, animal health and plant health. The administrative capacity of laboratories has yet to be strengthened and official checks need to be bolstered. To ensure alignment with the EU *acquis,* the central databases and animal registers require further improvements. The database for animals and official checks is not fully reliable, and the surveillance programme for relevant notifiable diseases is very limited. Official laboratories lack the necessary capacity and are not accredited for methods to detect foot and mouth disease. Hygiene, veterinary and phytosanitary checks need to be improved, and the accreditation of laboratory methods used for these checks needs to be accelerated. **Bosnia and Herzegovina** continued to monitor pesticide residues in and on food of plant and animal origin. Bosnia and Herzegovina has not yet fulfilled the EU *acquis* requirements of setting up its laboratories as reference laboratories providing phytosanitary checks. The principles of integrated pest management have yet to be implemented in a harmonised manner[186].

In March 2023, the European Commission accepted Montenegro's self-declaration that it is free from Xylella fastidiosa[187]. In September 2023, Government of **Montenegro** adopted

184 https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52023SC0690&qid=1718226508662
185 https://seerural.org/wp-content/uploads/2024/04/2.-Fruits-and-vegetables-Albania.pdf
186 https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52023SC0691&qid=1718226799295
187 https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52023SC0694&qid=1718226875801

the second update of Montenegro's Strategy for Alignment with and Implementation of the EU *acquis* and the General Action Plan and Specific Action Plan for control and eradication of classical swine fever. The Administration for Food Safety, Veterinary and Phytosanitary Affairs (AFSVPA) implemented disease surveillance programmes. **Montenegro's** request to be included in the list for residue monitoring was approved by the European Commission in June 2023.

Montenegro adopted the 2023 programme of phytosanitary measures with the programme of control of production of seed and propagating material and prepared a draft Law on the Organisation of Markets in Fisheries and Aquaculture[188].

Serbia made some progress regarding the implementation of latest recommendations, in particular through recruitment of additional staff in the Phytosanitary Directorate and the classification of food establishments and establishments handling animal by-products. In terms of veterinary policy, annual programmes consisting of animal health protection measures were adopted in March 2023. Further alignment is required in the area of animal health to comply with the most recent EU *acquis*. Serbia needs to fill well over 150 vacant positions in the Veterinary Directorate both in the inspection and policy departments as well as increase training of Directorate staff. The capacity of the Directorate for reference laboratories requires further strengthening in terms of specialist staff and analytical scope of its laboratories, including those for milk testing. In the area of phytosanitary policy, the 2023 Annual Programme of plant health measures was adopted in February 2023. While some progress was noted in staffing of the phytosanitary inspectorate, policy departments of the Phytosanitary Directorate remain to be strengthened.

In the coming year, Serbia should: strengthen the capacities of the line directorates; prioritise the process of upgrading food establishments to align with the EU *acquis*; and adopt legislation aligned with the EU *acquis* regulating genetically modified organisms (GMO)[189].

In 2023 and 2024, **Serbia** adopted and implemented the following programmes: Programme for Monitoring the Safety of Food of Animal Origin (Official Gazette, no. 54/23) (Official Gazette, no. 33/24); Animal Feed Safety Monitoring Programme (Official Gazette, no. 52/23) (Official Gazettee, no. 26/24); Programme for Monitoring the Safety of Food of Plant and Mixed Origin (Official Gazette, no. 87/23) (Official Gazette, no. 34/24). In addition, it can be noted that traceability is an integral part of the Law on food Safety (Official gazette No 21/09 and 17/19) of Serbia, Article 32.

North Macedonia prepared amendments to the Law on Food Safety and a new Law on Official Controls, which are yet to be adopted. The new Law on Animal Health, aimed at aligning with the new EU animal health legislation, is yet to be adopted. The Food and Veterinary Agency provides regular updates on safeguard measures for imports and import requirements for live animals and animal products. The 2023 Monitoring Programme on control of residues of veterinary medicinal products and contaminants in live animals and foodstuffs of animal origin is in line with the EU *acquis* on bovine, ovine/caprine, porcine, poultry, aquaculture, milk, eggs, wild game and honey regulation. The new Law on Zoo-Technics was ad-

188 https://www.gov.me/biblioteka?sort=published_at&dt=2&page=1
189 https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52023SC0695

opted in April 2023. The capacity to align with and implement the EU *acquis* on zoo-technical issues remains to be improved.

The Phytosanitary Directorate regularly updated the list of harmful organisms in line with the new EU *acquis* and the pest status. The phytosanitary monitoring programme for plant health was implemented, and the phytosanitary information system further developed. The Law on Phyto-Pharmacy is aligned with the EU *acquis*. However, measures on the sustainable use of pesticides have not been implemented[190].

In line with its new Law on Wine, which was adopted in 2024, North Macedonia adopted the Geographical Names of Wine[191].

Kosovo* put in place the food control and traceability management system as well as the laboratory information management system for the food safety and veterinary laboratories. The financial and human resources of the Food and Veterinary Agency of Kosovo* remain insufficient to fully implement the EU *acquis*. Additionally, the Food and Veterinary Agency has still not developed or begun implementing a comprehensive disease monitoring and control system, in line with the EU legislation and World Organisation for Animal Health requirements.

Kosovo* made some progress on the phytosanitary policy. Standard operating procedures and the necessary accompanying documents required for the monitoring of 18 high priority pests, i.e. quarantine organisms, were prepared[192].

Kosovo* adopted an administrative instruction on determining the rules for the identification and registration of animals and facilities for breeding and keeping them (OG No. 1/24 of 15 April 2024[193]).

Action 46	Promote environmentally-friendly (zero pollution) and organic farming and reduction of synthetic chemical products used in food production

WB6 use fewer mineral fertilisers in total and on a per area basis compared to the EU. EU has more advanced agricultural policies and support mechanisms that promote efficient fertiliser use, while the WB6 are in the process of developing or implementing such policies.[194]

SWG RRD established the REAWG on Organic Agriculture. Main activities of the REAWG on Organic Agriculture are to maintain the platform for discussion, experience exchange and learning from each other, to facilitate discussions on regional level, promote organic production and benefits for the environment, discuss realistic aims around organic production, and recommend future steps to be taken within the group. So far, seven internal REAWG on Organic Agriculture meetings were held, with actions and implemented activities focused on further assistance in organic promotion and meeting of the Green Deal goals.

National Action Plans (NAPs) for transposition, implementation and enforcement of the EU Regulation 2018/848 with implementing and delegated regulations predict the following:

190 https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52023SC0693&qid=1718227053082
191 https://www.mbpzhr-ks.net/sr/administrativne-uredbe/?dy=2023
192 https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52023SC0692&qid=1718226680115
193 https://www.mbpzhr-ks.net/repository/docs/Udhezim_Administrativ__MBPZHR_NR.07.2023.pdf
194 Greening Agriculture in the Western Balkans, Regional Report

- Adopt the Law on Organic Production and draft and submit essential secondary regulations to the competent institutions in each of the WB6;
- Accelerate the process of adoption of the draft Law on Organic Production and secondary regulations;
- Strengthen organic market development both domestically and regionally;
- Develop a strong Organic Action Plan in collaboration with the organic sector and market actors;
- Build institutional capacity in the organic sector (e.g. control bodies, laboratories, etc.);
- Support capacity of NGOs focused on organic as catalysts for market action and partnerships, pushing the retail platforms for market growth.

While there is a great potential for the increase of organic production in WB6, substantially more subsidies are needed to achieve this growth.

Albania made some progress in the alignment with the EU *acquis* following the report from the REAWG on Organic Agriculture, such as:

- The draft Law on Organic Production was prepared, but partially approximated with reg. 848/2018/EC (except with the Annex II production rules) and should have been finalised in March 2023;
- The draft was under finalisation with the legal department in June 2023;
- Public consultation with stakeholders (importers, marketing association, exporters, control bodies, etc.) was planned for June-July 2023.

In the coming year, **Albania** should in particular complete the legal frameworks on quality policy and ensure the institutional and administrative capacity for implementation is in place.

Legislation was drafted in line with the recent reform of the EU *acquis*. **Albania** continued to provide support for organic farming[195].

There was no progress on organic farming in **Bosnia and Herzegovina**. In the coming year, **Bosnia and Herzegovina** should in particular adopt a law on organic production, which is in line with the EU *acquis*[196].

Support measures remain unevenly implemented. Policy readiness and legal framework documents are equally inconsistent. As a result, **Bosnia and Herzegovina** does not have a Law on Organic Agricultural Production nor is there a certification body. Producers of organic agricultural products certify their products as organic with certification bodies that are on the EU List and are currently acceptable to all entities.

The reports of REAWG on Organic Agriculture for **Bosnia and Herzegovina** show that it has completed some legal actions. The Law on Organic Agricultural Production is adopted on the level of the Bosnia and Herzegovina's Entity of the Federation of Bosnia and Herzegovina

195 https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52023SC0690&qid=1718226508662
196 https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52023SC0691&qid=1718226799295

(Official Gazette, no. 72/16). It is partially harmonised with the EU Regulation 2018/848. The Bosnia and Herzegovina's Entity of the Federation of Bosnia and Herzegovina also adopted the Rulebook on Organic Crop and Livestock Production (Official Gazette, no. 14/18), which is partially harmonised with the aforementioned Regulation.

Ensuring stronger application of ecological practices in production, suitable for climate change adaptation and mitigation and in accordance with the EU agricultural policy, remains a strategic goal. The Strategy plans to increase the number of farms engaged in organic production, increasing the area under organic production, and gradually increase support payments.

The REAWG on Organic Agriculture reports note that Bosnia and Herzegovina's Entity of the **Republika Srpska** made some progress in drafting legal documents. 2023-2024 Work Plan includes:

- First draft version of the Law on Organic Production prepared in March 2023;
- First draft version of the Law delivered to all the members of the REAWG in April 2023;
- Adaptation of the draft version and meeting with producers and processors was planned for July-August 2023;
- Final draft version delivered to Assembly of Republika Srpska by the end of September 2023;
- The new Law on Organic Production was planned for adoption by the end of 2023.

The plan for 2024 assumes that ten Rulebooks will be adopted by the end of 2024.

The organic farming sector in **Montenegro** needs support to fulfil its potential for further development and expansion. The MAFWM is implementing a pilot scheme to apply for entrustment of IPARD measure 4 "Agri-environment-climate and organic farming". Work is still ongoing on drafting the Law on Organic Production, which aims to further align legislation with the EU *acquis*.[197]

Based on the information from the Sixth Interim Meeting of the REAWG on Organic Agriculture held in Podgorica in October 2023, the working group for the drafting of the Law on Organic Production completed public hearings and sent the proposal to the Secretariat for Legislation. The Secretariat for Legislation gave a positive opinion on the Law at the beginning of March 2024 and its recommendations related to the EU Regulation 2017/625.

As of July 2024, the Law was still in the procedure for adoption.

Aside from these actions, Rulebook for Plant Production and Rulebook for Livestock are completed.

In addition to the above, the main activities in the organic production sector in 2024 will be on the development of the Action Plan for Organic Production, drafting of the remaining secondary legislation, organising capacity building training for stakeholders, and other.

197 https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52023SC0694&qid=1718226875801

Serbia drafted new legislation aligning with the EU *acquis* in the area of organic farming and its adoption is expected. The draft of the new Law on Organic Production, which was prepared in accordance with the Regulation (EU) 2018/848, was submitted to the Legal Secretariat in June 2023. Adoption of the Law was planned for the third quarter of 2023.

The Law has not been adopted yet, as it awaited finalisation of the Law on Official Controls. This law which regulates the establishment of a harmonised system for official controls and other activities within the agri-food chain, forms the foundation of the control system for organic production.

In addition, the implementation of the new measure in IPARD III (2021-2027) "Agri-environment-climate and organic farming" needs to start[198].

In Serbia, the total area under organic production in 2023 was 29.0002ha, there were 6.542 organic producers in 2023 (677 certificate holder with 5.865 cooperators). The Ministry has authorised nine control bodies to carry out control and certify organic production activities.

With regards to organic farming, **North Macedonia** has all legislation in place as well as its competent authority, control bodies, and accreditation and certification systems. A new law on organics further aligning with EU *acquis* remains to be adopted. Currently, the Law on Organic Agricultural Production is undergoing the governmental revision and alignment procedure. The draft Law is harmonised with the Regulation (EU) No 2020/2146 and Regulation (EU) No 910/2014. It is advisable to intensify actions to enhance the monitoring and control of organic certification and traceability of organic products. Efforts should be made to further develop the sector, making use of the support available under the IPARD III programme[199].

Kosovo* should in particular take effective measures to stop the loss of agricultural land, take action towards developing its organic farming and adopt the Law on Agricultural Land. Organic farming certification and control operations are carried out by four international organisations.

An Action Plan for protection of agricultural land which is to address the steady loss and degradation of farmland, involving the Ministry of Agriculture and Rural Development, Ministry of Environment, Spatial Planning and Infrastructure and local authorities, has not been adopted yet[200].

According to report from REAWG on Organic Agriculture **Kosovo* is planning the following activities for 2024:**

- Preparing the necessary Concept Document for the Parliamentary Procedure for Implementation of the EU Regulation No 2018/848 into the new Law on Organic Production and Labelling of Organic Products.

The 2024-2025 Plan on Organic Market Development is implementing public communication and promotion of consumer information. The 2024-2025 Plan foresees support for the preparation of promotional materials (website, awareness campaign with different stake-

198 https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52023SC0695
199 https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52023SC0693&qid=1718227053082
200 https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52023SC0692&qid=1718226680115

holders, etc.) for organic agriculture and labels, organic statistics, reporting on organic agriculture, and business-to-business (B2B) information website and newsletter with success stories.

Action 47	Cooperate with scientific, education, business and agricultural holdings to facilitate transfer to innovative and environmentally-friendly technologies and farming methods

WB6 are at different levels of implementation of the Agricultural Knowledge and Innovation Systems (AKIS). The AKIS approach should be incorporated into legislation quickly, more adequately and in a more EU aligned manner.

REAWG on the AKIS was active in facilitation of these activities. The Interim Meetings of REAWG brought the following objectives: establishment of an AKIS knowledge and innovation transfer network; development of one regional and six policy strategic plans aimed at fostering knowledge and innovation transfer in defined topic areas; development of at least five virtual education and communication measures for scaling up technical innovations and innovative business models, with a particular focus on young, dynamic farmers and agri-businesses.

The World Bank estimates that closing the 25% gap for investments in research and development with the EU, as a part of the AKIS, could increase agricultural productivity by 15% in Albania, 25% in Bosna and Herzegovina, 16% in North Macedonia, and 6% in Serbia[201].

Albania records the commencement of the implementation of Strategic Action Plan for the reform of advisory system; however the implementation capacity remains low[202]. Farm Advisory Services (FAS) in **Albania** provide services to approximately 25,000 farmers through direct contacts. Agriculture training scheme, designed for 2022-2023, trained the entire staff of agriculture extension services.

To offer assistance to individual farmers who cannot comply with the minimum criteria, there are Groups of Farmers and Agricultural Cooperation Societies (ASCs). In addition, there is also a Farmer portal https://www.agroalbania.al/ which provides real time information about prices, financial support, production, agritourism and similar.

Assessing the existing system in **Albania**, members of the REAWG on AKIS noted the following main gaps:

- Weak partnership and collaboration amongst stakeholders in the agricultural sector, academia, farmers associations, NGOs, and the private sector;
- The need for a coordination body which would reduce the fragmentation of AKIS and weak functional relationships between the AKIS players;
- Absence of an AKIS coordination body and a formalisation of relations of the AKIS components.

201 World Bank. 2018. Exploring the Potential of Agriculture in the Western Balkans. Washington, DC.
202 https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52023SC0690&qid=1718226508662

For the upcoming period, the REAWG on AKIS plans the following activities:

- Finalise the report on the guide for establishing operational group and the awareness campaign for the benefits of the measure (June 2024) (there is no information about this activity);
- Prepare a strategic document for the formalisation of AKIS in Albania (December 2024);
- Prepare inputs for the Knowledge Reservoir (May 2025).

Bosnia and Herzegovina needs to develop its farm advisory services[203]. Progress in the implementation of AKIS 2023-2024 Work Plan in **Bosnia and Herzegovina** shows the following results and remaining objectives:

- Drafted the Rulebook on support for the exchange of knowledge and innovation/ introduction of AKIS (Draft, 06/2024)
- Participate in public consultations related to the proposed AKIS law solutions (07/2024)
- Provide Knowledge Reservoir input (end of 2024)

In May 2024, the Rulebook on the terms and methods of achieving financial support for the transfer of knowledge and innovations was finalised. In the preliminary draft of the Law on Financial Support in Agriculture and Rural Development of the Bosnia and Herzegovina's Entity of the **Federation of Bosnia and Herzegovina**, which is planned for adoption till the end of 2024, AKIS was formalised by taking over the provisions from the EU Regulation 2021/2015.

There is some progress in Bosnia and Herzegovina's Entity of the **Republika Srpska**, such as: nomination of the AKIS Working Group and its official appointment by the Decision of the Minister of Agriculture of Republika Srpska dated 27 November 2023; drafting of the proposal for the improvement of procedure for supporting applied research in agriculture from the Republika Srpska budget; and drafting of the rules of procedure and work programme of the AKIS Coordination Board. Inputs were collected and preparation activities started regarding the implementation of AKIS Action Plan in the Republika Srpska in 2023. However, although the AKIS Action Plan was submitted, it was not adopted. It has the status of an informal document, a "non-paper ".

Montenegro organised FAS on two levels: 1) municipal level, with the advisory services hosted by each municipality; and 2) central-level, with the Advisory Service as a unit of MAFWM. The FAS on municipal level are very weak, without deep involvement in the implementation of agricultural policy. The Advisory Service has a clear structure and is functioning in two divisions: Advisory Service for Plant Production and Advisory Service for Animal Production. Both operate through their regional centres. There are two universities involved in the AKIS

203 COMMISSION STAFF WORKING DOCUMENT Bosnia and Herzegovina 2023 Report Accompanying the document Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions 2023 Communication on EU Enlargement policy– Bosnia and Herzegovina. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52023SC0691&qid=1718226799295

– one public (University of Montenegro, Biotechnical Faculty which covers the main fields of agricultural sciences, including veterinary medicine and forestry) and one private (University Donja Gorica).[204]

Based on the reports from the REAWG on AKIS, a little progress was achieved.

Recommendations from the European Commission (EC) Report noted that FAS have yet to be strengthened[205].

FAS in **Serbia** is well established and fully operational, covered by all respective legal acts. The legal framework for FAS functioning in Serbia is provided by the Law on Advisory and Extension Services in Agriculture (Official Gazette, No 30/10) and several by-laws. The FAS has 34 agricultural advisory and extension services (AAES) of which 31 are public and 3 are private, with a total of 298 advisors. The work of AAES is managed by the MAFWM, and the Provincial Secretariat for Agriculture, Water Management and Forestry (PSAWMF) for the territory of the Autonomous Province (AP) Vojvodina.

The connection between the advisory system and science, i.e. faculties and scientific research institutions is achieved through the implementation of the Annual Education Plan for Advisors and joint projects financed from the budget.

Serbia has good systems of advisor licencing. It has a separate Unit for Extension Service to design and monitor the implementation of annual programmes. These are designed together with the established Council for Extension, which involves all relevant stakeholders.

Serbia, with its sophisticated agricultural infrastructure, could lead in adopting cutting-edge climate-smart agricultural practices, potentially setting a regional standard by integrating advanced pest and disease management techniques, sensor and remote sensing technology, biogas technology, and land quality enhancement. These could align with the existing land potential, resources of *BioSens* Institute[206], and a vibrant private IT sector engaged in agriculture.[207]

- For the upcoming period, the REAWG on AKIS plans the following activities:
- Input to the WB AKIS Knowledge Repository – case study (February 2024)
- Participate in the Seventh Interim Meeting of the REAWG on AKIS (February 2024)
- Proposal for further development of the AKIS bottom-up structure (March 2024)
- Draft proposal for demo farm establishment (June 2024)
- Input to the WB AKIS Knowledge Repository (June 2024)
- Participate in the Eighth Interim Meeting of the REAWG on AKIS (June 2024)
- Draft proposal for a demo farm network in Serbia (July 2024)

204 ENABLING FUNCTIONAL AND INTEGRATED AKIS SYSTEMS IN THE WESTERN BALKANS, https://seerural.org/wp-content/uploads/2023/01/Enabling-functional-and-integrated-akis-systems-in-the-western-Balkans.pdf

205 Social Committee and the Committee of the Regions 2023 Communication on EU Enlargement policy– Montenegro. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52023SC0694&qid=1718226875801

206 https://biosens.rs/

207 Greening Agriculture in the Western Balkans, Regional Report

- Input to the WB Knowledge Repository – case study (November 2024)
- Participate in the Ninth Interim meeting of the REAWG on AKIS (November 2024)

North Macedonia should in particular adopt a legislative framework to further align with the EU *acquis* in areas such as farm advisory services[208]. While AKIS in **North Macedonia** is in the development phase, there has been some progress in developing a functional and efficient AKIS in the last two years. The current task is the implementation of 2023-2024 AKIS Action Plan for developing an effective and efficient AKIS.

The Law on Advisory Services was adopted in December 2023 (Official Gazette 263/2023). In line with the Law and by-laws on FAS, the Monitoring and Coordination Council for Advisory Services and the AKIS was formed in February 2024.

Piloting of life-long learning programme for advisors was prepared in December 2023.

Regarding AKIS implementation in **North Macedonia** an on-going task is implementation of the Action Plan for developing an effective, efficient and integrated AKIS. The planned implementation timeframe is 2023-2024, which is in line with the policy.

Kosovo* achieved progress in the adoption of AKIS Plan based on the inclusion of the relevant activities in the strategic documents. Thus, the 2022-2028 Strategy for Agriculture and Rural Development defines the process of digitalisation of the sector and transfer of knowledge and innovation in one of the Strategy's specific objectives, while the global target for the AKIS establishment by 2028 is 100%. In addition, the Strategic Plan of the Advisory System of Kosovo* for Agriculture and Rural Development 2023-2027 has been adopted[209].

For the upcoming period, the REAWG on AKIS plans the following activities:

- Finalise proposal on the establishment and functioning of the AKIS coordination body in Kosovo*: structure, scope and methods of work, sources of financing (December 2023)
- Conduct a study on functioning of the vineyard sector and rapid assessment regarding the identification of other potential sectors in which operational groups could be created (February 2024)
- Draft proposal on the establishment and functioning of the operational group for non-wood forest products (NWFP) and Modern Agriculture Platform MAPs (February 2024)
- Conduct mapping of lead farmers and their potential contribution to knowledge sharing within the farmer community (September 2024)
- Prepare a lead farmer guideline (September 2024)

208 COMMISSION STAFF WORKING DOCUMENT North Macedonia 2023 Report Accompanying the document Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions 2023 Communication on EU Enlargement policy– North Macedonia. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52023SC0693&qid=171822705308

209 https://www.mbpzhr-ks.net/repository/docs/Srb.pdf

Action 48	Devise actions to reduce waste in rural and coastal areas

Although the WB6 have generally fully or partially harmonised their legislation with the EU's, planning documents are not being completely implemented due to a lack of financial resources and investments in infrastructure. There is also a substantial need to:

1. Raise awareness and inform the public about this topic;
2. Transfer knowledge and experience from the EU in the application of best waste treatment techniques available;
3. Provide funds from the budget for the implementation of projects;
4. Use funds from EU structural and investment funds;
5. Provide a positive environment for attracting investments;
6. Invest in research and development; for example develop new waste treatment technologies.

Albania tracks progress through the implementation of *Modernised* Project, which focuses on climate-friendly solid waste and recycling management in Albania. It was implemented from 2020 to 2023, and commissioned by the German Federal Ministry for Economic Cooperation and Development (BMZ).

The project supported the Ministry of Tourism and Environment (MoTE) in implementing the updated Strategy for Integrated Waste Management. The improved data management system serves, among other, to release the environmental state report by the MoTE and National Environmental Agency (NEA). The report findings are based on verified data on municipal waste and potential to reduce greenhouse gases. Furthermore, the project assisted NEA to improve licensing of service providers and operators via information technology (IT) systems, strengthen inspection and regulation according to the agreed performance indicators and standard contracts, and sanctionable violations of environmental standards. At the local level, the project collaborated closely with six partner cities in **Albania** to introduce climate sensitive waste management practices.[210]

Bosnia and Herzegovina has the Environmental Approximation Strategy (EAS) of Bosnia and Herzegovina in place since 2017. Waste management is not treated in the Strategy and is left out of its scope. This implies a need for its institutions to deal with this issue in separate strategic documents or to include them in the first revision of EAS.

The 2020-2030 Climate Change Adaptation and Low Emission Development Strategy for **Bosnia and Herzegovina** recognises waste management as one of the priority sectors for low emission of greenhouse gas (GHG). There is no information on whether an action plan for the implementation of the Strategy or a report on its implementation has been adopted. The new Law on Waste Management was finalised and is pending adoption by the Parlia-

210 https://www.giz.de/en/worldwide/62845.html

ment of **Montenegro**.[211] Of note is the implementation of *BEST Cooperation in Waste Management - Towards a sustainable environment* project, funded by the EU. It started in 2023 and will last until 2025. Goals and activities include:

1. Improved knowledge of waste management amongst relevant stakeholders and alignment with EU regulations;
2. Municipalities and public utility companies equipped with new waste management infrastructure;
3. Increased awareness of the significance of waste management amongst the local population.[212]

North Macedonia adopted the Law on Waste Management in September 2021. This Law regulates the principles and objectives for waste management, and outlines strategies, plans and programmes needed for waste management. North Macedonia adopted its first Plan for Waste Prevention.[213]

Of note is the implementation of *Regional Waste Management System in Vardar and Southeast Region (Technical Assistance for Assessment of Regional Waste Management System Development)* project.

This investment project is the first undertaking in the sector and an important step towards integrated solid waste services. It supports the introduction of EU-compliant solid waste services for a population of over 1 million across 45 municipalities and develops environmentally safe disposal practices. The project started in 2022 and will last until 2026.[214]

Law on Waste Management in **Serbia** dates back to 2018 and provides rules and standards for waste classification and waste management; duties and responsibilities of the population and the public and private sectors; planning of waste disposal; licences and permits; financial support; surveillance; and breaches and penalties.

Local self-government units have a responsibility in the area of communal activities and are responsible for the strategic evaluation of plans and programmes, assessment of the project impact on the environment, and issuance of integrated permits within their jurisdiction. Municipal waste management is within the jurisdiction of local self-government.

As part of the EU accession negotiations, **Serbia** began the process of establishing a waste management system and adapting it to the EU goals and the *acquis*. Serbia adopted the 2022-2031 Waste Management Programme with the following specific objectives:

211 COMMISSION STAFF WORKING DOCUMENT Montenegro 2023 Report Accompanying the document Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions 2023 Communication on EU Enlargement policy– Montenegro

212 https://naled.rs/en/projekti-best-saradnja-u-upravljanju-otpadom-do-odrzive-zivotne-sredine-8173

213 COMMISSION STAFF WORKING DOCUMENT North Macedonia 2023 Report Accompanying the document Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions 2023 Communication on EU Enlargement policy– North Macedonia. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52023SC0693&qid=1718227053082

214 https://www.wbif.eu/technicalassistancegrants//WB27-MKD-ENV-01

1. Improved municipal waste management system through: increased recycling rate, reduced disposal of biodegradable waste in landfills, and reduced disposal of waste in unsanitary landfills;
2. Established system of sustainable management of hazardous and industrial waste;
3. Increased rate of collection, reuse and recycling of specific waste streams, and more efficient use of resources;
4. Strengthened capacity of institutions in the field of waste management and regulation harmonised with the EU regulations.

It is needed to further harmonise regulations, adopt amendments and additions to the Law on Waste Management and the Law on Packaging and Packaging Waste, and relevant by-laws.

The primary law that regulates the waste management sector in **Kosovo*** is Law no. 04/L-060 on Waste (Law on Waste). After adoption of the Law on Waste, municipalities assumed additional responsibilities related to waste management, including additional commitments related to the collection of waste collection fees as well as regarding the choice of operator models in accordance with the law.

The recently finalised project worth 7 million EUR was jointly funded by the EU and the German Federal Ministry for Economic Cooperation and Development, while it was implemented by the German Agency for International Cooperation (GIZ). It led to an increase in the collection of solid waste in all 38 **Kosovo*** municipalities from 57.8% to 90.2%, an extension of waste-collection and management service to additional 77,000 households, and the closure of more than 1,500 illegal dumpsites.

With new projects, worth 49 million EUR, the EU and Germany will help **Kosovo*** improve its infrastructure to meet EU standards and align its legal framework for regulating waste management with the EU *acquis*. It will also support the implementation of the new Law on Waste and **Kosovo*** Integrated Waste Management Strategy.[215]

Action 49	Step up efforts for sustainable development of rural areas with implementation of LEADER

Progress of LEADER approach[216] implementation

There is a lot of different issues that hinder or slow down the implementation of actions defined in the LEADER Roadmap. From the legal and institutional framework standing, there is a limited awareness amongst policymakers and government officials about the importance of LEADER approach. There are capacity constraints on the part of governments, usually lacking the necessary institutional set-up and capacity to develop and apply necessary regulations. In some cases, there is a lack of coordination between central and local governments which hinders the support for LEADER approach at the local level.

215 https://www.eeas.europa.eu/delegations/kosovo/eu-and-germany-help-improve-waste-management-kosovo-invest-additional-eur-49-million-sector_en?s=321

216 https://ec.europa.eu/enrd/leader-clld/leader-toolkit/leaderclld-explained_en.html

Although the LEADER measure is laid out in IPARD III programme of **Albania, North Macedonia**, **Montenegro** and **Serbia**, the process of accreditation of this measure is still too slow. Centralised decision-making and limited autonomy at the local level impede the flexibility and adaptability of LEADER initiatives.

Serbia has a support scheme that helped establish and promote local partnerships formed on the LEADER-like principles, allowing them better readiness for the upcoming IPARD measures support.

Currently, there are limited skills in networking strategies, communication, and facilitation. Without adequate capacities, organisations struggle to initiate, sustain, and expand their networks.

Existing rural development networks, without proper financial support, are faced with difficulties in establishing and maintaining connections with local stakeholders. This affects organisation of events, facilitating meetings, maintaining communication channels, and providing support to network members. Beyond financial resources, rural networking efforts are suffering from limited access to other critical resources, such as information, technology, and infrastructure.

Insufficient funding hinders the formation and sustainability of local action group (LAG) initiatives.

In the WB6, government support for LAGs and LAG initiatives is limited due to competing priorities, bureaucratic barriers, and resource constraints. The absence of a robust civil society infrastructure in some WB6 may also impede the emergence of LAG initiatives.

Political instability and socio-economic disparities prevalent in the WB6 can create additional challenges for community-based initiatives like LAGs. These factors may undermine trust, cooperation, and collective action amongst local stakeholders, making it difficult to establish and sustain LAG initiatives effectively.

In April 2022, **Albania** adopted the Law 36/2022 on the Organisation and Operation of Local Action Groups. This Law aims to determine the prerequisites for the creation and operation of LAGs. This Law defines the basic principles, criteria, responsibilities and processes for the organisation and operation of LAGs, and design and implementation of development strategies led by the community, in harmony with agricultural and rural development policies, at the level of central and local administration.[217]

In June 2022, the European Commission approved **Montenegro**'s IPARD III. After adoption by the government, Montenegro's Parliament confirmed the programme in December 2022 by adopting the Law on Management and Implementation of IPARD III. The instrument's implementation can be launched once the full regulatory framework is in place[218]. IPARD III Programme includes the support measure for the LEADER approach. It remains to be seen if and when **Montenegro** will start the implementation of this measure.

217 https://www.fao.org/faolex/results/details/en/c/LEX-FAOC215184

218 Social Committee and the Committee of the Regions 2023 Communication on EU Enlargement policy– Montenegro https://eur-lex.europa.eu/legal-content/ENTXT/?uri=CELEX%3A52023SC0694&qid=1718226875801

Serbia's IPARD III programme was prepared in an efficient and timely manner and approved by the European Commission in March 2022. Implementation of the local rural development strategies (LEADER) under the programme needs to start[219].

Overall, the capacity and staff retention of the IPARD authorities in **North Macedonia** need to be improved.

Action 50	Support investments in renewable energy production and technologies as well as GHG emission reductions and adaptation to climate change measures in agriculture

The WB6 made some progress in integrating climate change considerations into their agricultural policies and plans. All WB6 are either in the process of adoption or they adopted the strategies for agriculture and rural development, as long-term documents defining the future development of the sector, covering periods 2021-2027 (**Albania**, **North Macedonia**, **Bosnia and Herzegovina**), 2022-2028 (**Kosovo***, **Montenegro**), and 2014-2024 (**Serbia**).

WB6 agriculture sector has a relatively low carbon footprint due to low intensity of crop and livestock production, low use of fertilisers and chemicals, and a high share of pastures and organic farming. In 2020, agriculture in the WB6 made up 0.2% of the global agricultural methane and nitrous oxide production. The total agricultural GHG production in the WB6 was 39 times smaller than its production in the EU.

Several factors hinder the adoption of climate smart agriculture (CSAs) and agri-environmental measures (AEMs) in the WB6. These are, for example, structural constraints, policy gaps, institutional weaknesses, budgetary misallocation, absence of extension and advisory services, and low awareness and incentives amongst farmers. The highest percent of agriculture sector emissions in WB6 was a consequence of livestock production activities, mainly enteric fermentation, manure management, and manure left on pastures.

While the current environmental impact of the WB6 agriculture sector is low, this is more due to the low level of advanced technology inputs and low agricultural intensity than it is generated by deliberate policy decisions.

On average, WB6 use of fertilisers and chemicals (pesticides, insecticides, herbicides, etc.) per hectare is smaller, as is their emission of GHG per capita, when compared to that of the EU. In some, the share of high diversity landscapes, especially in Bosnia and Herzegovina, exceeds that of the EU.

Thus, the WB6 are in a good position to meet many GAWB targets, in case they are required to do so as part of EU accession.

219 COMMISSION STAFF WORKING DOCUMENT Serbia 2023 Report Accompanying the document Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions 2023 Communication on EU Enlargement policy- Serbia https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52023SC0695

Table 3.6.1 Agriculture GHG Emissions Per Capita in the WB6 vs. the EU27 ($CO_{2\,eq}$ t/pc)

	Albania	Bosnia and Herzegovina	Montenegro	North Macedonia	Serbia	Average
Agrifood systems	1.6	1.8	1.7	1.5	2.9	**1.9**
Emissions on agricultural land	1.1	0.9	0.7	0.6	1.9	**1.04**
Agriculture, Forestry, and Other Land Use (AFOLU)	0.9	0.3	0.7	0.6	0.9	**0.68**
Σ	3.6	3	3.1	2.7	3.6	**3.62**

Source: Greening Agriculture in the Western Balkans, Regional Report

The most important source of green investment funding is the IPARD funds. There is a big difference in the share of public support to implement Measure 4 in overall IPARD measures. It varies from 1% in **North Macedonia**, 2% in **Albania**, 5% in **Serbia**, to 8% in **Montenegro**.

Table 3.6.2. Review of IPARD Measures in WB6

No	IPARD II entrusted measures / IPARD III new programmed measures	Albania	Montenegro	North Macedonia	Serbia
M1	Investments in physical assets of agricultural holdings				
M3	Investments in physical assets concerning processing and marketing of agricultural and fishery products				
M4	Agri-environment-climate and organic farming measure				
M5	Implementation of local development strategies – LEADER approach				
M6	Investments in rural public infrastructure				
M7	Farm diversification and business development				
M9	Technical assistance				
M10	Advisory services				
M11	Establishment and protection of forests				
Indicative IPARD III allocation (mil EUR)		**112**	**63**	**97**	**288**

Source: IPARD

Instead of supporting the compliance, safety and accountability measures, most public expenditures in agriculture in the WB6 are used for direct farm payments, a large share of which is coupled with the production of specific crop and livestock products. In **Bosnia and Herzegovina**, **Kosovo***, **North Macedonia**, and **Serbia**, the share of direct farm payments

in total agricultural budgets reaches 70–80%, most of which is coupled with livestock production or the use of fertilisers and chemicals[220].

These measures are not subject to minimum cross-compliance requirements (i.e. good agricultural and environmental practices), while they generate significant GHG emissions and bring other environmental damage, in addition to reducing overall agricultural productivity and creating other market distortions[221].

Albania is making strides in building an infrastructure and enabling environment that supports agri-environmental compliance. **Albania** achieved some progress regarding (i) increased administrative capacity to prepare the IPARD III programme; (ii) adoption of the Law on Wine; and (iii) adopting an implementation plan for the set-up of FADN[222]/FSDN[223]. The initiation of agri-environmental measures and systems such as land parcel identification system (LPIS) and integrated administration and control system (IACS) mark the early stages of a complex reform process.

Albania can strengthen its agriculture sector against climate change by developing water management infrastructure that supports vital irrigation and drainage systems, integrating these with existing solar energy initiatives, and furthering rural livelihood diversification effort. A system of "simplified" food safety rules was introduced as part of flexibility measures that are customised for small scale producers and family businesses as opposed to the hygiene measures designed for larger mainstream agrifood companies. By this measure, the diversity of high-quality food products, cultural heritage and livelihoods can be preserved, while food safety and hygiene standards can also be met by smallholders.[224]

Bosnia and Herzegovina's journey towards greening agriculture is characterised by significant systematic challenges. The absence of a paying agency and LPIS presents notable hurdle on the path to modernising agricultural practices and aligning with EU standards. The complex organisational structure comprising two often-conflicting entities is a significant challenge, as it impedes sector development and EU integration efforts. This complexity is mirrored in the agricultural sector and is also one of the reasons preparatory structures needed for utilisation of IPARD funds are still not in place.

Bosnia and Herzegovina's agricultural budget is modest, heavy on coupled direct payment. It lacks dedicated budget for agri-environmental measures. Direct payments still need to be aligned with the EU *acquis*. While the high percentage of coupled direct payments is still present in the incentive support programme, the government has plans to gradually transition the policy to decoupled payments and investment support. The transition is slow and takes time. However, a positive note is the competitive credit market development in **Bosnia and Herzegovina** led by major international commercial banks.

220 EU. 2021. Recent Agricultural Policy Developments in the Context of the EU Approximation Process in the Pre-Accession Economies. Joint Research Centre Technical Report

221 World Bank. 2018. Exploring the Potential of Agriculture in the Western Balkans. Washington, DC

222 Farm Accountancy Data Network, https://agriculture.ec.europa.eu/data-and-analysis/farm-structures-and-economics/fadn_en

223 Farm Sustainability Data Network, successor of FADN: https://www.europarl.europa.eu/legislative-train/theme-a-european-green-deal/file-farm-sustainability-data-network

224 Greening Agriculture in the Western Balkans, A Regional Report

Kosovo* is noticeably lagging in agricultural institutional development compared to other WB6. The institutions have not faced the challenge of implementing complex support programmes independently, as the support policy is predominantly driven by donors. Thus, it is difficult to expect that **Kosovo*** will be able to implement complex AEMs. Development of PA, IACS, FADN/FSDN and LPIS is still not a high priority for the government.

The land market in **Kosovo***, coupled with limited options for collateralising agricultural land and a lack of competition on the supply side, has inhibited development of a strong credit market. Financing mechanisms within **Kosovo*** require fortification to escalate agri-environmental measures adequately. While initiatives are in place to involve the private sector in delivering farm advisory services, the importance of public investment and international aid in catalysing the adoption of sustainable methods is evident.[225]

Montenegro made significant progress in agriculture development with the Strategy for Agriculture and Rural Development for 2023–2028 adopted, the PA and LPIS improved, and systems fully ready for IPARD payment.

Montenegro's approach to institutional development and support for farmers, shaped by the World Bank's MIDAS project, was recognised as exemplary and serves as a model of good practice. The project currently implements a pilot scheme to apply for entrustment of IPARD measure 4 "Agri-environment-climate and organic farming". A Geospatial Aid Application (GSAA) system uses data from LPIS, farm registry and veterinary services for application, payments and spot control of the scheme. These developments show **Montenegro**'s commitment to improving agricultural management practices and environmental stewardship.

Montenegro stands out as the only WB6 with a wide range of environmental measures supported by the largest share of its spending at 2.2% of the total agricultural budget and at 8% of the total planned public funding for IPARD III. One such measure is "sustainable use of mountain pastures," which provides support to agricultural holdings that keep livestock on seasonal mountain pastures for at least three months in a calendar year. Another measure is the support for livestock waste management.

Montenegro could further pursue the sustainable use of natural capitals (forests, land, blue economy) that were traditionally utilised for extensive livestock farming for mountain pasture management.

North Macedonia possesses a full-bodied LPIS which was launched in 2002 with a focus on advanced land parcel identification and area monitoring functions. The economy has the foundational tools necessary to expand AEMs and potentially become the first in the region to implement cross-compliance measures.

Acknowledging the necessity for a transition to more sustainable practices, the Government of **North Macedonia** is committed to investing in both human capacity and financial resources needed to implement IPARD accredited measures. AEMs are in place; however, with modest funds. Efforts to improve access to commercial credit for sustainable farming are underway, channelling funds into green investments and fostering eco-friendly agricultural advancements. This commitment is presented in the strategy to promote private delivery of

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farm advisory services, ensuring that farmers receive the support needed to adopt environmentally sustainable practices.

Serbia's IPARD III plan aims to accredit Measure 4: Agri-environmental measures. The accreditation will require intensive monitoring through satellites and on-site inspections. However, the development of LPIS and IACS has been slow, which delays the implementation of AEMs. **Serbia** should accelerate the establishment of IACS to effectively manage its significantly increased budget and the transition from manual to electronic processing of aid applications. This step is also essential to introducing cross compliance as a policy tool and bringing the sector's support measures in line with the EU *acquis*[226].

Serbia can utilise its extensive agriculture budget more efficiently and orient it towards climate adaptation and mitigation within its climate resilient agricultural policy. **Serbia** has a high level of coupled livestock payments which are not tied to environmental conditions.

Serbia stands out in the WB6 for its developed agricultural credit market with the banking sector advocating for green loans, which serves as a robust foundation for its green transition in agriculture and rural development.

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3.7. Protection of Nature and Biodiversity Roadmap

The Western Balkans Six is currently working on the preparation of Western Balkans Biodiversity Report. All WB6 have previously developed biodiversity strategies and established targets for nature protection. However, most of these strategies have since expired. Substantial work remains for WB6 to update and align their policies, strategies, programmes, and plans with regional and global frameworks. In the context of the Convention on Biological Diversity (UNCBD) and its Global Biodiversity Framework (GBF) to which the EU Biodiversity Strategy under the Green Deal is aligned. Most of the WB6 still need to submit updated National Biodiversity Strategies and Action Plans (NBSAPs), as required forParties to the UNCBD.

Table 3.7.1 Summary of the status of the policy documents on biodiversity conservation and restoration in WB6

	Albania	Bosnia and Herzegovina	Kosovo*	Montenegro	North Macedonia	Serbia
Biodiversity assessment	2017[227]	2017[228]	2018[229]	2017[230]	✗	2017[231]
Biodiversity Strategy/ Plan	2012-2020[232]	2015-2020[233]	2011-2020[234]	2016-2020[235]	2017-2027 2018-2023[236]	2021-2023[237]
Restoration Strategy/ Plan	✗	✗	✗	✗	✗	✗
Forestry Strategy/ Plan	2018-2030[238]	2014 2011-2021[239]	2022-2030[240]	2014-2023[241]	2006[242]	2006[243]
Protected Areas (PAs) Strategy/Plan	2019-2023[244]	✗	✗	✗	✗	✗

227 ORFBDU_Albania-Assessment_ENG.pdf (giz.de)
228 ORFBDU_Assessment_BiH.pdf (giz.de)
229 https://pdf.usaid.gov/pdf_docs/PA00WCZP.pdf
230 Montenegro-Assessment_ENG.pdf (balkangreenenergynews.com)
231 https://www.giz.de/en/downloads_els/BIMR_Assessment_ENG_Serbia.pdf
232 CBD Strategy and Action Plan - Albania (English version)
233 CBD Strategy and Action Plan - Bosnia and Herzegovina (English version)
234 Kosovo Strategy and Action Plan for Biodiversity 2011-2020 – Kosovo Environmental Programme
235 CBD Strategy and Action Plan - Montenegro (English version)
236 CBD Strategy and Action Plan - Republic of Macedonia (English version), mac202006.pdf (fao.org)
237 https://faolex.fao.org/docs/pdf/srb204624.pdf
238 alb204065.pdf (fao.org)
239 bih165094.pdf (fao.org), bih165093.pdf (fao.org)
240 Policy-strategy-on-forestry-dev-in-Kosovo-2022-2030.pdf (rks-gov.net)
241 strategija-sa-planom-razvoja-suma-i-sumarstva-2014-2023.pdf (javnepolitike.me)
242 https://faolex.fao.org/docs/pdf/mac149607.pdf
243 https://faolex.fao.org/docs/pdf/ser148208.pdf
244 https://www.undp.org/sites/g/files/zskgke326/files/2022-10/Albania%20PAs_Strategic%20plan_2019-2023.pdf

Climate change Strategy/Plan	2020-2030[245]	2014-2025[246]	2019-2028[247]	2015-2030[248]	2021-2050[249]	Climate Change Adaptation Programme for the period from 2023 to 2030
Sustainable development Strategy/Plan	2015-2020[250]	2021-2030[251]	2022-2030[252]	2016-2030[253]	2009-2030[254]	2008-2018[255]
Water Management Strategy/Plan	2018-2027[256]	2010-2022[257]	2017-2036[258]	2018-2035[259]	2012-2042[260]	2017-2034[261]
Red Lists	✓	✓	✓	✓	✓	✓

Legend	YES	Needs to be updated	NO

Source: IUCN ECARO

Restoration planning remains absent, as it has not been systematically integrated into nature conservation strategies and legislation. WB6 is also exploring the use of NbS to enhance both ecosystem and community resilience. Under the guidance of the IUCN as its Secretariat, the BDTF is making progress, particularly in developing strategic approaches and initiatives that link the Biodiversity and Nature Protection pillar with the UNCBD guiding framework GBF as well as in project development and implementation.

245 EN_Report_Monitoring of National Action Plan (1).pdf (wfd.org)
246 Strategija prilagođavanja na klimatske promjene i niskoemisionog razvoja za Bosnu i Hercegovinu
247 ClimateChangeStrategyandActionPlan2019-2028 – KosovoEnvironmentalProgramme
248 1_127_17_09_2015.pdf(javnepolitike.me)
249 UNDP 9th Brochure ENG WEB (unfccc.int)
250 StrategjiaSKZHImendryshimesipasporosisesembledhjesseKM (ips.gov.al)
251 The SDGs Framework in Bosnia and Herzegovina | United Nations Development Programme (undp.org)
252 National Development Strategy 2030 (rks-gov.net)
253 mne180387.pdf (fao.org)
254 MicrosoftWord- NSSD_MK_del1 26јуни2009.doc (vlada.mk)
255 Nacionalnastrategijaodrživograzvoja: 57/2008-6 (pravno-informacioni-sistem.rs)
256 https://faolex.fao.org/docs/pdf/alb181221.pdf
257 bih204311.pdf (fao.org)
258 Water Strategy 2017-2036 – Kosovo Environmental Programme
259 STRATEGIJAUPRAVLJANJAVODAMACRNEGORE
260 https://faolex.fao.org/docs/pdf/mac201976.pdf
261 Zakon (fao.org)

3.7.1 Progress in implementing the Roadmap across the actions and the region

Action 51	Develop and implement a Western Balkans 2030 Biodiversity Strategic Plan

According to the GAWB "the main priorities for the Western Balkans Six are to halt biodiversity loss, to integrate the EU Biodiversity Strategy targets for 30% of protected areas and 10% of strictly protected areas, to address conservation of biodiversity and ecosystem services and restoration of ecosystems, transpose and ensure enforcement of Birds and Habitats Directives".

As WB6 aim to join the EU, it is vital to align regional nature conservation efforts. The Western Balkans Biodiversity Strategic Plan (WBBSP) should align with and actively contribute to the development of Western Balkans Forest Landscape Restoration Plan (FLRP). This alignment will enable the WBBSP to effectively support and integrate with EU nature protection policies. As a crucial step in preparing the WBBSP, the Biodiversity Task Force (BDTF) with IUCN ECARO serving as its secretariat, recognized the importance of developing the Analytical Framework and Roadmap. This effort resulted in the creation of a guiding document, developed by RCC, titled the "Analytical Paper for the Development of the Western Balkans 2030 Biodiversity Strategy Plan". The document systematically compiled and analysed existing indicators used for reporting under the CBD and EU legal requirements, identified gaps and the need for additional data collection essential to crafting a comprehensive WBBSP, and highlighted key regional biodiversity protection initiatives of significant importance.

Action 51a	Develop a Western Balkans Biodiversity Report

Across the region, there are nature conservation programmes, as well as biodiversity strategies and action plans that detail the status of biodiversity and identify major threats to and causes of biodiversity loss. This provided an overview of the state of biodiversity based on the established indicators of the CBD. Given the use of the same or similar methodologies, these reports are appropriate for compilation at the regional level, but update is needed. The 6th National Reports were submitted to the CBD by 2020 by signatory parties from WB6, including Albania, Bosnia and Herzegovina, Montenegro, North Macedonia, and Serbia. These reports are not aligned with the Kunming-Montreal GBF as it was adopted after their submission. Signatory parties are required to submit their seventh national report to the CBD by February 28, 2026. This report will focus on the implementation of the newly adopted Kunming-Montreal GBF, forming part of the regular reporting cycle under the CBD to assess progress toward global biodiversity targets.

A unified Western Balkans Biodiversity Report does not exist, but the individual government biodiversity strategies provide ample information on the status of biodiversity in the WB6. The main focus was on biodiversity baseline studies and assessments, with different data quality levels, which depended on the type of research conducted and may require more

systematic and comprehensive data collection for an effective utilisation in the WB Biodiversity Strategic Plan.

The Kunming-Montreal GBF, EU Biodiversity Strategy for 2030, and Green Agenda for the Western Balkans, along with its Action Plan, offer strong frameworks and guidance for conservation planning in the Western Balkans Six. Representative coordination and technical bodies, such as the Regional Working Group on GAWB and the Biodiversity Task Force, ensure effective governance, coordination, and oversight at the regional level. Together, these elements provide a robust foundation for developing a unified Western Balkans Biodiversity Strategic Plan. The absence of such a plan could further exacerbate the existing challenges in conservation planning.

Action 51b	Develop a Western Balkans Biodiversity Strategic Plan

Creating an effective regional biodiversity strategy for the Western Balkans Six will crucially depend on a cohesive approach that integrates the EU Green Deal, 2030 Biodiversity Strategy, Kunming-Montreal GBF, and other relevant Multilateral Environmental Agreements (MEAs), as well as the Action Plan for implementing the Sofia Declaration on the GAWB and other strategic nature protection documents at the individual-level.

Development of the next phase of WB Biodiversity Report for the next reporting period should ensure development of the Western Balkans Biodiversity Strategic Plan in 2024, although there are concerns regarding these deadlines.

As already pointed out in the previous report, revision process and overall analyses need to be conducted to assess targets, actions and overall strategy to align with the main strategy directions defined in many of regional, EU and global documents and plans.

One of the primary mechanisms for implementing the Kunming-Montreal GBF remains the National Biodiversity Strategies and Action Plans (NBSAPs). The CBD signatories, all WB6 apart from Kosovo*, are required to revise their NBSAPs to detail their contributions to each of the GBF targets by 2030.

By adopting integrated and nature-positive approaches, the Western Balkans Six can significantly enhance the green infrastructure, ecological connectivity, and forest coverage. This will contribute to both climate resilience and biodiversity conservation, creating a more sustainable and resilient region.

The main underlying principles of WBBSP will be: 1) The relevance – the future WBBSP is tailored to the needs and priorities of biodiversity, nature protection and climate change adaptation in the Western Balkans Six, 2) The coherence - the WBBSP is coherent with sectoral plans and strategies and institutional priorities in WB6, 3) The alignment – the future WBBSP implementation is aligned with and contributes to Action Plan for the Implementation of the Sofia Declaration on the GAWB, Regional Joint Statement on Prevention of Plastic Pollution, including Marine Litter, European Union Green Deal and Biodiversity Strategy and Kunming-Montreal GBF targets, 4) The efficiency – the resources / inputs (funds, time etc.) are used efficiently relative to the outputs, and 5) The impact - positive changes related to biodiversity conservation in the region as a result of WBBSP implementation.

Action 52	Prepare nature protection and restoration plans including for marine areas

Nature protection targets and strategies in all WB6 are set with the main focus on protection rather than restoration. Additionally, protection of marine areas was put in place and became a joint strategic orientation together with nature protection.

As a result of joint activities and multi-sectoral initiatives, protected natural assets increased significantly, although sustainable financing remains a problem.

Restoration efforts were not yet recognised as mandatory nor were they regulated by law in the WB6, resulting in absence of comprehensive information and system-wide landscape restoration plans. Landscape restoration differs from afforestation plans, which are mandatory, managed by responsible forest authorities, and exist across the region.

Protected and conserved areas continue to be essential for long-term conservation success. The EU Biodiversity Strategy and the Kunming-Montreal GBF both establish clear targets at 30% for terrestrial and marine conservation, with the EU specifying an additional 10% for strictly protected areas. There are still no political commitments from the WB6 to the targets, agreed upon at both global and EU levels.

Coastal and marine habitats in **Albania**, **Bosnia and Herzegovina** and **Montenegro** are under intense pressure from effluents and solid waste originating from urban and tourist areas. Strengthening strategies and programmes aimed at safeguarding these habitats in the WB6 remains crucial as these areas face escalating pressures.

Action 53	Develop and implement a Western Balkans Forest Landscape Restoration Plan

In their aspirations to join the EU, WB6 must align their legislation and policies with EU standards, including those related to biodiversity. The nature and biodiversity pillar of the Green Agenda highlights the importance and societal relevance of freshwater ecosystems and forest landscapes, as emphasized in the Action Plan for the Implementation of the Sofia Declaration and the GAWB 2021-2030. This plan notes that the region's landscapes have significant potential to provide ecosystem services, particularly the forests in mountainous areas, natural ecosystems around large lakes, and extensive natural river systems. The WBBSP and the FLRP will emphasise and clearly outline the planning for restoration of forests, rivers, and wetlands.

Protection of Nature and Biodiversity pillar of the Action Plan for the Implementation of the Sofia Declaration on the Green Agenda for the Western Balkans 2021-2030 will be implemented through agreed actions, where the GAWB Action Plan also provides guidance on governance, monitoring, reporting and other mechanisms to support the implementation of Western Balkans FLRP.

Action 53a	Prepare Restoration Opportunities Assessment Report

So far, there has been no shared Restoration Opportunities Assessment Report (ROAR) and domestic restoration plans are lacking. Information on restoration opportunities is sparse and insufficient, scattered across various projects implemented in the region. The SWG RDD[262] Regional Expert Advisory Working Group on Sustainable Forest Management prepared assessments on the state of sustainable forest management in WB6. These assessments include recommendations for improving institutional, policy, and legal frameworks to align with EU policies. Draft regional synthesis reports and recommendations have been developed[263], but an Action Plan has yet to be prepared.

To provide the building blocks and support the preparation and implementation of the ROAR, IUCN ECARO plans to focus on GAWB actions 53a and 53b during 2025 and 2026 as part of the project "ADAPT 2.0: Nature-based Solutions for Climate Change Mitigation and Adaptation in the Western Balkans" (ADAPT 2.0). This work will be carried out in close cooperation with the RCC, BDTF, and Regional Coordination Group, and through a consultation process involving relevant stakeholders from the region. The Restoration Opportunities Assessment Report will assess the extent of forest landscape degradation across various geographical areas and habitats. It will identify the most vulnerable habitats and species, the specific threats they face, and critical actions needed for their protection, sustainable management, and restoration. The report will also address cross-cutting priorities such as biodiversity enhancement, carbon storage, climate adaptation, and connectivity, aiming to identify opportunities that can help meet multiple sectoral targets simultaneously. To ensure the highest level of scientific rigor and expertise, IUCN will guide this work using established standards and methodologies, including the IUCN Global Standard for Nature-based Solutions[264]™, the ROAM methodology[265], and the IUCN Red List of Ecosystems Categories and Criteria[266], which serves as the global benchmark for assessing the conservation status of ecosystems.

Regional approach projects implemented in all WB6 to be considered include:

- ADAPT: Nature-based Solutions in the Western Balkans | IUCN : 2019-2024, the regional initiative implemented by IUCN ECARO included ROAM assessments for two local NbS pilot projects in Serbia and Albania, supported by Sida
- Forest Restoration in North Macedonia and Albania | IUCN : 2023-2025, project led by IUCN ECARO, supported by Swedish Postcode Lottery Foundation's Northern Forests Initiative
- *EU4 Green Recovery*: Support the implementation of GAWB, duration: 2022-2025, with support of EU and Austrian Development Agency (ADA);

262 https://seerural.org/about-us/
263 https://seerural.org/news/sustainable-forest-management
264 https://iucn.org/our-work/topic/iucn-global-standard-nature-based-solutions
265 https://iucn.org/resources/grey-literature/guide-restoration-opportunities-assessment-methodology-roam
266 https://iucnrle.org/rle-categ-and-criteria

- *Technical Support for the Global Biodiversity Framework Early Action Support (EAS)*, duration: 2022-2026, implemented by UNDP with support of the Global Environment Facility (GEF);
- *Large Carnivore Initiative for Europe (LCIE),* implemented since 2010 by the Species Survival Commission (SSC) of the IUCN and Group Specialist within the Species Survival Commission (SSC) of the IUCN;
- *The Dinaric-Balkan-Pindos Large Carnivore Initiative (DPP LCI)*, duration: 2022-2024, with the support of the German Federal Environment Ministry's Advisory Assistance Programme (AAP);
- *Balkan Lynx Recovery Programme (BLRP)*, implemented since 2006, with the support of MAVA and Euronatur foundations;
- *Integrated Forest Management along the Drin River Basin*, duration: 2022-2026, implemented by the Association for Global Development (ICEP) and Connecting Natural Values and People Foundation (CNVP); funded by ADA.

Projects implemented in Albania for consideration:

- *EUSIWM (II) Support to Integrated Water Management*, duration until 2026; funded by EU/ADA;
- *Clean and Resilient Environment for Blue Sea Project*, duration: in the pipeline, implemented by the Ministry of Tourism and Environment, Agency for Water Supply, Sanitation and Waste; funded by the World Bank.

Projects implemented in Bosnia and Herzegovina for consideration:

- *Scaling up Climate Resilient Flood Risk Management in Bosnia and Herzegovina*, duration: in the pipeline, implemented by UNDP; funded by GEF;
- *Sustainability of Protected Areas (SPA) project*, duration: 2022-2027, implemented by UNDP; funded by GEF.

Projects implemented in Kosovo* for consideration:

- *Sustainable Use of Natural Resources for Environment and Economic Development (SUNREED)*, duration: 2022-2026, implementation by Connecting Natural Values and People (CNVP) Kosovo*, funded by Embassy of Sweden in Kosovo* and SIDA.

Projects implemented in Montenegro for consideration:

- *Biodiversity Mainstreaming into Sectoral Policies and Practices and Strengthened Protection of Biodiversity Hot-Spots in Montenegro*, duration: 2022-2026, implemented by UNDP, funded by GEF.

Projects implemented in North Macedonia for consideration:

- *Improving Capacities for Natura 2000 and CITES*, duration: 2022-2024, implemented by NIRAS IC Sp.z.o.o. in consortium with the Polish Society for Protection of Birds, EFTAS Fernerkundung Technologietransfer GmBA, FARMAHEM Dooel Skopje, Macedonian Ecological Society (MES) and Stichting BirdLife Europe; funded through IPA 2014-2020 Programme;

- *The Nature Conservation Programme in North Macedonia*, duration: 2010-2024, implemented by Farmachem, MES and Ministry of Environment and Physical Planning; funded by the Swiss Agency for Development and Cooperation (SDC);
- *Biodiversity conservation, sustainable land management and sustainable tourism development in North Macedonia*, duration: 2023-2027, implemented by UNDP, Ministry of Environment and Physical Planning and UN Environment Programme (UNEP) Vienna; funded by GEF.

Projects implemented in Serbia for consideration:

- *EU for Green Agenda in Serbia*, duration: 2022-2024, implemented by UNDP and Ministry of Environmental Protection; funded by the EU, Embassy of Sweden, European Investment Bank (EIB), Governments of Sweden, Switzerland and Serbia;
- *EU for Green Agenda in Serbia: Protecting and investing in biodiversity and water for enhanced climate resilience*, duration: 2023-2026, implemented by UNDP, UNEP and Ministry of Environmental Protection; funded by the Swedish Embassy;
- *Together for Environment*, duration: 2022-2027, implementation by the Belgrade Open School, The Nature Conservancy, International Union for IUCN, Young Researchers of Serbia, American Chamber of Commerce in Serbia, and Economic Expert Community Association; funded by the US Agency for International Development (USAID);
- *Enabling environment at policy, field and market levels for Forest Landscape Restoration (FLR) to achieve Land Degradation Neutrality (LDN) in Serbia,* duration: 2022-2025, implemented by Food and Agriculture Organization (FAO), Ministry of Agriculture, Forestry and Water Management-Directorate of Forests, Institute of Forestry, Pokret Gorana Srbije; funded by GEF.

Action 53b	Prepare Forest Landscape Restoration Plan (including a financial plan)

The EU Nature Restoration Law, adopted by the EU Parliament and expected to be approved by the Council of the EU during 2024, enforces binding targets from the EU's 2030 Biodiversity Strategy to restore various ecosystems such as rivers, forests, agricultural areas, and marine habitats. The Law sets a goal to restore at least 20% of the EU's land and sea areas by 2030 and all ecosystems in need of restoration by 2050. Member states are required to create Nature Restoration Plans to meet these objectives, with the European Commission evaluating these plans to ensure compliance.

As the WB6 work towards joining the EU, it is crucial to align regional nature conservation efforts. The WBBSP should be harmonised with and actively contribute to the development of Western Balkans FLRP. This alignment will ensure that the WBBSP effectively supports and is integrated with the EU nature protection policies. The FLRP will set targets and indicators for restoration actions, aligning its objectives with the EU Biodiversity Strategy for 2030, the

EU Nature Restoration Law, the EU Forest Strategy, and the ECCA30[267] initiative under the Bonn Challenge. This plan will serve as the foundation for identifying Nature-based Solutions (NbS) intervention areas and appropriate measures for field implementation. Additionally, the FLRP will be supported by a Financial Plan, outlining the investment needs for restoring and sustainably managing forests across the WB6. Since the FLR Plan, as a comprehensive document, requires a longer period to be developed, the next steps will focus on specific initiatives that are currently being implemented or will be implemented in WB6, and will support to the development of FLRP.

Albania is implementing the 2018-2030 Forestry Policy Document aimed at adopting sustainable use and management practices to prevent forest losses and deforestation caused by erosion, floods, diseases, pests, fires, and loss of biodiversity.

Bosnia and Herzegovina has introduced its Development Strategy, emphasizing sustainable forest management through ongoing investments in organized reforestation. Additionally, both the NBSAP and the Environmental Strategy and Action Plan of Bosnia and Herzegovina (BiH ESAP 2030+) highlights the necessity of establishing a cohesive legal and strategic framework for forest management and restoration but has not yet been officially adopted. The Forestry Program of the Bosnia and Herzegovina was drafted in 2009, with its main objectives adopted in 2017. However, the program is considered outdated and has not seen significant updates or full adoption since then. Efforts are needed to modernize and finalize this framework to align with current forest management and restoration needs. The Republika Srpska Forestry Development Strategy 2011-2021, revision is ongoing including an action plan. This draft document incorporates a chapter on the role of NbS in forest landscape restoration, supported by the ADAPT initiative led by IUCN ECARO. In Bosnia and Herzegovina's Entity of the Republika Srpska, the Forestry Strategy for 2022–2032 has been developed, including an action plan. This strategy includes a dedicated chapter on the importance of Nature-based Solutions (NbS) for forest landscape

Kosovo's* 2021-2030 Forest Strategy with forest landscape restoration was adopted in 2021.

Montenegro's 2014-2030 Forest Strategy needs to be revised and the process will begin soon.

North Macedonia adopted the 2006-2036 Strategy for Sustainable Development of Forests which sets forest landscape restoration as one of the priorities.

Serbia introduced the 2021-2023 Nature Protection Programme which specifically emphasises the importance of forests for conservation of biological diversity. The document does not cover all aspects of forest landscape restoration. Forestry Development Strategy of Serbia adopted in 2006 is under revision process. . The preparation of the Second National Forest Inventory (NFI) is supported by the 'Contribution of Sustainable Forest Management to Low Emission and Resilient Development' project, which is financed through the Global Environmental Facility (GEF) mechanism. The NFI has not yet been adopted."

Seen through the economic lens, prioritising sustainable management and conservation is often seen as more advantageous than restoration. Government policies typically focus on combating forest degradation threats. This is because restoration can be more expensive than sustainable forest management, as it generally addresses situations where significant forest degradation has already occurred.

267 https://www.bonnchallenge.org/sites/default/files/resources/files/%5Bnode%3Anid%5D/ECCA30.pdf

Action 54	Analyse biodiversity benefits of Nature-based Solutions and opportunities for their integration into the development of climate and other plans

Modern concepts like NbS, integrated planning, and climate-smart resource management have only recently been introduced to decision-makers and practitioners in the WB6. Furthermore, there is a lack of policy coherence, and global and EU policy frameworks have not been effectively translated into WB6 contexts yet. For instance, none of the WB6 has yet developed a restoration plan.

To date, inter-sectoral integration and decision-making that prioritise biodiversity and large-scale ecosystem protection, such as forests and river basins, have not been emphasised in the WB6. WB6 face numerous challenges in effective water management that extend beyond the protection and management of freshwater ecosystems. These challenges include a dependence on sectoral, non-integrated planning approaches, significant investment needs (especially in sanitation and waste treatment infrastructure), insufficient administrative capacities, limited experience with multidisciplinary issues, and a long history of centrally planned economies.

Several projects in South East Europe examined how NbS can enhance ecosystem and community resilience to climate change and environmental degradation. One such initiative is the regional ADAPT project *Nature-based Solutions for Resilient Societies in the Western Balkans*. This project aims to demonstrate how NbS can complement engineering solutions in disaster risk reduction. It focuses on identifying ways nature can improve disaster risk reduction and climate adaptation in the WB6, with pilot projects in Albania and Serbia, and assessments in Bosnia and Herzegovina, Montenegro, North Macedonia, and Kosovo*.

Through the ADAPT Initiative, International Union for Conservation of Nature (IUCN) Regional Office for Eastern Europe and Central Asia (ECARO) conducted a comparative policy analysis on the role of NbS in climate change adaptation and disaster risk reduction in the WB6. This analysis provided policymakers in the WB6 with insights into the current status of NbS in existing policies and highlighted opportunities for advancing NbS. Additionally, IUCN ECARO tested the application of the IUCN Global Standard for NbS in policy analysis for the first time.

ADAPT is an IUCN-led project working across the Western Balkans Six and promoting Nature-based Solutions with aims to increase ecosystem and community resilience to climate change and environmental degradation by applying Nature-based solutions for disaster risk reduction. This regional umbrella initiative works with relevant participating partners across the Western Balkans Six.

The ADAPT II is planned and it will have a great focus on Nature-based Solutions and restoration. ADAPT II will help develop a regional restoration plan and linkages between biodiversity and climate change.

Action 54a	Report on climate change and biodiversity linkages

The Report on Climate Change and Biodiversity Linkages and recommendations for integrating these linkages into climate change policies, strategies, and plans, including the GAWB decarbonisation component, Nationally Determined Contributions (NDCs), and National Adaptation Plans (NAPs) needs to include key species indicators to track the impact of climate changes on species and habitats.

Besides the fact that climate change was recognised as a significant pressure on the region's biodiversity, a comprehensive climate change vulnerability analysis has not been carried out. The integration of biodiversity and climate change policy frameworks in WB6 does not fully address how biodiversity conservation and the sustainable use of natural resources can contribute to climate change mitigation and adaptation. Specifically, it lacks a focus on incorporating climate-smart practices into biodiversity conservation and on aligning these practices with relevant sectoral policies. Overall, there is a need for much stronger and more ambitious integration of biodiversity conservation and climate change within the environmental policy frameworks of the WB6. Additionally, there are no comprehensive plans or strategies, nor mechanisms in place, to assess and mitigate the impacts of climate change on biodiversity.

Furthermore, the potential of protected and/or restored habitats to sequester carbon dioxide and contribute to climate change mitigation has not been fully acknowledged in NBSAPs, NECPs, or NAPs. The WB6 should prioritize integrating biodiversity-related goals and indicators into their NDCs to support the achievement of mid- and long-term climate change objectives. The contribution of protected areas to climate change adaptation and mitigation is substantial and should be mainstreamed into climate policies. This integration ensures that biodiversity considerations are accounted for when setting goals and targets for both climate change mitigation and adaptation, thereby enhancing the effectiveness and sustainability of climate strategies. To contribute to the alignment of biodiversity and climate strategies in WB6, the IUCN will prepare a comprehensive Report on the ecosystem benefits of Nature-based Solutions and explore opportunities for their integration into the development of climate and biodiversity plans. This report will be developed during 2026–2027 as part of the ADAPT 2 project. This comprehensive scientific report will quantify the benefits of NbS, including both ecosystem and socio-economic benefits.

Given the relationship between climate change and biodiversity, it is crucial to consider the substantial impact of electricity production from coal-fired thermal power plants in WB6. These plants not only emit large quantities of greenhouse gases, intensifying climate change, but also release significant amounts of sulphur dioxide, which has detrimental effects on ecosystems and biodiversity. Sulphur dioxide contributes to air pollution and plays a major role in forming acid rain. This acidification harms ecosystems by damaging soil quality, aquatic systems, and vegetation, leading to a decline in biodiversity[268].

268 Izah, Sylvester & Iyiola, Adams & Yarkwan, Baturh & Richard, Glory. (2023). Impact of air quality as a component of climate change on biodiversity-based ecosystem services.

Action 55	Strengthen the mechanisms for regional cooperation and strategic planning on biodiversity conservation and implementation of commitments under the Convention on Biological Diversity

The main threats to biodiversity in WB6 include habitat loss, unsustainable land-use practices, and natural resource management, infrastructure development, pollution, and climate change. Given the above challenges and the fact that WB6 committed to ambitious goals related to biodiversity conservation and management of natural resources, there are compelling reasons for scaling up efforts to safeguard the valuable biodiversity and natural resources. While legal and policy frameworks for nature protection and conservation exist in all WB6, implementation and enforcement is lagging.

In addition to coordinating the nature and biodiversity pillar of GAWB, the IUCN serves as the Secretariat for the Biodiversity Task Force South East Europe (BDTF SEE). The BDTF SEE is a technical advisory body aimed at promoting and facilitating regional cooperation and coordination amongst relevant stakeholders on nature policy. It advocates for coherent policies, regional strategies, and planning processes in the WB6. As the Secretariat, IUCN ECARO ensures that all processes are fully aligned with the EU Green Deal, 2030 EU Biodiversity Strategy, and other key EU and global nature policies. IUCN ECARO and BDTF SEE, responsible for coordinating activities in the nature and biodiversity pillar of GAWB, provide the regional coordination and consultation framework for the WBBSP.

The BDTF SEE has operated in the WB6 since 2017 as a coordination entity. This regional structure serves as a technical and advisory body to the Regional Working Group on Environment. Its aim is to enhance coordination and planning for biodiversity conservation across the WB6.

Action 56	Reinforce the engagement with the United Nations Rio Conventions (and synergy between the three), and join efforts in preparing a regional position on a global post-2020 biodiversity agenda

Until now, there has been no unified regional stance on the global biodiversity agenda. All WB6, except for Kosovo*, joined the United Nations Rio Conventions. As active UN members, they are under obligation to implement these conventions, which includes submitting regular reports and attending COP meetings.

Action 57	Set up the Western Balkans Biodiversity Information Hub to improve knowledge exchange and availability of information

In the Western Balkans Six, biodiversity data comes from a variety of sources, including governmental agencies, research institutions, civil society organizations (CSOs), and citizen science platforms. This data encompasses information on species distribution, ecosystem services, habitat quality, conservation status, biodiversity trends, and more. However, WB6 face challenges related to biodiversity data, including the complexity of geographic scope and the lack of standardized and comparable data, etc. A potential solution to these challenges could be the Western Balkans Biodiversity Information Hub platform. Although not yet established, discussions are ongoing at BDTF meetings regarding the integration of scientific data and information on biodiversity policy frameworks at the regional level, aligned with global and EU nature conservation goals. The WBBIH, through a systematic, strategic, and participatory process, should incorporate all relevant public biodiversity data. This data would be sourced from global and local platforms such as the Integrated Biodiversity Assessment Tool (IBAT)[269], GBIF[270], IUCN Red List[271], ENCORE[272] WB6 biodiversity monitoring systems, and significant EU-level databases. The EU Biodiversity Strategy's progress is monitored through the EU Biodiversity Strategy Actions Dashboard and Actions Tracker. These platforms offer valuable insights into the achievement of the Strategy's targets and actions. A similar platform could be developed for the WBBSP. The EU Biodiversity Dashboard[273] and EU Biodiversity Strategy Actions Tracker[274] serve as official tools to track the implementation of the EU Biodiversity Strategy. The state of nature under the EU Birds and Habitats Directives is monitored through established mechanisms managed by the European Environment Agency (EEA): Natura 2000 Barometer[275] and Natura 2000 Viewer[276]. Organizing and managing biodiversity information and data in the Western Balkans 6 involves both technical and political considerations. These aspects will be addressed and refined during the development of the WBBSP. Also, the WBBIH could explore the possibility of establishing connections to similar services previously operated by other initiatives, such as the WB Info Hub[277] etc.

The WBBIH in the WB6 has yet to be established, and databases need improvement to ensure homogeneous, reliable, and comparable data. Legislation in WB6 mandates the maintenance of a biodiversity information system. However, in practice biodiversity information and data are included in larger environmental information systems, complicating data and system management.

The Biodiversity Task Force of the Western Balkans (BDTF WB) serves as a prime example of how regional collaboration can bolster conservation policies, improve biodiversity protection, and foster sustainable development. The IUCN ECARO, serving as the Secretariat of

269 https://www.ibat-alliance.org/
270 https://www.gbif.org/
271 https://www.iucnredlist.org/
272 https://encorenature.org/en
273 https://dopa.jrc.ec.europa.eu/kcbd/EUBDS2030-dashboard/?version=1
274 https://dopa.jrc.ec.europa.eu/kcbd/actions-tracker/
275 https://www.eea.europa.eu/en/analysis/maps-and-charts/natura-2000-barometer-dashboards
276 https://natura2000.eea.europa.eu/
277 https://www.westernbalkans-infohub.eu/

the BDTF, holds significant potential to contribute to the establishment of the WBBIH. Its extensive expertise in biodiversity conservation, global network of experts, and proven ability to facilitate multi-stakeholder collaboration make it uniquely positioned to provide strategic guidance, technical support, and capacity-building. Additionally, the IUCN's role as a global authority on the status of the natural world ensures that the future WBBIH can leverage its resources and tools, to effectively advance biodiversity objectives in the WB6.

Action 57a	Biodiversity Monitoring and Evaluation Framework

A biodiversity monitoring and evaluation framework may serve as the foundation for developing a Western Balkans Biodiversity Information Hub. Indicators will be aligned with those of the European Environment Agency (EEA), targets set by the 2030 EU Biodiversity Strategy, and post-2020 Global Biodiversity Framework of the CBD.

Action 58	Development of green infrastructures and ecosystem connectivity

Given that the Western Balkans Six are relatively small, and many core biodiversity areas are of transboundary significance, a coordinated transboundary and regional approach is essential. Regional cooperation amongst relevant authorities in the designation and management of protected areas is crucial for achieving better synergies and effective management of protected area networks and ecological networks. To ensure effective implementation on the ground, a regional mechanism for coordinating joint actions aimed at developing green infrastructure and enhancing ecosystem connectivity could be established.

Enhancing green infrastructure and ecological connectivity is crucial for supporting biodiversity and mitigating climate change. This approach aligns with IUCN's focus on Nature-based Solutions, ensuring that conservation actions are resilient and effective in addressing the interconnected crises of climate change and biodiversity loss. The Green Agenda for the Western Balkans emphasizes integration of environmental sustainability into regional development in line with the EU Green Deal and Biodiversity Strategy. The following points outline the main actions necessary to achieve these goals:

- Developing comprehensive green infrastructure networks is essential for establishing connections between urban, peri-urban, and rural areas, enhancing biodiversity corridors and ecosystem services. These networks should include multi-functional green spaces in urban planning, providing cooling effects, recreational areas, and habitats for wildlife. This creates resilient urban environments that contribute to climate adaptation and biodiversity conservation;
- Restoring natural habitats through large-scale projects focused on wetlands, riparian zones, and degraded landscapes is another key aspect. These restoration efforts should prioritise areas that enhance carbon sequestration, protect vulnerable communities from extreme climate events, and improve biodiversity resilience. Engag-

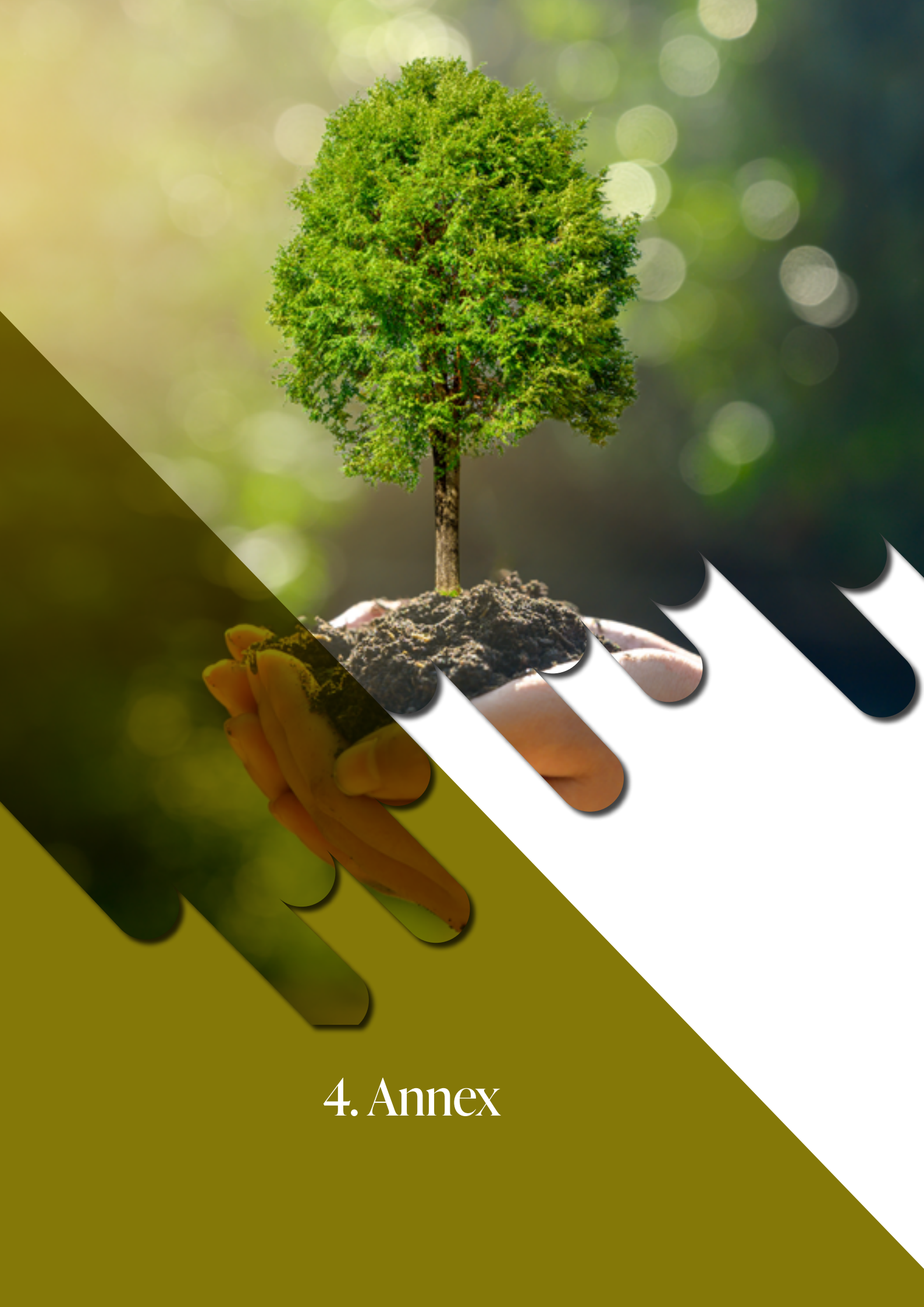
ing local communities in these projects ensures sustainability and local support, making restoration efforts more effective;

- Promoting Nature-based Solutions can significantly increase urban green cover and biodiversity. Encouraging cities to adopt these solutions involves providing technical assistance and capacity-building support. Highlighting the multiple benefits of NbS, including food and water security, poverty alleviation, and health outcomes, can help garner broader support and funding for these initiatives;
- Establishing cross-border/boundary ecological corridors is crucial for facilitating species migration and genetic exchange, which are essential for climate adaptation. This requires fostering collaboration amongst Western Balkans Six to protect and manage these corridors effectively. Leveraging IUCN's partnerships and technical expertise can ensure successful implementation and monitoring of cross-border/boundary ecological initiatives.

Increasing forest coverage is vital for carbon sequestration, biodiversity conservation, and enhancing ecosystem resilience. The IUCN's approach emphasizes community involvement and sustainable practices to ensure these efforts are effective and long-lasting. The GAWB underscores the multifunctional role of forests within green infrastructure initiatives, aligning with the broader goals of the EU Green Deal. The following actions are central to increasing forest coverage in the region:

- Implementing afforestation and reforestation programmes is a key strategy for increasing forest coverage. These programmes should target degraded lands, former agricultural areas, and urban spaces, using native and climate-resilient tree species. Aligning these initiatives with individual-level and regional climate policies ensures they contribute to carbon sequestration and resilience to climate impacts. Community involvement is crucial for the sustainability of these programmes, providing local support and engagement;
- Promoting community-based forestry involves engaging local populations in forest management and conservation. This can be achieved by providing training, resources, and financial incentives for adopting sustainable forest practices. Community-based initiatives ensure that forest management is tailored to local needs and conditions, enhancing both ecological and social outcomes;
- Integrating agroforestry systems into agricultural landscapes can significantly increase tree cover and improve soil health. Practices like alley cropping, silvopasture, and forest farming should be promoted, emphasizing their role in implementing NbS and contributing to the climate adaptation goals. Providing technical assistance and capacity-building support to farmers and landowners can facilitate the adoption of these sustainable practices.

Strengthening forest protection policies is essential to safeguard existing forests from deforestation and degradation. Enhancing policies and regulations involves advocating for policy coherence and alignment with international frameworks, such as the UNFCCC and CBD. This comprehensive approach ensures effective protection and restoration of forest ecosystems, contributing to long-term ecological resilience and climate mitigation.



4. Annex

List of abbreviations

AAES	Agricultural Advisory and Extension Services
AAP	Advisory Assistance Programme
ABCD	Access to Biological Collections Data
ADA	Austrian Development Agency
AEMs	Agri-environmental Measures
AFOLU	Agriculture, Forestry, and Other Land Use
AKIS	Agriculture Knowledge and Innovation Systems
AP	Autonomous Province
APCP	Action Programme for Coal Phase-out
ASCs	Agricultural Cooperation Societies
BCP	Border Crossing Point
BDTF SEE	Biodiversity Task Force South East Europe
BISE	Biodiversity Information System for Europe
BLRP	Balkan Lynx Recovery Programme
BMZ	German Federal Ministry for Economic Cooperation and Development
BSAPs	Biodiversity Strategy and Action Plans
B2B	Business-to-business
CAP	Common Agriculture Policy
CAQI	Common Air Quality Index
CBD	Convention on Biological Diversity
CC	Climate Change
CCAP	Climate Change Action Plans
CNVP	Connecting Natural Values and People Foundation
CSAs	Climate Smart Agriculture
DPP LCI	Dinaric-Balkan-Pindos Large Carnivore Initiative
DRR	Disaster Risk Reduction
EAS	Environmental Approximation Strategy
ECARO	Office for Eastern Europe and Central Asia
EEA	European Environment Agency
ERP	Extended Producer Responsibility
ESAPs	Environmental Self-assessment Action Plans
EVCSs	Electric Vehicles Charging Stations
FAO	Food and Agriculture Organization
FLR	Forest Landscape Restoration
FTS	Framework Transport Strategy
GAINS	Greenhouse gas – Air pollution Interactions and Synergies model
GBF	Global Biodiversity Framework
GEF	Global Environment Facility
GIZ	German Agency for International Cooperation
GSAA	Geospatial Aid Application

HSH	National Rail Company
IACS	Integrated Administration and Control System
IBAT	Integrated Biodiversity Assessment Tool
IIASA	International Institute for Applied Systems Analysis
IED	EU Industrial Emissions Directive
IFI	International Financial Institutions
IMs	Infrastructure Manager(s)
ITS	Intelligent Transport Systems
IUCN	International Union for Conservation of Nature
LAG	Local Action Group
LCIE	Large Carnivore Initiative for Europe
LDN	Land Degradation Neutrality
LEADER	Local Rural Development Strategies
LPI	Logistic Performance Index
LPIS	Land Parcel Identification System
MAFWE	Ministry of Agriculture, Forestry and Water Economy
MAP	Modern Agriculture Platform
MARD	Ministry of Agriculture and Rural Development
M&E	Monitoring and Evaluation
MEAs	Multilateral Environmental Agreements
MES	Macedonian Ecological Society
MMTS	Multimodal Transport Strategy
MoTE	Ministry of Tourism and Environment
MRVA	Monitoring, reporting, verification of emissions and the accreditation of verifiers
NAPs	National Adaptation Plans
NbS	Nature-based Solutions
NBSAPs	National Biodiversity Strategies and Action Plans
NDCs	Nationally Determined Contributions
NEA	National Environmental Agency
NIB	National Investigating Body
NFI	National Forest Inventory (NFI)
PAHs	Polycyclic Aromatic Hydrocarbons
PRMs	Primary Raw Materials
PSAWMF	Provincial Secretariat for Agriculture, Water Management and Forestry
RAMS	Road Asset Management System
REAWGs	Regional Expert Advisory Working Groups
ROAR	Restoration Opportunities Assessment Report
RIS	River Information Service
RP	Regional Partners
RRA	Railway Regulatory Agency
SAA	Stabilisation and Association Agreement
SDC	Swiss Agency for Development and Cooperation

SEE	South East Europe
SEPA	Serbia's Environmental Protection Agency
SIDA	Swedish International Development Cooperation Agency
SPA	Sustainability of Protected Areas project
SRM	Secondary Raw Material
SSC	Species Survival Commission
SSMS	Smart and Sustainable Mobility Strategy
SST	Sectorial Strategy of Transport
SUMP	Sustainable Urban Mobility Plan
SUNREED	Sustainable Use of Natural Resources for Environment and **Economic Development**
TC	Transport Community
TCT	Transport Community Treaty
TEN-T	Trans-European Transport Network
UNEP	UN Environment Programme
USAID	US Agency for International Development
V&R	Vulnerability and Risk Assessment
VTMIS	Vessel Traffic Monitoring and Information Service
WACC	Weighted Average Cost of Capital
WBBIH	WB Biodiversity Information Hub
WB6	Western Balkans Six

List of ministries in charge of implementation of GAWB Action Plan in Western Balkans Six

	Ministry
Albania	Ministry of Infrastructure and Energy Ministry of Tourism and Environment Ministry of Agriculture and Rural Development
Bosnia and Hercegovina	Ministry of Foreign Trade and Economic Relation of Bosnia and Herzegovina **Entity level:** Federal Ministry of Environment and Tourism Federal Ministry of Energy, Mining and Industry Federal Ministry of Agriculture, Water Management and Forestry Federal Ministry of Physical Planning Federal Ministry Transport and Communications **Entity level:** Ministry of Transport and Communications of the Republika Srpska Ministry of Agriculture, Water Management and Forestry of the Republika Srpska Ministry of Energy and Mining of the Republika Srpska Ministry of Trade and Tourism of the Republika Srpska Ministry of Spatial Planning, Construction and Ecology of the Republika Srpska
Kosovo*	Ministry of Environment, Spatial Planning and Infrastructure Ministry of Agriculture, Forestry and Rural Development Ministry of Economy

	Ministry
Montenegro	Ministry of Ecology, Sustainable Development and Northern Region Development Ministry of Energy Ministry of Agriculture, Forestry and Water Management Ministry of Spatial Planning, Urbanism and State Property Ministry of Transport and Maritime Affairs
North Macedonia	Ministry of Environment and Physical Planning Ministry of Agriculture, Forestry and Water Economy Ministry of Transport and Connections
Serbia	Ministry of Environmental Protection Ministry of Mining and Energy Ministry of Construction, Transport and Infrastructure Ministry of Agriculture, Forestry and Water Management

Data and information on GAWB were obtained from the official documents and publications of the listed stakeholders:

European Commission
European Parliament (with its research services)
Energy Community
European Economic and Social Committee
Joint Research Centre (JRC)
Regional Cooperation Council (RCC)
Transport Community
Hydro-Meteorological Institute
Institute of Statistics
Environmental Protection Agency
Centre on Emission Inventories and Projections (CEIP)
Danube Commission
European Bank for Reconstruction and Development (EBRD)
EIT Raw Materials
EMEP Centre on Emission Inventories and Projections
European Environment Agency (EEA)
European Investment Bank (EIB)
Eurostat
Food and Agriculture Organisation of the United Nations (FAO)
German Agency for International Cooperation (GIZ)
International Energy Agency (IEA)
Institute for European Energy and Climate Policy (IEECP)
International Commission for the Protection of the Danube River
International Sava River Basin Commission
International Union for Conservation of Nature (IUCN)
Italian Agency for Development Cooperation
IUCN Regional Office for Eastern Europe and Central Asia (IUCN ECARO)
Organisation for Economic Co-operation and Development (OECD)
Research Institute of Organic Agriculture (FiBL)

South East Europe Strategic Alliance for Rail Innovation (SEESARI)
Technical Assistance to Connectivity in the Western Balkans (CONNECTA)
United Nations Convention to Combat Desertification (UNCCD)
United Nations Development Programme (UNDP)
United Nations Economic Commission for Europe (UNECE)
United Nations Environment Programme (UNEP)
Western Balkans Road Safety Observatory (WBRSO)
World Bank
World Health Organisation (WHO)
World Resources Institute (WRI)
Bankwatch
Vienna Institute for International Economic Studies (WIIW)
Delore Institute
Centre for European Policy Studies (CEPS)
Berlin Process

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