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2023 Report
On the Implementation
of the Green Agenda
for the Western Balkans
Action Plan (GARI)

Appendix 1 - Indicators

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Title:

2023 Report on the Implementation of the Green Agenda
for the Western Balkans Action Plan (GARI) • Appendix 1 - Indicators

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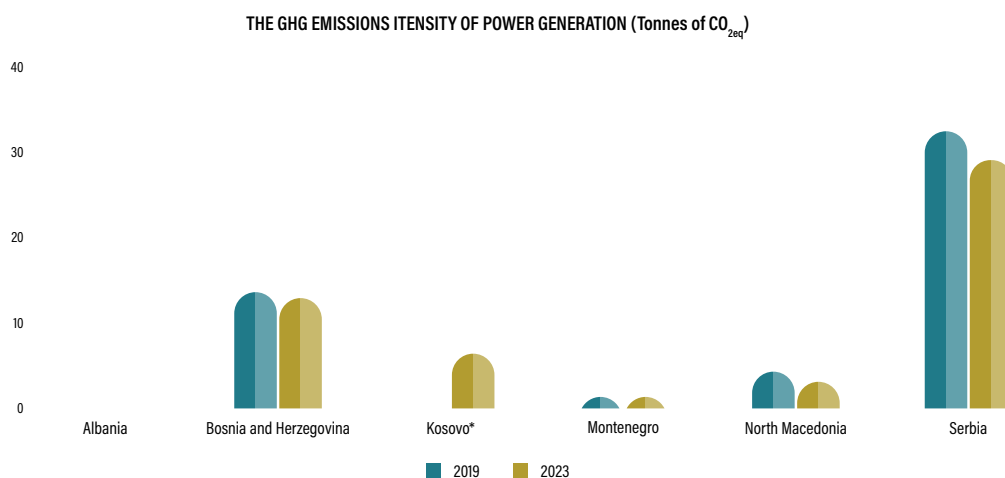
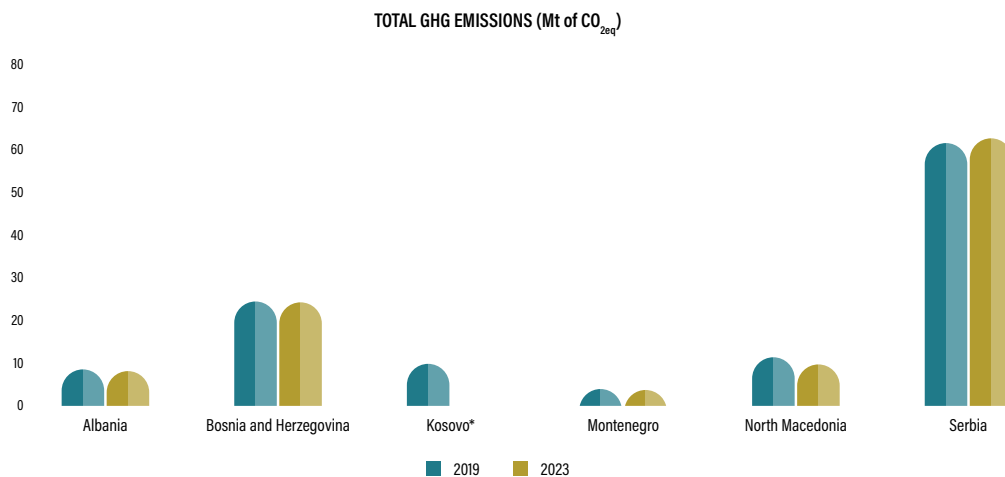
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Appendix 1 - Indicators

The overview of the quantitative indicators that constitute the monitoring system of Green Agenda for Western Balkans (GAWB) is presented in accordance with the structure of the Action Plan. Detailed overview of qualitative and quantitative indicators for 2023 is given in Appendix

Climate action ^{1 2}

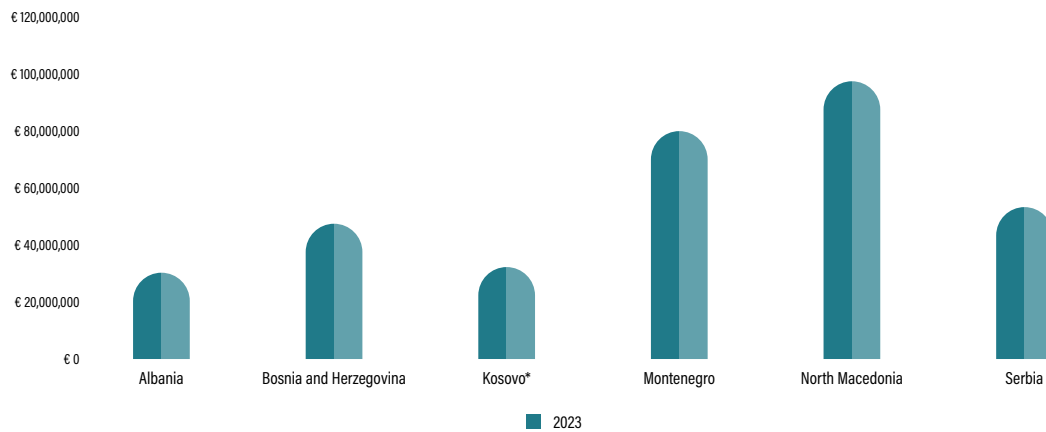


1 <https://www.climatewatchdata.org/>

2 <https://www.wbif.eu/>

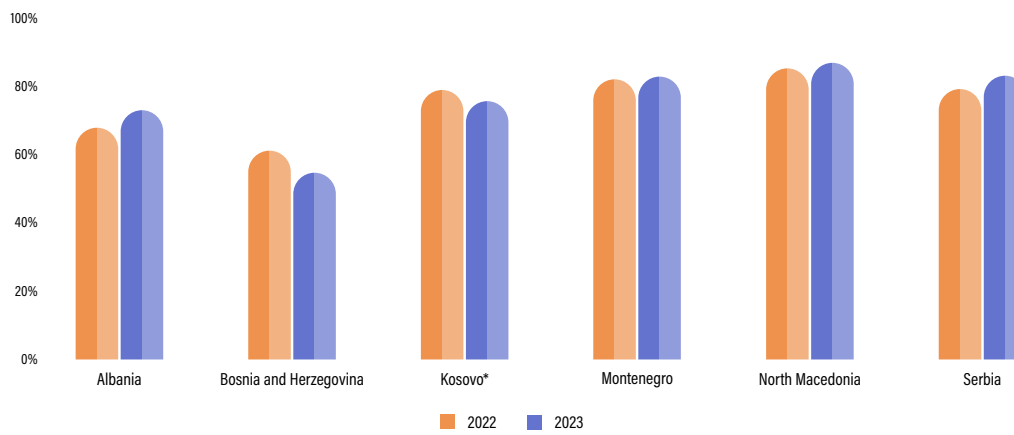
* This designation is without prejudice to positions on status, and is in line with UNSCR 1244/1999 and the ICJ Opinion on the Kosovo declaration of independence.

LEVEL OF CLIMATE FINANCING

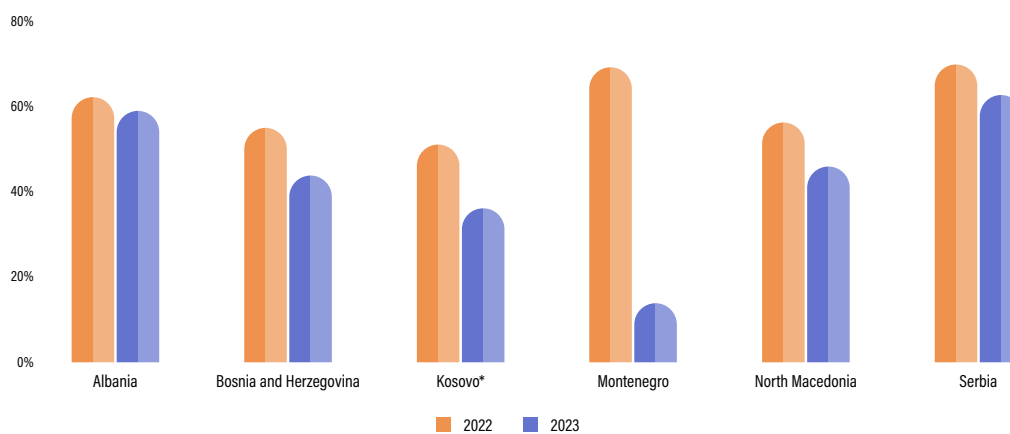


Energy ³

IMPLEMENTATION RATIO ELECTRICITY (%)

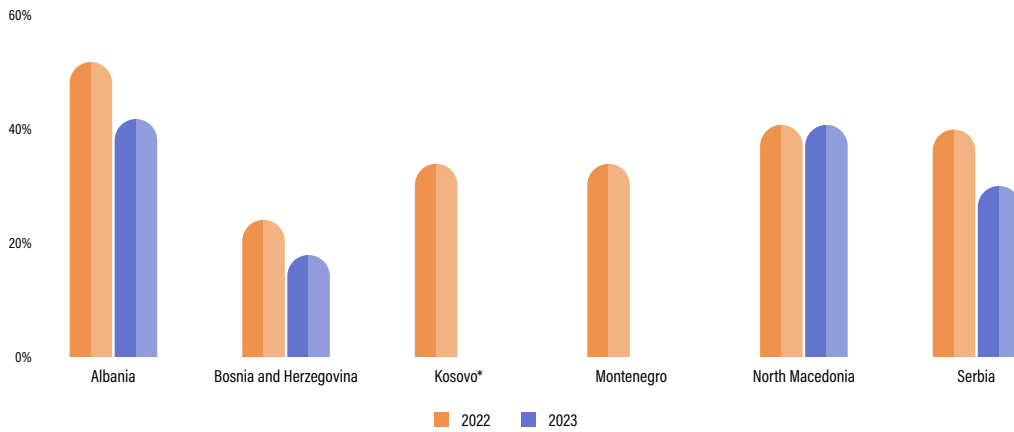


IMPLEMENTATION RATIO RENEWABLE ENERGY (impl. status) (%)



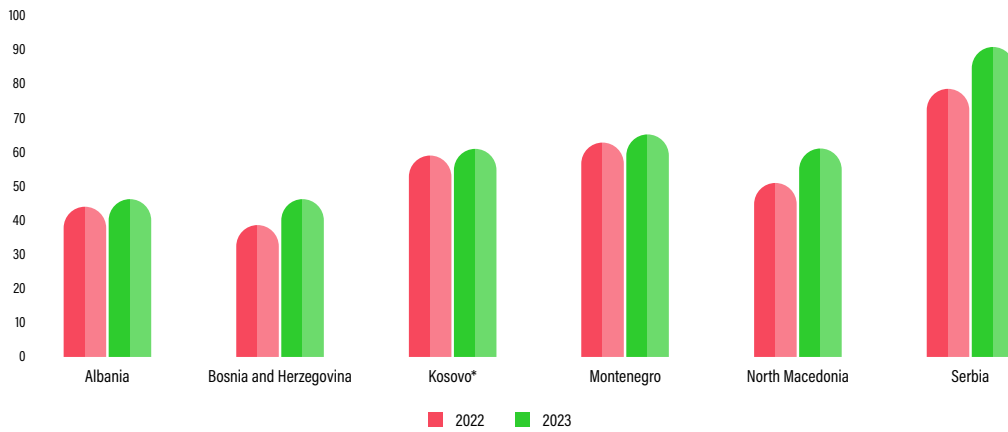
³ Energy Community, Implementation Report 2023 (data on November 1, 2023)

IMPLEMENTATION RATIO RENEWABLE GAS (%)

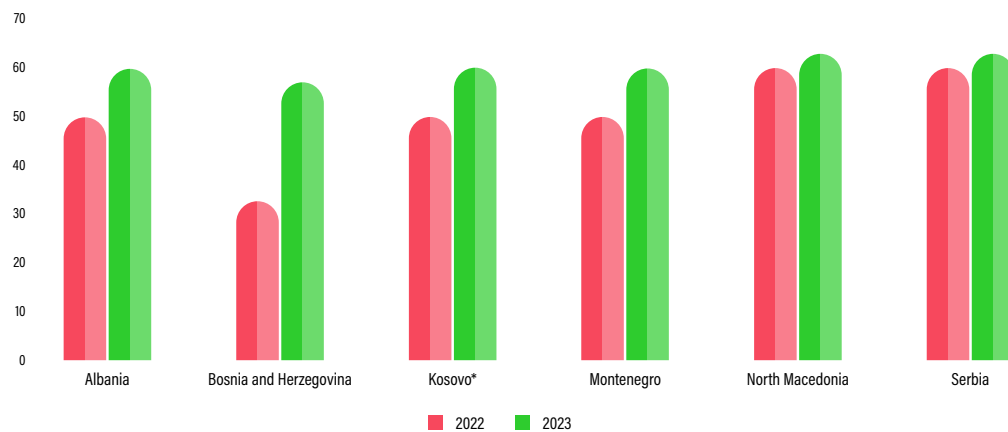


Sustainable Transport ⁴

RAIL ACTION PLAN - STATE OF PLAY (%)

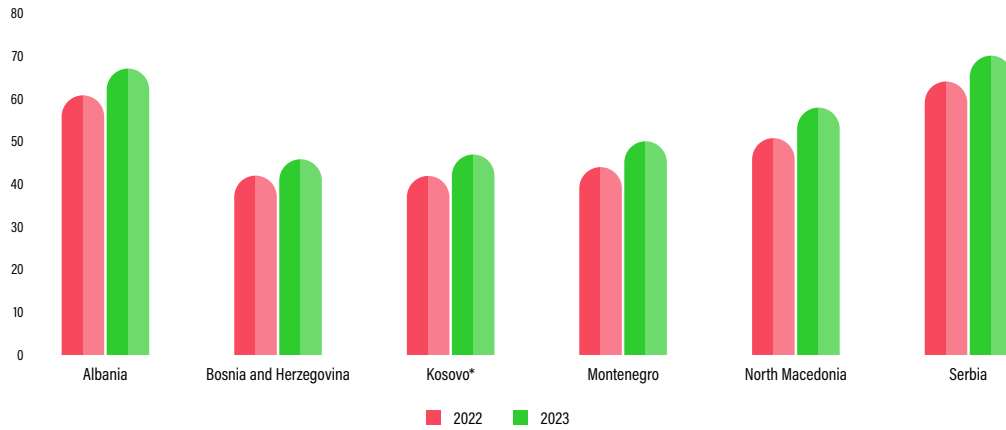


TRANSPORT FACILITATION ACTION PLAN - STATE OF PLAY (%)

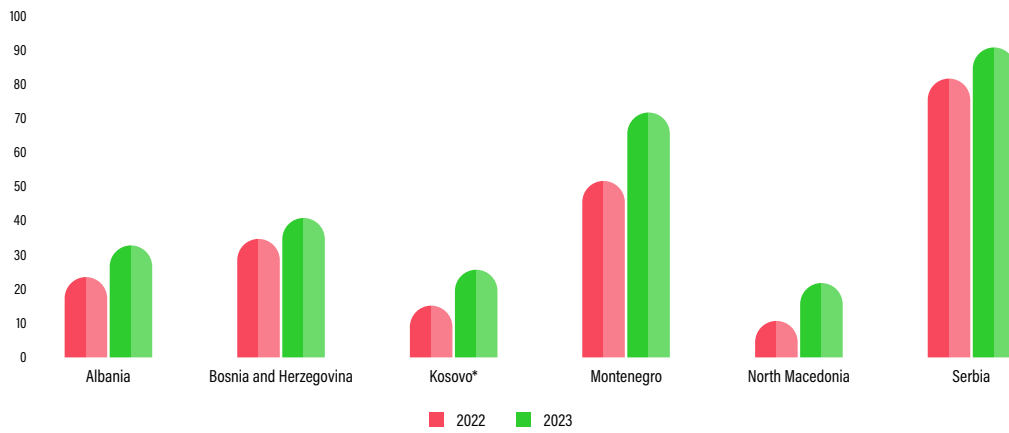


⁴ <https://www.transport-community.org/>

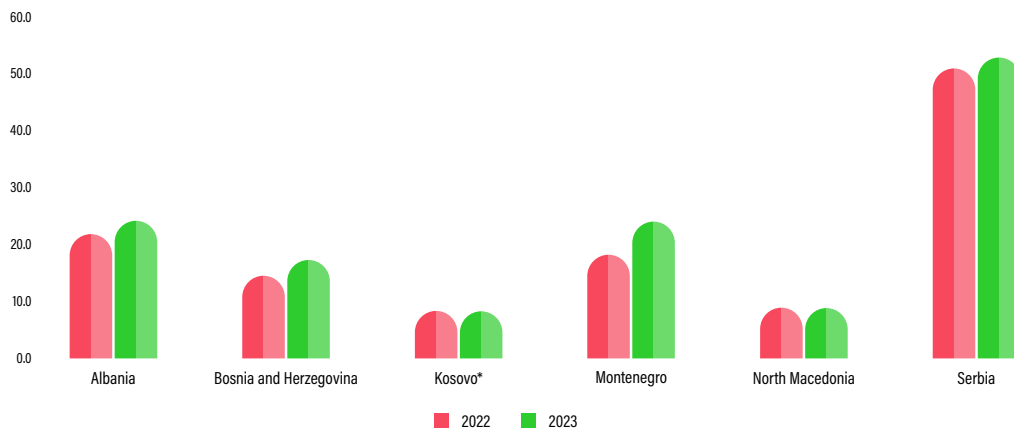
ROAD ACTION PLAN - STATE OF PLAY (%)



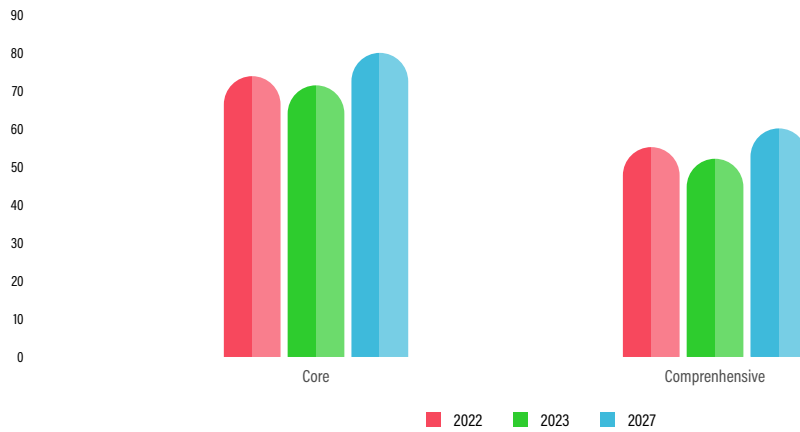
ROAD SAFETY ACTION PLAN - STATE OF PLAY (%)



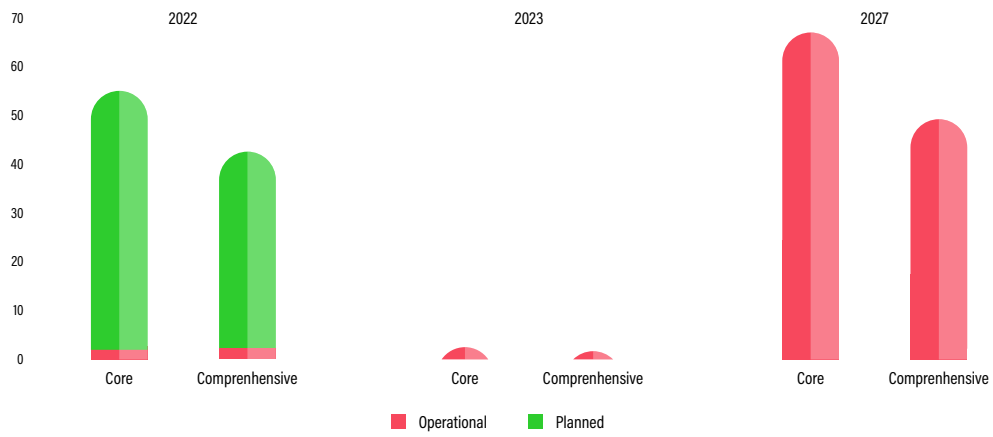
WATERBORNE TRANSPORT & MULTIMODALITY ACTION PLAN - STATE OF PLAY (%)



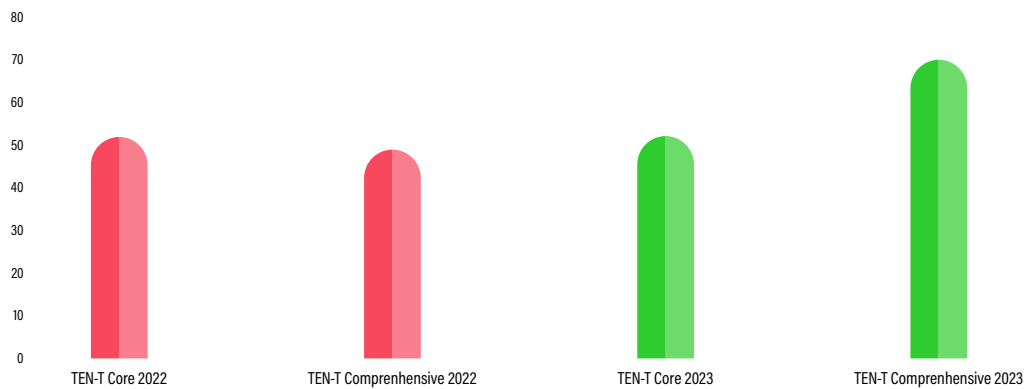
ELECTRIFICATION - RAIL NETWORK TO BE ELECTRIFIED (% OF CORE AND COMPREHENSIVE)



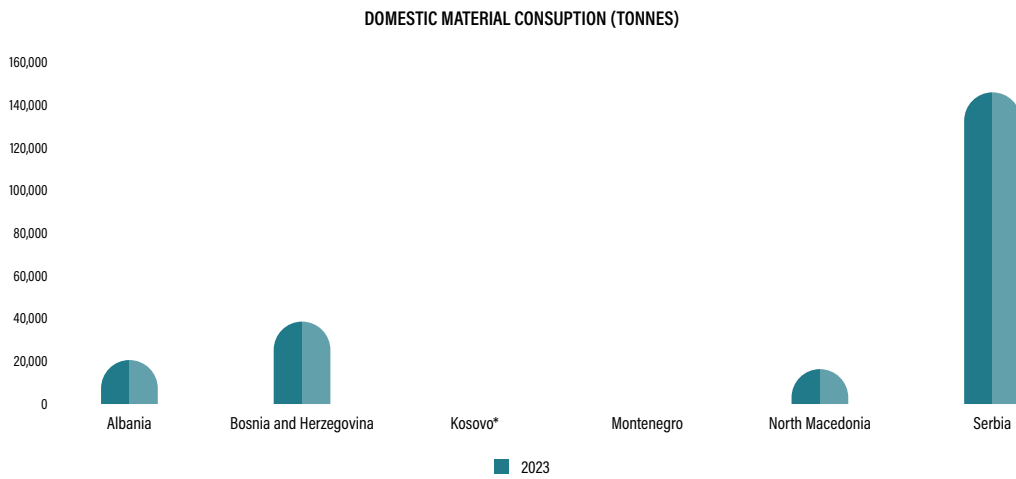
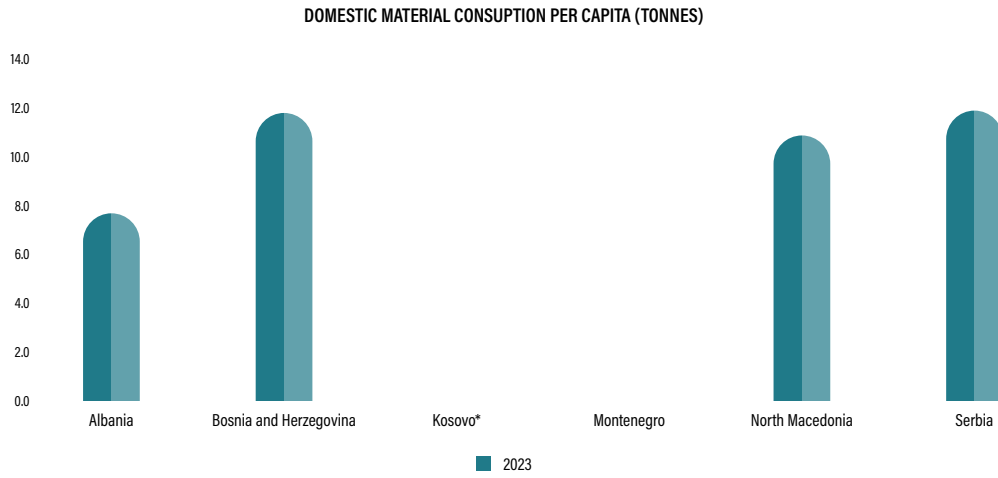
ERTMS (% OF CORE AND COMPREHENSIVE)



ITS COMPLIANCE ON ROAD NETWORK (%)

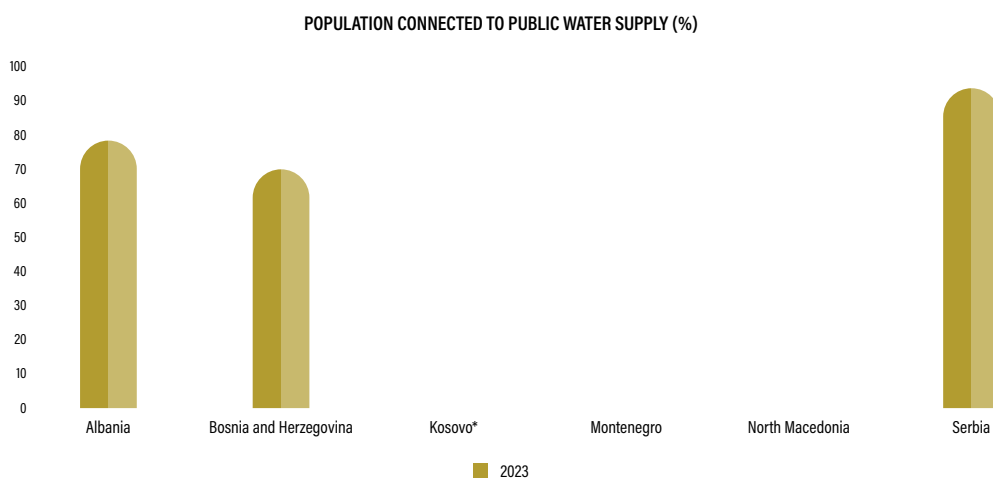
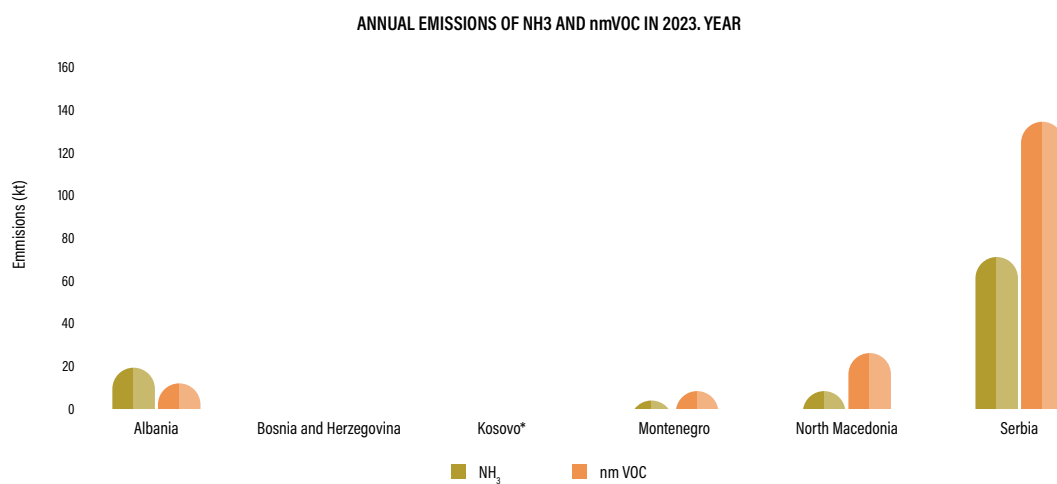
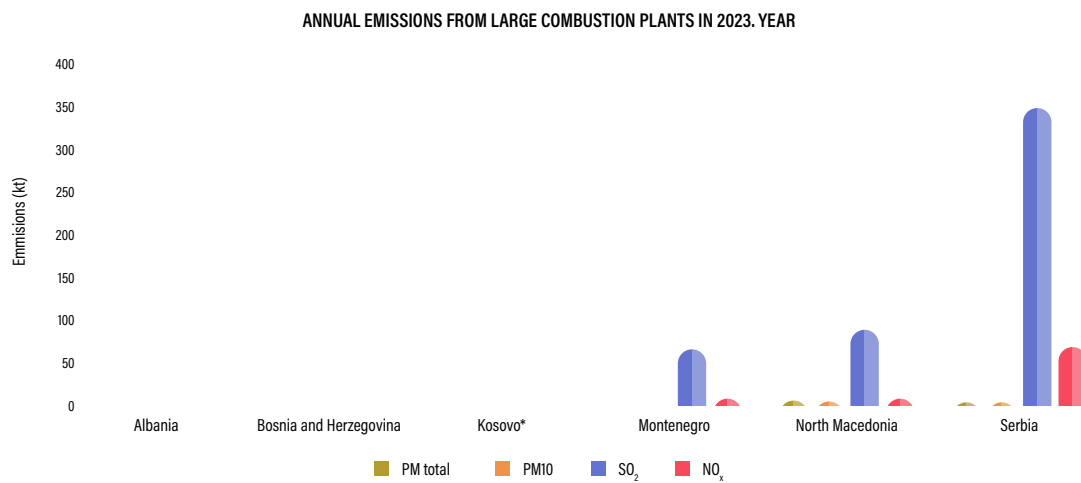


Circular Economy⁵



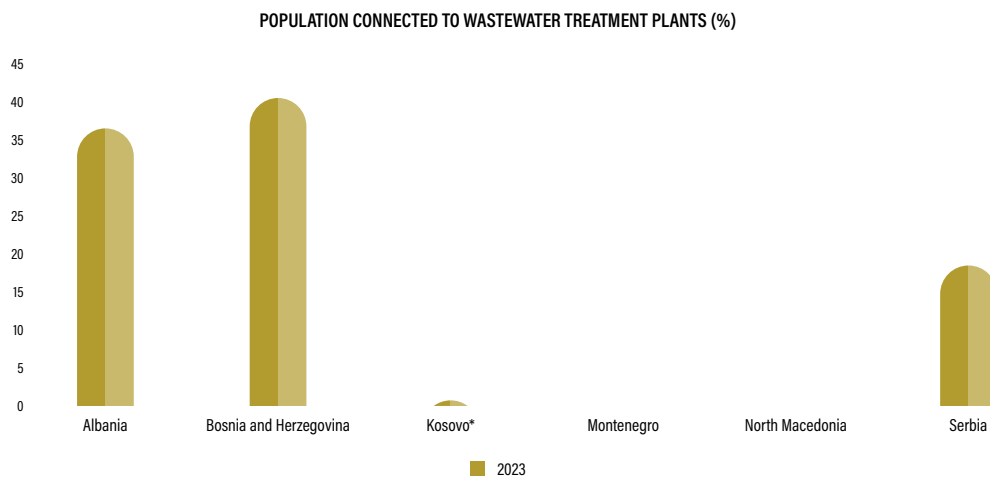
5 OECD (2024), Western Balkans Competitiveness Outlook 2024: Regional Profile, Competitiveness and Private Sector Development, OECD Publishing, Paris, <https://doi.org/10.1787/170b0e53-en>

Depollution^{6 7}

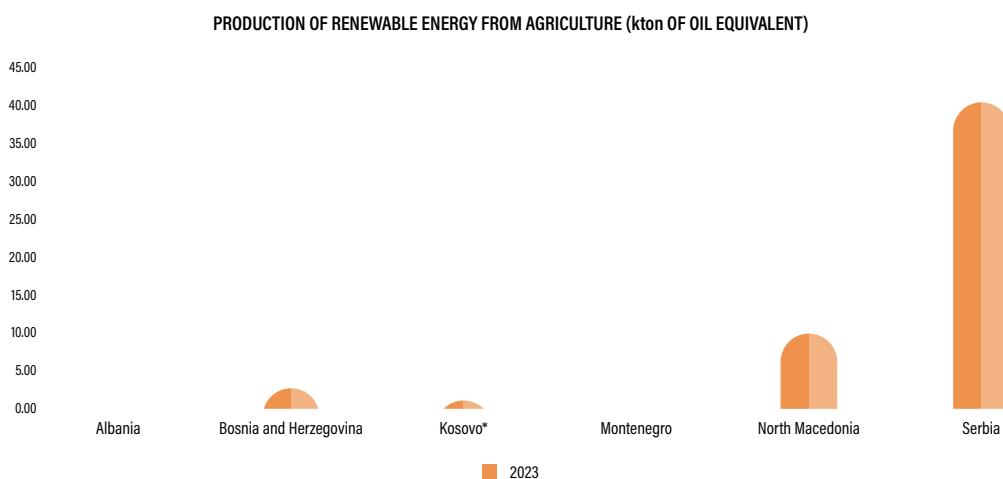
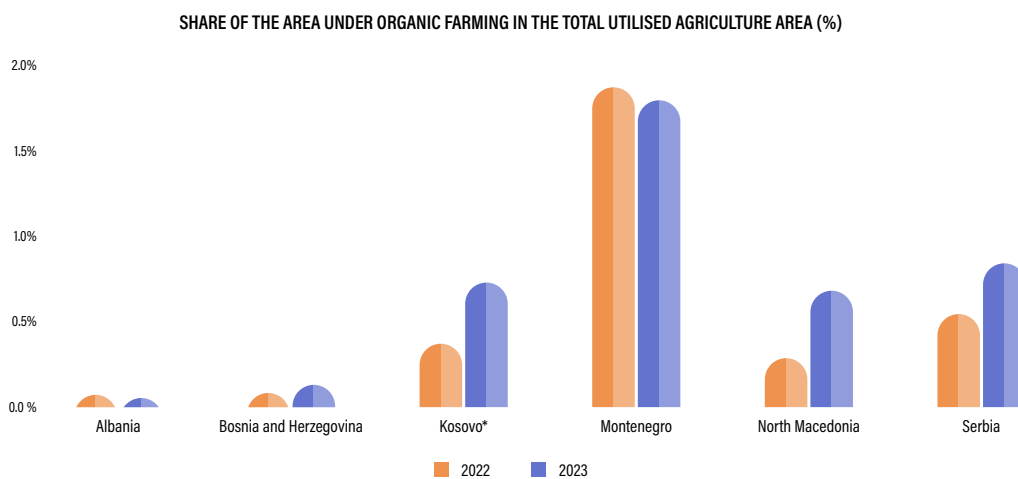


6 <https://www.ceip.at/data-viewer-2/officially-reported-emissions-data>

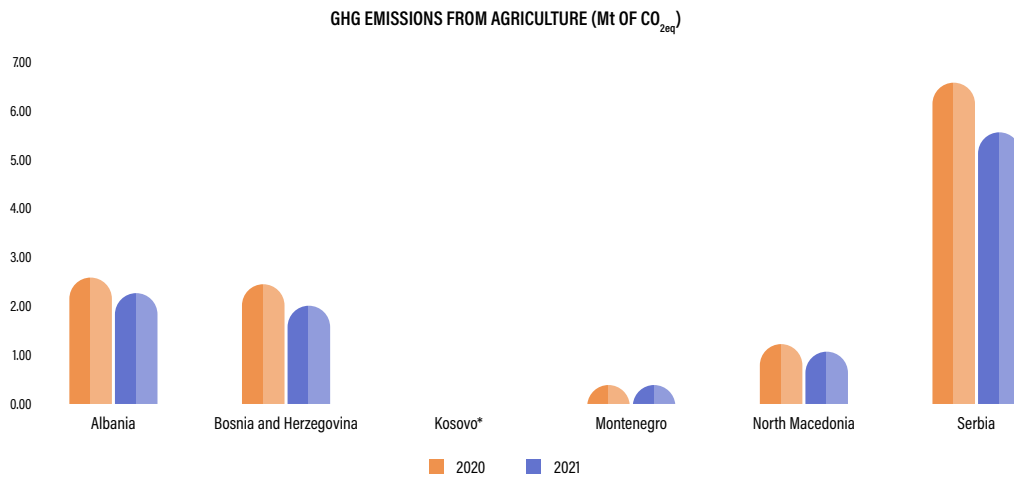
7 https://ec.europa.eu/eurostat/databrowser/view/env_wat_pop/default/table?lang=en&category=env.env_wat.env_nwat - Last available data



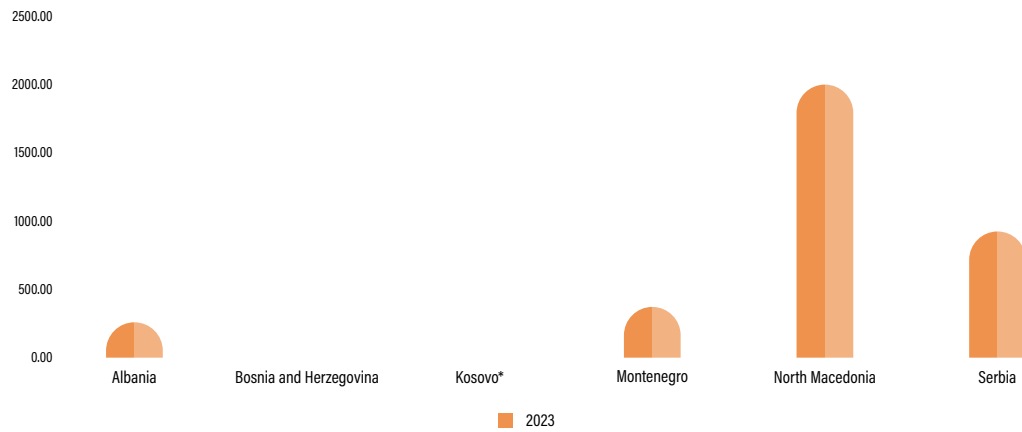
Sustainable Agricultural ^{8 9 10 11 12 13 14}



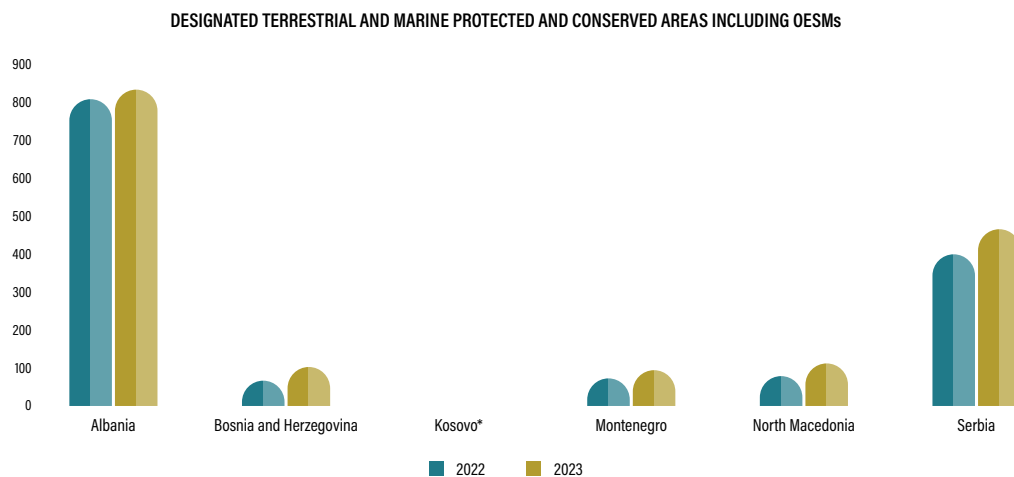
8 Organic Report 2022 Montenegro
 9 Information from the MAFWM in 2024
 10 Average for Central Serbia and Vojvodina
 11 Annual Implementation Report Executive Summary, Energy Community Secretariat 1 November 2023
 12 World Bank Assessment Letter for the Resilience and Sustainability Facility (2019),
 13 <https://unfccc.int/BURs>
 14 Annual report on the implementation of the IPARD programme 2014-2020 for 2023



NUMBER OF FARMS AND FOOD PROCESSING ENTERPRISES RECEIVING (IPARD) SUPPORT TO ALIGN WITH HYGIENE AND ANIMAL WELFARE STANDARDS (N)



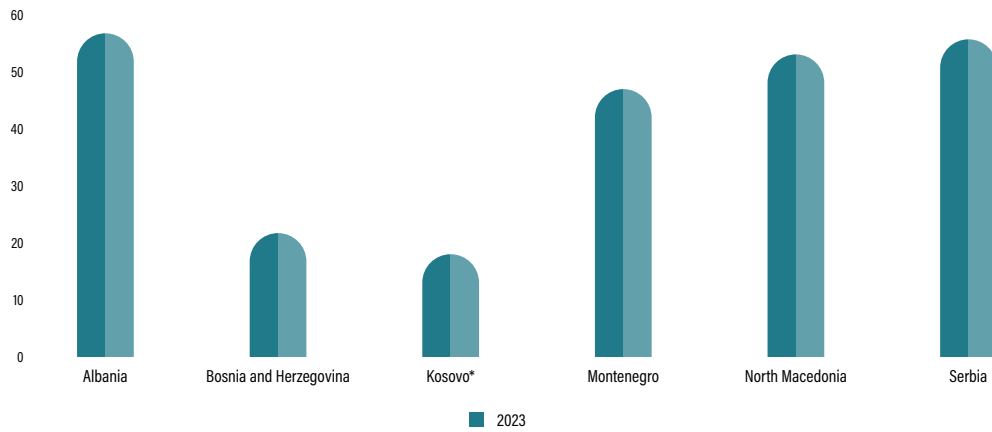
Nature and Biodiversity protection^{15 16}



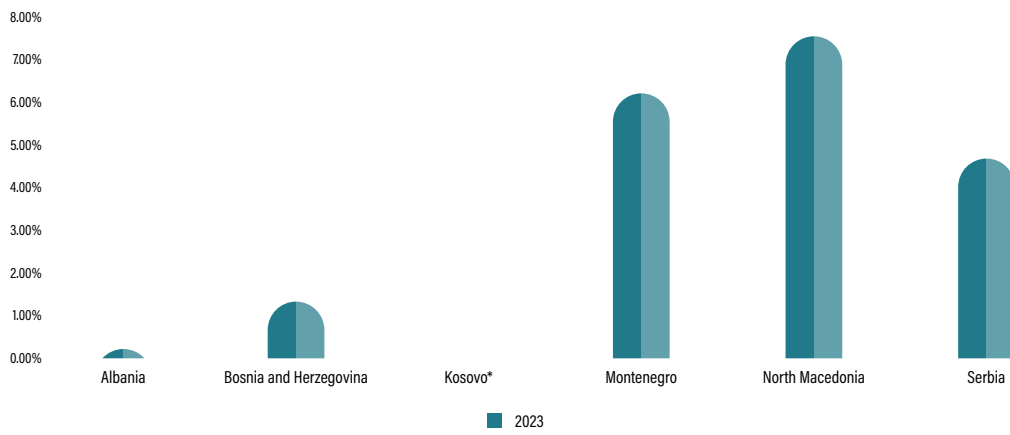
15 <https://www.protectedplanet.net/en>

16 <https://www.eea.europa.eu/data-andmaps/data/natura-2000-eunis-database>

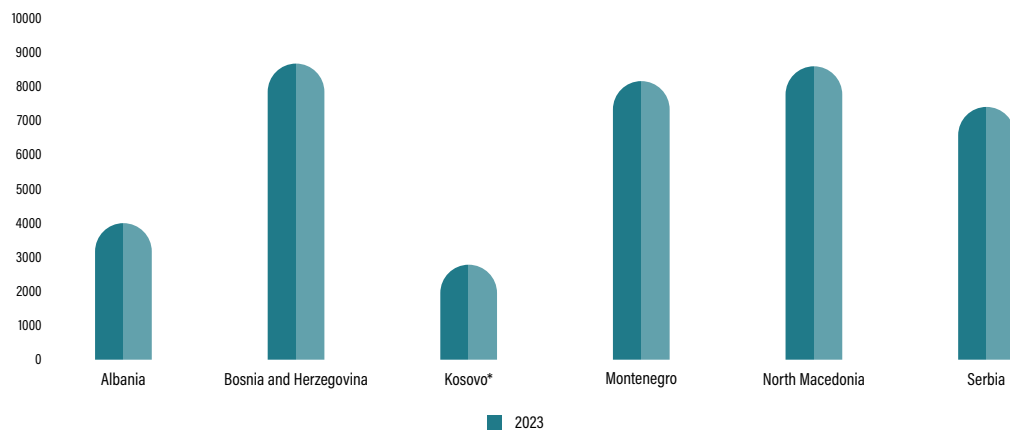
SPECIES PROTECTION INDEX



PROTECTED AREAS MANAGEMENT EFFECTIVENESS



PHENOLOGY OF SELECTED PLANT AND ANIMAL SPECIES



INDICATORS

	No.	Indicator	Value in 2023					Data source	Comment	
			Economy							
			Albania	Bosnia and Herzegovina	Kosovo*	Montenegro	North Macedonia			Serbia
Climate action	1.	Total GHG emissions (tonnes of CO ₂ eq).	8.06 MtCO ₂ eq	24.399 MtCO ₂ eq		3.79 MtCO ₂ eq	9.77 MtCO ₂ eq	62.81 MtCO ₂ eq	GHG inventories / Environmental Protection Agencies / Statistical Offices	https://www.climatewatchdata.org/ Data available for 2021.
	2.	The GHG emission intensity of power generation (tonnes of CO ₂ eq). ¹⁷	0 MtCO ₂ eq	13 MtCO ₂ eq	6.5 MtCO ₂ eq	1.4 MtCO ₂ eq	3.2 MtCO ₂ eq	29.1 MtCO ₂ eq	EnC reports / Environmental Protection Agencies / Statistical Offices.	
	3.	The number of sectoral policies that include climate change adaptation.							EC Progress Report / Communication on EU Enlargement Policy.	According to EU Adaptation Strategy adaptation must be implemented in systemic way, meaning that all sectors which are dependable on climate and natural resources and vulnerable to climate hazards, directly or indirectly, should include climate change in their planning. This approach should be initialized by individual adaptation policy documents. Monitoring sectoral policy documents for all WB6 and all vulnerable sectors and reviewing them for adaptation implementation consider review of majority of policy documents. This indicator is too complex to assess, especially to use it for monitoring of adaptation implementation in the future.
	4.	Level of climate financing.	€30.2m	€47.4m	€32.5m	€80.5m	€97.8m	€53.3m	EC Progress Report / Communication on EU Enlargement Policy.	Derived from https://www.wbif.eu/ Up to 2022, for environment & climate

17 Extracted from: <https://www.iea.org/data-and-statistics/data-tools/energy-statistics-data-browser?economyeconomy=SERBIA&fuel=CO2%20emissions&indicator=CO2EleBySource>

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	No.	Indicator	Value in 2023						Data source	Comment
			Economy							
			Albania	Bosnia and Herzegovina	Kosovo*	Montenegro	North Macedonia	Serbia		
Energy	1.	Implementation ratio electricity	73%	55%	76%	83%	87%	83%	EnC Implementation Report.	
	2.	Implementation ratio renewable energy.	59%	44%	36%	14%	46%	63%	EnC Implementation Report.	
	3.	Implementation ratio gas.	42%	18%	NA	NA	41%	30%	EnC Implementation Report.	
Transport	1.	Relevant directives/regulations/standards/specifications transposed.	FT-11%, PT-27%, Tot-38%	FT-1%, PT-4%, Tot-5%	FT-3%, PT-7%, Tot-10%	FT-25%, PT-9%, Tot-34%	FT-14%, PT-12%, Tot-26%	FT-27%, PT-37%, Tot-64%	TCT Action plan progress report / Technical Committee reports.	Monitoring the transposition of ANNEX I of Transport Community Treaty – Rules applicable to transport sector ¹⁸ , FT – fully transposed, PT – partially transposed, Tot - total
	2.	Western Balkan Six Strategies updated with sustainable and smart elements.	1.5	0.3	1.5	2.5	1.0	1.5	Sustainable and Smart Mobility progress reports / Ad hoc group meetings.	Based on OECD methodology and indicators, smart transport in the Western Balkans Six (WB6) is rated with average value 1.6 (maximum rating is 5)
	3.	Infrastructure developed according to TEN-T (related to green elements).	60%	57%	57%	60%	63%	63%	TEN-T Annual Plans.	Transport Facilitation – Monitoring mechanism – Implementation Scoring ¹⁹

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

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

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	No.	Indicator	Value in 2023						Data source	Comment
			Economy							
			Albania	Bosnia and Herzegovina	Kosovo*	Montenegro	North Macedonia	Serbia		
Circular Economy	1.	Domestic material consumption per capita.	7.7	11.8	NA	NA	10.905	21.9	http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=t2020_r1110&lang=en Statistical Offices.	
	2.	Domestic material consumption.	21,367.4	38,700	NA	NA	16,809	146,216	http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=t2020_r1110&lang=en Statistical Offices.	
	3.	Resource productivity.	100 ALL/kg	0.6027	NA	NA	0.6518	37.2 RSD/kg	https://ec.europa.eu/eurostat/databrowser/view/env_ac_rp/default/table?lang=en Statistical Offices.	
	4.	Generation of waste - Total.	NA	NA	NA	1,477,866 (2021)	1,397,000	174,664,906	https://ec.europa.eu/eurostat/databrowser/view/env_wasgen/default/table?lang=en Environmental Protection Agencies.	
Depollution	1.	Annual ambient concentrations of PMs, SO ₂ and NO _x .							Annual air quality reports for Western Balkan Six /Environmental Protection Agencies.	For detailed information see: https://publications.jrc.ec.europa.eu/repository/bitstream/JRC118679/air_qualityghg_western_balkans_online.pdf data at the level of measurement point or city. No economy level

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	No.	Indicator	Value in 2023					Data source	Comment
			Economy						
			Albania	Bosnia and Herzegovina	Kosovo*	Montenegro	North Macedonia		
Depollution	2.	Annual emissions of PMtotal, PM10, SO2 and NOx from large combustion plants.	NA ²⁰ NA NA NA	NA NA NA NA	NA NA NA NA	0.42kt 0.25kt 65.38kt 7.64kt	4.06kt 2.89kt 87.73kt 6.38kt	3.33kt 2.29kt 347.33kt 67.78kt	EnC annual implementation reports Energy Community Homepage (energy-community.org) Environmental Protection Agencies LRTAP Convention NFR tables. https://www.ceip.at/data-viewer-2/officially-reported-emissions-data
	3.	Annual emissions of NH3 and nmVOC .	18.58kt 11.98	NA NA	NA NA	3.24kt 8.28kt	8.35 26.08	71.02kt 134.19kt	Environmental Protection Agencies LRTAP Convention NFR tables. https://www.ceip.at/data-viewer-2/officially-reported-emissions-data
	4.	Population connected to public water supply (%) and	78.0	69.7	NA	NA	NA	93.67	Statistical Offices of Western Balkan Six, Eurostat. https://ec.europa.eu/eurostat/databrowser/view/env_wat_pop/default/table?lang=en&category=env.env_wat.env_nwat Last available data
		Population connected to wastewater. treatment plants (%).	32.40	36.0	0.56	NA	NA	16.44	
	5.	Artificial land cover per capita by type.							Statistical Offices of Western Balkan Six, Eurostat / Environmental Protection Agencies (Corine Land Cover). Western Balkan Six not reported in https://ec.europa.eu/eurostat/databrowser/view/lan_lcv_art/default/table?lang=en&category=lan
	6.	Nitrate in groundwater.							Statistical Offices of Western Balkan Six, Eurostat / Environmental Protection Agencies.

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20 No large combustion plants in Albania

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	No.	Indicator	Value in 2023					Data source	Comment	
			Economy							
			Albania	Bosnia and Herzegovina	Kosovo*	Montenegro	North Macedonia			Serbia
Sustainable Agriculture	1.	Share of the area under organic farming in the total utilised agriculture area.	0.06	0.14	0.73	1,8 ²¹	0.69	0.85 ²²	Environmental Protection Agencies State of the Environment Reports.	Data taken from the FiBL official site, except for Montenegro, which are taken from the Economy Organic Report 2022.
	2.	Share of land under management requiring reduction in chemical input.						2.05 ²³		No data available for all WB6. Should be removed from the list of indicators.
	3.	Mean organic carbon content in agricultural land.							Environmental Protection Agencies State of the Environment Reports.	No data available. Should be removed from the list of indicators. Not clear what exactly it means and where these data could be collected.
	4.	Production of renewable energy from agriculture.	NA	2,71	1,12	NA	10	40,4		Data for Biomass and Biogas production ²⁴
	5.	GHG emissions from agriculture (tonnes of CO2 eq).	1463	1995.8 ²⁵	769 ²⁶	1961.8 ²⁷	1,368 ²⁸	4733	Environmental Protection Agencies State of the Environment Reports.	Data taken from Biennial Update Report submissions from Non-Annex I Parties ²⁹

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 21 EconomyEconomy Organic Report 2022 Montenegro

22 Information from the MAFWM in 2024

23 Average for Central Serbia and Vojvodina

24 Annual Implementation Report Executive Summary, Energy Community Secretariat 1 November 2023

25 Latest available data (2016)

26 World Bank Assessment Letter for the Resilience and Sustainability Facility (2019), <https://www.elibrary.imf.org/view/journals/002/2023/200/article-A002-en.xml>

27 Latest available data (2017)

28 Latest available data (2019)

29 <https://unfccc.int/BURs>

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	No.	Indicator	Value in 2023						Data source	Comment
			Economy							
			Albania	Bosnia and Herzegovina	Kosovo*	Montenegro	North Macedonia	Serbia		
Sustainable Agriculture	6.	Number of farms and food processing enterprises receiving (IPARD) support to align with hygiene and animal welfare standards.	260	0	0	364	1986 ³⁰	918 ³¹		Number of approved project applications under the IPARD II for M1. There is no available separate data for investments related only to animal husbandry. No published Annual implementation Report (Albania, Montenegro) Some of the WB6 are not implementing IPARD Kosovo* and Bosnia and Herzegovina), but could have investments related to these standards. Suggestion is to modify the title of the Indicator to Number of investments under M1. To go for all investments since investments in plant production is also related to contribution to Green Agenda.
Nature and Biodiversity protection	1.	Designated terrestrial and marine protected and conserved areas including OECMs.	807 18,59% (2,84%)	65 4,06%	49	75 13,85% (0,58%)	80 15,39%	398 8,14%	UNEP-WCMC World Database on Protected Areas (WDPA) https://www.protectedplanet.net/en/thematic-areas/wdpa?tab=WDPA , World Database on Other Effective Areas-based Conservation Measures (WDOECM) https://www.protectedplanet.net/en/thematic-areas/oecms?tab=OECMs .	Number of designated terrestrial and marine protected and conserved areas percentage of terrestrial protected and conserved areas percentage of marine protected and conserved areas

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30 ANNUAL REPORT ON THE IMPLEMENTATION OF THE IPARD PROGRAMME 2014-2020 FOR 2023

31 Approved applications under M1. Source Annual report on implementation of IPARD II Program 2022.

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

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			Economy							
			Albania	Bosnia and Herzegovina	Kosovo*	Montenegro	North Macedonia	Serbia		
Nature and Biodiversity protection	2.	Potential Natura 2000 sites and economy-wide ecological networks.	-	-	-	-	-	-	European Natura 2000 database, datasets on ecological networks https://www.eea.europa.eu/data-andmaps/data/natura-2000-eunis-database	there are no Natura 2000 sites
	3.	Species Protection Index.	56,82	21,97	18,40	47,15	53,24	55,87	Western Balkan Six and regional Red Lists https://www.iucnredlist.org/	
	4.	Protected areas management effectiveness.	0,16%	1,35%	nda	6,14%	7,54%	4,63%	Global Database on Protected Areas Management Effectiveness (GD-PAME) https://www.protectedplanet.net/en/thematic-areas/protected-areas-management-effectiveness-pame?tab=Results	PAME - management effectiveness evaluations %; data for terrestrial and inland waters protected areas only; no data available for Kosovo*
	5.	Species recovery programmes.							WB6 and individual-level species action plans.	
	6.	Area of restored forest landscapes	-	-	-	20K ha (5,25%)	15K ha (0,58%)	-	Bonn Challenge Barometer https://infoflr.org/bonn-challenge-barometer	pledges

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Nature and Biodiversity protection	7.	Phenology of selected plant and animal species.	3994	8710	2771	8210	8595	7430	Indicators and sources of verification to be agreed upon based on the regional biodiversity strategic plan.	number of selected species
	8.	Biodiversity Strategy and Action Plans for Western Balkan Six (BSAPs).	2012-2020	2015-2020	2011-2020	2016-2020	2017-2027	2021-2023	The reporting system as defined by the Secretariat of the Convention on Biological Diversity in the Global post-2020 Biodiversity Framework https://www.cbd.int/conferences/post2020	



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