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Bosna i Hercegovina

OKOLIŠ

Bosnia and Herzegovina

ENVIRONMENT

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BHAS
Agencija za statistiku Bosne i Hercegovine
Agency for Statistics of Bosnia and Herzegovina

Sarajevo, 2026.

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Sarajevo, 2026

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Izrazi upotrijebljeni u ovoj publikaciji u jednom gramatičkom rodu obuhvataju i muški i ženski rod.
The terms used in this publication in one grammatical gender encompass both the masculine and feminine genders.

1.
OTPAD
WASTE

1.1. OTPAD IZ PROIZVODNIH I USLUŽNIH DJELATNOSTI

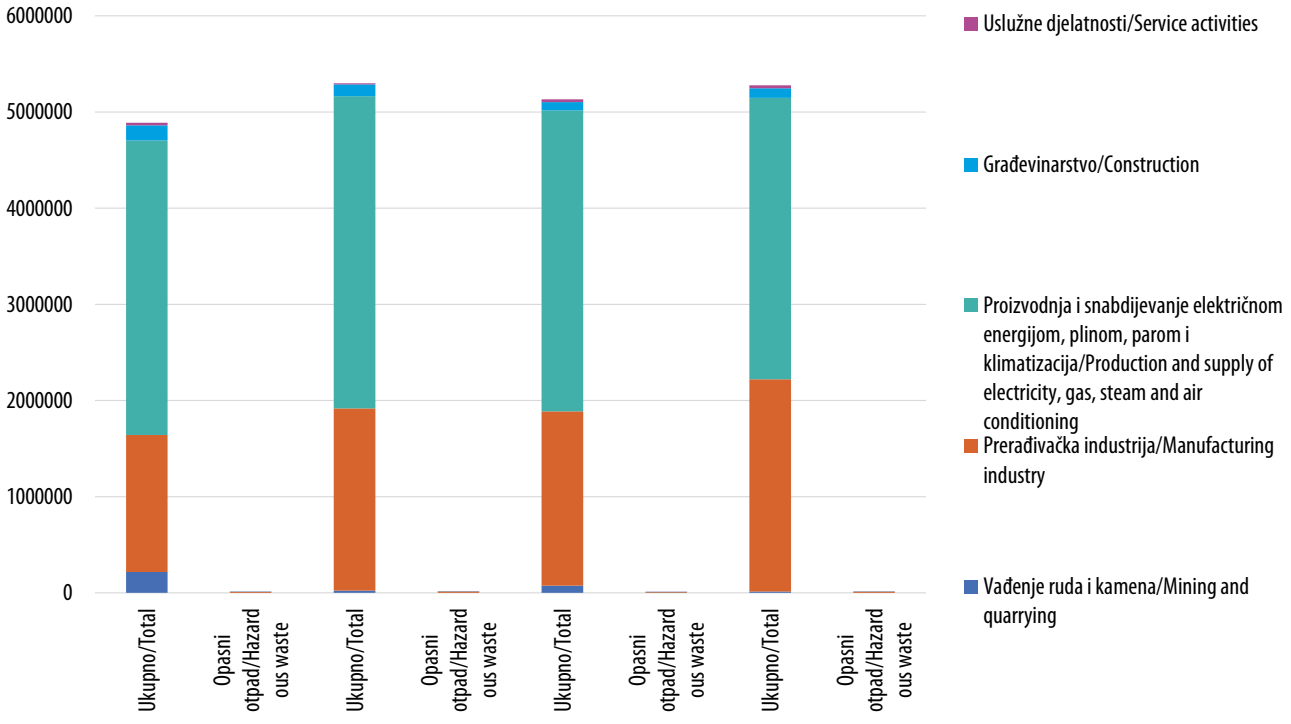
1.1. WASTE FROM PRODUCTION AND SERVICE ACTIVITIES

Tabela 1.1.1. Ukupni i opasni otpad nastao iz proizvodnih i uslužnih djelatnosti, 2016.-2022., Bosna i Hercegovina
Table 1.1.1. Total and hazardous waste generated from production and service activities, 2016-2022, Bosnia and Herzegovina

	2016.		2018.		2020.		2022.	
PODRUČJE KLASIFIKACIJE DJELATNOSTI BIH *THE FIELD OF CLASSIFICATION OF ACTIVITIES OF BOSNIA AND HERZEGOVINA*	Ukupno / *Total*	Opasni otpad / *Hazardous waste*	Ukupno / *Total*	Opasni otpad / *Hazardous waste*	Ukupno / *Total*	Opasni otpad / *Hazardous waste*	Ukupno / *Total*	Opasni otpad / *Hazardous waste*
VAĐENJE RUDA I KAMENA *MINING AND QUARRYING*	216.355	358	23.701	293	75.201,09	513,45	13.627,4	374.2
PRERAĐIVAČKA INDUSTRIJA *MANUFACTURING INDUSTRY*	1.425.537	106.38	1.893.270	12.967	1.812.627	7.122,39	2.207.868	11.482,5
PROIZVODNJA I SNABDIJEVANJE ELEKTRIČNOM ENERGIJOM, PLINOM, PAROM I KLIMATIZACIJA *PRODUCTION AND SUPPLY OF ELECTRICITY, GAS, STEAM AND AIR CONDITIONING*	3.061.987	226	3.247.689	386	3.129.364	1.470,12	2.926.249	624,3
GRAĐEVINARSTVO *CONSTRUCTION*	156.920	650	122.916	112	85.977,05	204,71	9.930,.5	322,8
USLUŽNE DJELATNOSTI *SERVICE ACTIVITIES*	27.171	1.329	11.598	399	28.023,21	558,08	29.481	595,4
UKUPNO *TOTAL*	4.887.970	13.201	5.299.174	14.157	5.131.192	9.868,75	5.276.534	13.399,2

Izvor /*Source*: BHAS

Grafikon 1.1.1. Ukupni i opasni otpad nastao iz proizvodnih i uslužnih djelatnosti, 2016.-2022., Bosna i Hercegovina /*Graph 1.1.1. Total and hazardous waste generated from production and service activities, 2016-2022, Bosnia and Herzegovina*



U Bosni i Hercegovini je u periodu od 2016. do 2022. godine ukupna količina otpada nastalog iz proizvodnih i uslužnih djelatnosti porasla sa 4,89 miliona tona na 5,28 miliona tona, što predstavlja povećanje za 8,0%. Najveće količine otpada tokom cijelog perioda nastajale su u prerađivačkoj industriji, gdje je u 2022. godini proizvedeno 2,21 milion tona otpada, a slijedili su sektor proizvodnje i snabdijevanja električnom energijom, plinom, parom i klimatizacije sa 2,93 miliona tona te građevinarstvo sa 993,1 hiljadu tona. Količina opasnog otpada na nivou Bosne i Hercegovine povećana je sa 13,2 hiljade tona u 2016. godini na 13,4 hiljade tona u 2022. godini. Najveći dio opasnog otpada poticao je iz prerađivačke industrije, koja je u 2022. godini generirala 11,5 hiljada tona, odnosno više od četiri petine ukupno proizvedenog opasnog otpada.

In Bosnia and Herzegovina, the total amount of waste generated from production and service activities increased from 4.89 million tons to 5.28 million tons between 2016 and 2022, an increase of 8.0%. The largest amounts of waste throughout the period were generated in the manufacturing industry, where 2.21 million tons of waste were produced in 2022, followed by the electricity, gas, steam and air conditioning supply sector with 2.93 million tons and construction with 993.1 thousand tons. The amount of hazardous waste at the level of Bosnia and Herzegovina increased from 13.2 thousand tons in 2016 to 13.4 thousand tons in 2022. The largest share of hazardous waste came from the manufacturing industry, which generated 11.5 thousand tons in 2022, or more than four-fifths of the total hazardous waste produced.

Tabela 1.1.2. Otpad nastao iz proizvodnih i uslužnih djelatnosti po listi otpada, 2016.-2024., Bosna i Hercegovina
Table 1.1.2. Waste generated from production and service activities according to the waste list, 2016-2024, Bosnia and Herzegovina

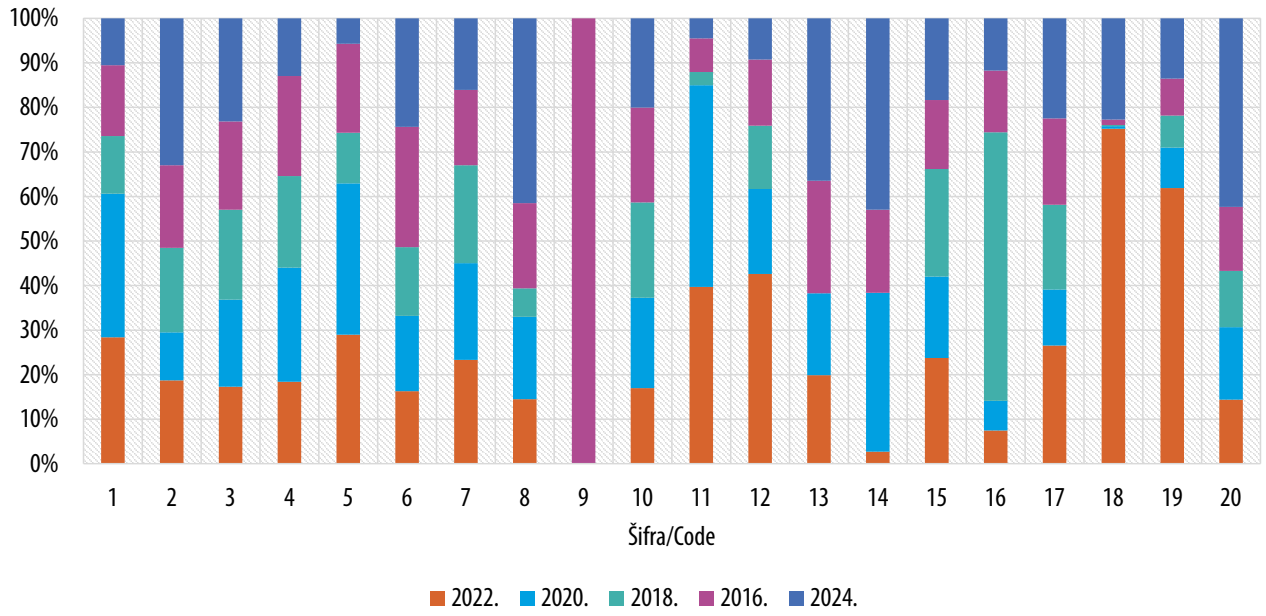
ŠIFRA *CODE*	LISTA OTPADA *WASTE LIST*	2016.	2018.	2020.	2022.	2024.
1	Otpad koji nastaje pri istraživanju, eksploatiranju i fizičko-hemijskoj obradi mineralnih sirovina *Waste generated during the exploration, exploitation and physical and chemical processing of mineral raw materials*	687.904	781.620	314.780,55	384.663,8	255.457,4
2	Otpad iz poljoprivrede, vrtlarstva, proizvodnje vodenih kultura, šumarstva, lova i ribarstva, pripremanja hrane i prerade *Waste from agriculture, gardening, aquaculture, forestry, hunting and fishing, food preparation and processing*	48.937	28.094	49.509,87	48.407,25	86.164,63
3	Otpad od prerade drveta i proizvodnje ploča i namještaja, celuloze, papira i kartona *Waste from wood processing and the production of panels and furniture, cellulose, paper and cardboard*	201.156	227.586	234.361,7	230.270,4	269.494,2
4	Otpad iz kožarske, krznarske i tekstilne industrije *Waste from the leather, fur and textile industry*	3.565	4.949	3.977,94	4.336,66	2.507,97
5	Otpad od prerade nafte, prečišćavanja prirodnog plina i pirolitičke obrade uglja *Waste from oil refining, natural gas refining and coal pyrolysis processing*	4.692	5.510	1.841,4	3.233,06	927,98
6	Otpad iz anorganskih hemijskih procesa *Waste from inorganic chemical processes*	221.539	229.356	209.457,5	366.407,9	331.056,6
7	Otpad iz organskih hemijskih procesa *Waste from organic chemical processes*	2.930	2.724	2.758,97	2.123,22	2.019,62
8	Otpad od proizvodnje, formulacija, prodaje i primjene premaza (boje, lakovi i staklasti emajli), ljepila, sredstva za zaptivanje i štamparskih boja *Waste from the production, formulation, sale and application of coatings (paints, varnishes and vitreous enamels), adhesives, sealants and printing inks*	141	180	62,38	185,99	403,38
9	Otpad iz fotografske industrije *Waste from the photographic industry*			0	0,4	0
10	Otpad iz termičkih procesa *Waste from thermal processes*	3.138.494	3.757.149	3.953.964	3.929.187	3.707.776
11	Otpad od hemijske površinske obrade i zaštite metala i drugih materijala; hidrometalurgija neželjeznih metala *Waste from chemical surface treatment and protection of metals and other materials; hydrometallurgy of non-ferrous metals*	8.818	10.055	653,47	1.672,91	1.002,58
12	Otpad od oblikovanja i površinske obrade metala i plastike *Waste from shaping and surface treatment of metals and plastics*	80.517	35.995	26.861,34	27.997,13	17.536,98
13	Otpadna ulja (osim jestivih ulja, 05, 12 i 19) *Waste oils (except edible oils, 05, 12 and 19)*	1.600	1.483	0	2.030,29	2.935,83
14	Otpad od organskih supstanci koje se koriste kao rastvarači (osim 07 i 08) *Waste from organic substances used as solvents (except 07 and 08)*	2	26	0	13,63	31,33
15	Otpadna ambalaža; apsorbensi, tkanine i sredstva za brisanje i upijanje, filterski materijali i zaštitna odjeća koja nije specificirana na drugi način *Waste packaging; absorbents, wiping and absorbing fabrics and materials, filter materials and protective clothing not otherwise specified*	19.809	15.226	20.122,12	12.894,53	15.310,37
16	Otpad koji nije specifikovan u katalogu *Waste not specified in the catalogue*	8.309	7.390	66.889,9	15.323,54	13.033,38
17	Građevinski otpad i otpad od rušenja objekata (uključujući otpad od izgradnje cesta) *Construction and demolition waste (including road construction waste)*	248.058	117.396	177.981,92	181.239,8	209.878

nastavak /*continued*

ŠIFRA *CODE*	LISTA OTPADA *WASTE LIST*	2016.	2018.	2020.	2022.	2024.
18	Otpad koji nastaje kod zaštite zdravlja ljudi i životinja i/ili srodnih istraživanja (isključujući otpad iz domaćinstava i restorana koji ne potiče iz neposredne zdravstvene zaštite) *Waste generated in the protection of human and animal health and/or related research (excluding household and restaurant waste not originating from direct health care)*	7.012	57	22,25	114,72	2.118,16
19	Otpad iz postrojenja za upravljanje otpadom, postrojenja za prečišćavanje gradskih otpadnih voda i pripremu vode za piće i industrijsku upotrebu *Waste from waste management facilities, urban wastewater treatment plants and water preparation for drinking and industrial use*	159.353	23.367	18.493,06	21.338,36	34.911,69
20	Komunalni otpad i slični otpad iz industrije, trgovine i zanatskih pogona, uključujući odvojeno prikupljene frakcije *Municipal waste and similar waste from industry, commerce and craft establishments, including separately collected fractions*	45.134	51.012	39.584,54	45.092,71	132.592,3

Izvor /*Source:* BHAS

Grafikon 1.1.2. Otpad nastao iz proizvodnih i uslužnih djelatnosti po listi otpada, 2016.-2024., Bosna i Hercegovina /*Graph 1.1.2. Waste generated from production and service activities according to the waste list, 2016-2024, Bosnia and Herzegovina*



U Bosni i Hercegovini je u periodu od 2016. do 2024. godine najveći dio proizvedenog otpada kontinuirano poticao iz termičkih procesa, pri čemu su se količine kretale od 3,14 miliona tona u 2016. godini do 3,71 miliona tona u 2024. godini. Značajne količine otpada nastajale su i u anorganskim hemijskim procesima, pri preradi drveta i proizvodnji papira, te pri istraživanju i eksploataciji mineralnih sirovina. Važan udio u ukupno proizvedenom otpadu imali su i građevinski otpad te komunalni otpad iz industrije, trgovine i zanatskih djelatnosti. Posmatrano u cjelini, strukturu proizvedenog otpada u Bosni i Hercegovini tokom cijelog perioda karakteriše dominacija otpada iz termičkih i industrijskih procesa.

In Bosnia and Herzegovina, in the period from 2016 to 2024, the largest portion of waste generated continuously came from thermal processes, with the quantities ranging from 3.14 million tons in 2016 to 3.71 million tons in 2024. Significant amounts of waste were also generated in inorganic chemical processes, in wood processing and paper production, and in the exploration and exploitation of mineral raw materials. Construction waste and municipal waste from industry, trade and craft activities also had an important share in the total waste generated. Viewed as a whole, the structure of waste generated in Bosnia and Herzegovina throughout the entire period is characterized by the dominance of waste from thermal and industrial processes.

1.2. KOMUNALNI OTPAD

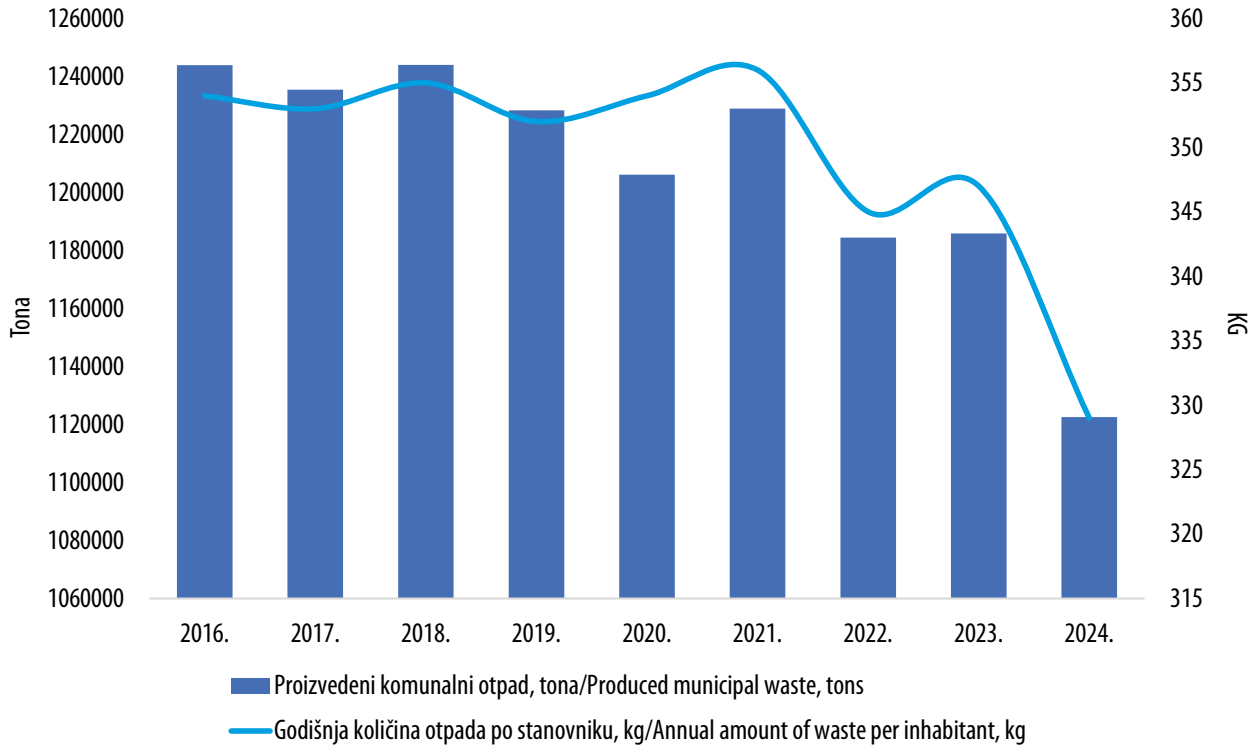
1.2. MUNICIPAL WASTE

Tabela 1.2.1. Proizvedeni komunalni otpad, 2016.-2024., Bosna i Hercegovina
Table 1.2.1. Produced municipal waste, 2016-2024, Bosnia and Herzegovina

	2016.	2017.	2018.	2019.	2020.	2021.	2022.	2023.	2024.
Proizvedeni komunalni otpad, tona *Produced municipal waste, tonnes*	1.243.889	1.235.449	1.243.973	1.228.309	1.206.147	1.228.915,9	1.184.449	1.185.899	1.122.532
Godišnja količina otpada po stanovniku, kg *Annual amount of waste per inhabitant, kg*	354	353	355	352	354	356	345	347	329
Dnevna količina otpada po stanovniku, kg *Daily amount of waste per inhabitant, kg*	0,97	0,97	0,97	0,98	0,97	0,98	0,94	0,95	0,9

Izvor /*Source*: BHAS

Grafikon 1.2.1. Proizvedeni komunalni otpad, 2016.-2024., Bosna i Hercegovina
Graph 1.2.1. Produced municipal waste, 2016-2024, Bosnia and Herzegovina



U Bosni i Hercegovini je količina proizvedenog komunalnog otpada u periodu od 2016. do 2024. godine pokazala blagi trend smanjenja. Ukupna količina proizvedenog komunalnog otpada smanjena je sa 1,24 miliona tona u 2016. godini na 1,12 miliona tona u 2024. godini, što predstavlja smanjenje za 9,8%. Istovremeno, godišnja količina otpada po stanovniku smanjena je sa 354 kg na 329 kg, dok je dnevna količina otpada po stanovniku pala sa 0,97 kg na 0,90 kg. Najveća količina komunalnog otpada zabilježena je 2018. godine, kada je proizvedeno 1,24 miliona tona, dok je najniža vrijednost evidentirana 2024. godine. Ovi podaci ukazuju na postepeno smanjenje količine proizvedenog komunalnog otpada i otpada po stanovniku tokom posmatranog perioda.

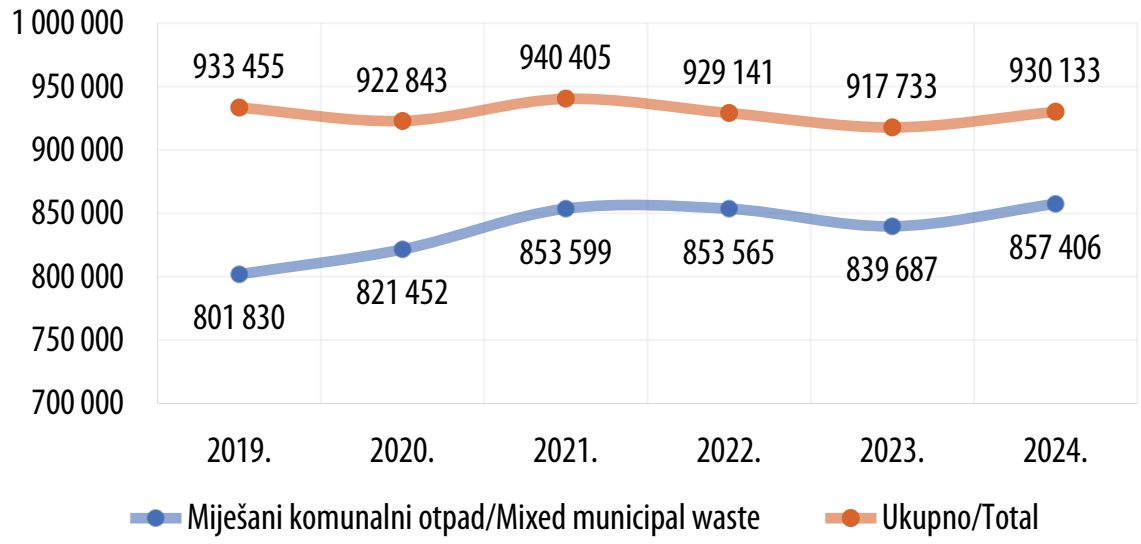
In Bosnia and Herzegovina, the amount of municipal waste generated in the period from 2016 to 2024 showed a slight downward trend. The total amount of municipal waste generated decreased from 1.24 million tons in 2016 to 1.12 million tons in 2024, which represents a decrease of 9.8%. At the same time, the annual amount of waste per capita decreased from 354 kg to 329 kg, while the daily amount of waste per capita decreased from 0.97 kg to 0.90 kg. The highest amount of municipal waste was recorded in 2018, when 1.24 million tons were generated, while the lowest value was recorded in 2024. These data indicate a gradual decrease in the amount of municipal waste generated and waste per capita during the observed period.

Tabela 1.2.2. Komunalni otpad prikupljen javnim odvozom, 2019.-2024., Bosna i Hercegovina
Table 1.2.2. Municipal waste collected by public collection, 2019-2024, Bosnia and Herzegovina

	2019.	2020.	2021.	2022.	2023.	2024.
Miješani komunalni otpad *Mixed municipal waste*	801.830	821.452	853.599	853.565	839.687	857.406.,8
Ukupno *Total*	933.455	922.843	940.405	929.141	917.733	930.133

Izvor /*Source*: BHAS

Grafikon 1.2.2. Komunalni otpad prikupljen javnim odvozom, 2019.-2024., Bosna i Hercegovina
Graph 1.2.2. Municipal waste collected by public collection, 2019-2024, Bosnia and Herzegovina



U Bosni i Hercegovini je u periodu od 2019. do 2024. godine javnim odvozom godišnje prikupljano između 917,7 hiljada i 940,4 hiljade tona komunalnog otpada. Ukupna količina prikupljenog otpada iznosila je 933,5 hiljada tona u 2019. godini, dok je u 2024. godini evidentirano 930,1 hiljada tona, što ukazuje na relativno stabilan nivo prikupljanja otpada tokom posmatranog perioda. Najveći dio prikupljenog otpada činio je miješani komunalni otpad, čija je količina porasla sa 801,8 hiljada tona u 2019. godini na 857,4 hiljade tona u 2024. godini. Time je udio miješanog komunalnog otpada u ukupno prikupljenom otpadu dodatno povećan, potvrđujući njegov dominantan udio u strukturi komunalnog otpada.

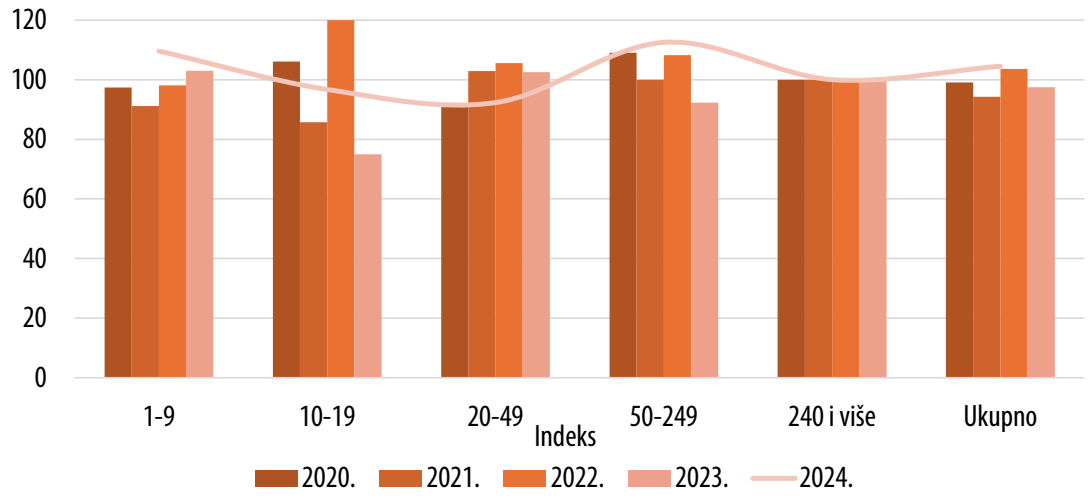
In Bosnia and Herzegovina, between 917.7 thousand and 940.4 thousand tons of municipal waste were collected annually by public collection in the period from 2019 to 2024. The total amount of waste collected was 933.5 thousand tons in 2019, while 930.1 thousand tons were recorded in 2024, indicating a relatively stable level of waste collection during the observed period. The largest part of the collected waste was mixed municipal waste, the amount of which increased from 801.8 thousand tons in 2019 to 857.4 thousand tons in 2024. This further increased the share of mixed municipal waste in the total waste collected, confirming its dominant share in the structure of municipal waste.

Tabela 1.2.3. Broj preduzeća u djelatnostima sakupljanja otpada, djelatnosti obrade i zbrinjavanja otpada, reciklaža otpada, prema klasama broja zaposlenih, 2020.-2024., Bosna i Hercegovina
Table 1.2.3. Number of companies in waste collection activities, waste treatment and disposal activities, waste recycling, by employment class, 2020-2024, Bosnia and Herzegovina

Broj preduzeća *Number of enterprises*	2020.	2021.	2022.	2023.	2024.	2024.
1-9	97.4	91.2	98.1	103	109.6	930.133
10-19	106.1	85.7	133.3	75	96.7	
20-49	92.1	102.9	105.6	102.6	92.3	
50-249	109.1	100	108.3	92.3	112.5	
240 i više */240 and more*	100	100	100	100	100	
Ukupno */Total*	99.1	94.3	103.6	97.5	104.5	

Izvor */Source*: BHAS

Grafikon 1.2.3. Broj preduzeća u djelatnostima sakupljanja otpada, djelatnosti obrade i zbrinjavanja otpada, reciklaža otpada, prema klasama broja zaposlenih, 2020.-2024., Bosna i Hercegovina
Graph 1.2.3. Number of companies in waste collection activities, waste treatment and disposal activities, waste recycling, by employment class, 2020-2024, Bosnia and Herzegovina



U Bosni i Hercegovini je broj preduzeća u djelatnostima sakupljanja, obrade i zbrinjavanja otpada te reciklaže otpada u periodu od 2020. do 2024. godine pokazivao određene oscilacije. Ukupni indeks broja preduzeća kretao se od 94,3 u 2021. godini do 104,5 u 2024. godini, što ukazuje na blagi rast u odnosu na prethodnu godinu. Najizraženije promjene zabilježene su kod preduzeća sa 10 do 19 zaposlenih i preduzeća sa 50 do 249 zaposlenih, dok je broj najvećih preduzeća sa 250 i više zaposlenih ostao nepromijenjen tokom cijelog posmatranog perioda. Posmatrano prema veličini preduzeća, najveći rast u 2024. godini ostvaren je kod preduzeća sa 1 do 9 zaposlenih i preduzeća sa 50 do 249 zaposlenih.

In Bosnia and Herzegovina, the number of companies in the waste collection, treatment and disposal and waste recycling activities showed certain oscillations in the period from 2020 to 2024. The total index of the number of companies ranged from 94.3 in 2021 to 104.5 in 2024, indicating a slight increase compared to the previous year. The most pronounced changes were recorded in companies with 10 to 19 employees and companies with 50 to 249 employees, while the number of the largest companies with 250 or more employees remained unchanged throughout the observed period. Observed by company size, the largest growth in 2024 was achieved in companies with 1 to 9 employees and companies with 50 to 249 employees.

1.3. ELEKTRIČNI I ELEKTRONSKI OTPAD

1.2. ELECTRICAL AND ELECTRONIC WASTE

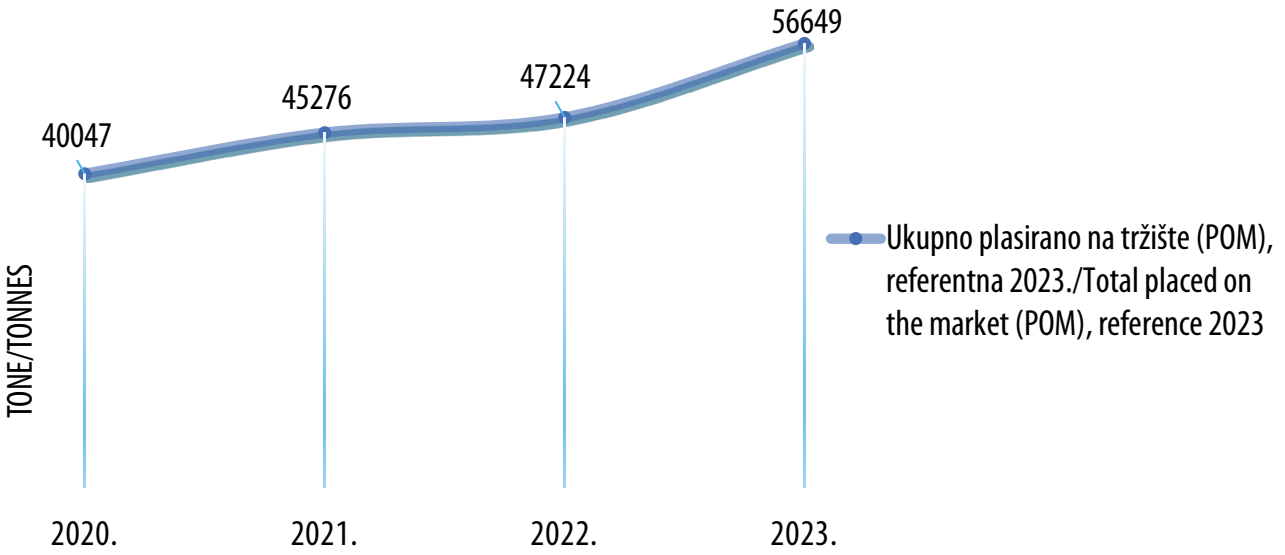
Tabela 1.3.1. Električna i elektronska oprema plasirana na tržište, 2020.-2023., Bosna i Hercegovina
Table 1.3.1. Electrical and electronic equipment placed on the market, 2020-2023, Bosnia and Herzegovina

Tona /*Tonnes*

	2020.	2021.	2022.	2023.
Ukupno plasirano na tržište (POM), referentna 2023. *Total placed on the market (POM), reference 2023*	40.047	45.276	47.224	56.649

Izvor /*Source:* BHAS

Grafikon 1.3.1. Električna i elektronska oprema plasirana na tržište, 2020.-2023., Bosna i Hercegovina
Graph 1.3.1. Electrical and electronic equipment placed on the market, 2020-2023, Bosnia and Herzegovina



U Bosni i Hercegovini je količina električne i elektronske opreme plasirane na tržište u periodu od 2020. do 2023. godine bilježila kontinuiran rast. Ukupna količina plasirane opreme povećana je sa 40,0 hiljada tona u 2020. godini na 56,6 hiljada tona u 2023. godini, što predstavlja povećanje za 41,5%. Rast je zabilježen tokom cijelog posmatranog perioda, pri čemu je najveća količina električne i elektronske opreme plasirana na tržište u 2023. godini. Ovi podaci ukazuju na povećanu potrošnju i dostupnost električne i elektronske opreme u Bosni i Hercegovini.

In Bosnia and Herzegovina, the quantity of electrical and electronic equipment placed on the market in the period from 2020 to 2023 recorded continuous growth. The total quantity of equipment placed on the market increased from 40.0 thousand tons in 2020 to 56.6 thousand tons in 2023, which represents an increase of 41.5%. Growth was recorded throughout the observed period, with the largest quantity of electrical and electronic equipment placed on the market in 2023. These data indicate increased consumption and availability of electrical and electronic equipment in Bosnia and Herzegovina.

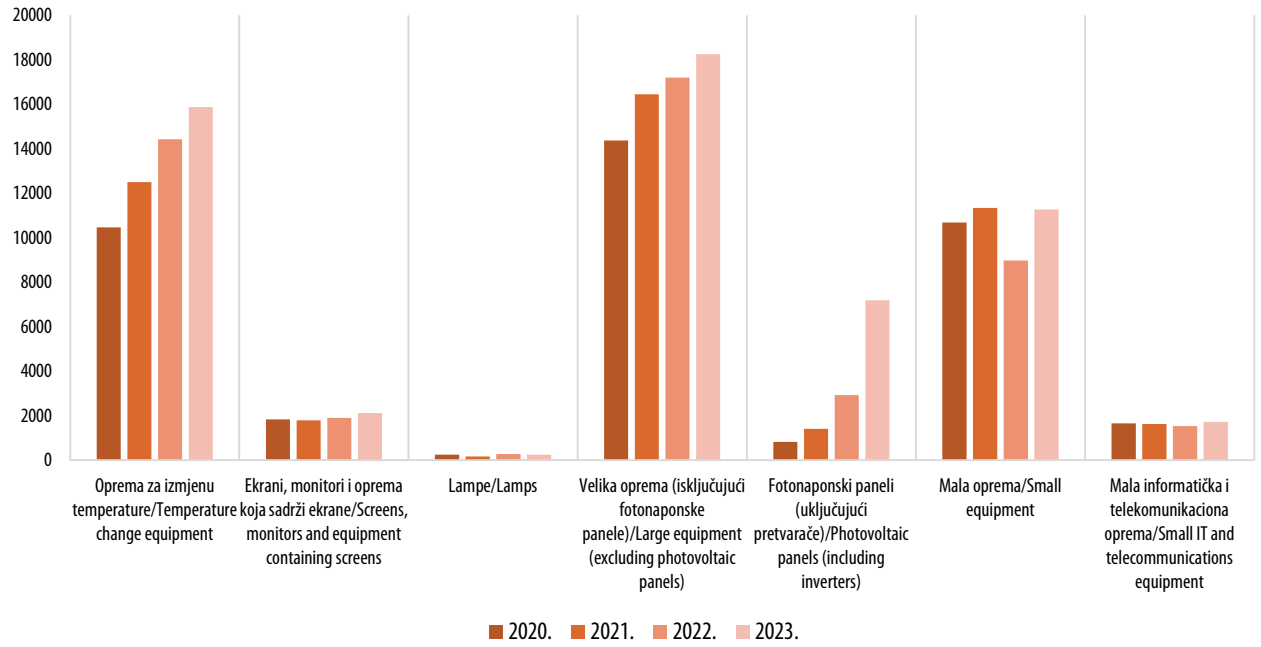
Tabela 1.3.2. Električna i elektronska oprema plasirana na tržište (EU6), 2020.-2023., Bosna i Hercegovina
Table 1.3.2. Electrical and electronic equipment placed on the market (EU6), 2020-2023, Bosnia and Herzegovina

Tona /*Tonnes*

	2020.	2021.	2022.	2023.
Oprema za izmjenu temperature *Temperature change equipment*	10.461	12.498	14.424	15.871
Ekrani, monitori i oprema koja sadrži ekrane *Screens, monitors and equipment containing screens*	1.828	1.791	1.898	2.110
Lampe *Lamps*	239	164	264	244
Velika oprema (isključujući fotonaponske panele) *Large equipment (excluding photovoltaic panels)*	14.370	16.451	17.207	18.258
Fotonaponski paneli (uključujući pretvarače) *Photovoltaic panels (including inverters)*	815	1.404	2.926	7.187
Mala oprema *Small equipment*	10.678	11.339	8.974	11.267
Mala informatička i telekomunikaciona oprema *Small IT and telecommunications equipment*	1.656	1.628	1.531	1.712

Izvor /*Source*: BHAS

Grafikon 1.3.1. Električna i elektronska oprema plasirana na tržište (EU6), 2020.-2023., Bosna i Hercegovina
Graph 1.3.1. Electrical and electronic equipment placed on the market (EU6), 2020-2023, Bosnia and Herzegovina



U Bosni i Hercegovini je količina električne i elektronske opreme plasirane na tržište prema EU6 kategorijama u periodu od 2020. do 2023. godine uglavnom bilježila rast. Najveći udio činila je velika oprema, čija je količina povećana sa 14,4 hiljade tona u 2020. godini na 18,3 hiljade tona u 2023. godini, kao i oprema za izmjenu temperature, koja je porasla sa 10,5 hiljada tona na 15,9 hiljada tona. Posebno izražen rast zabilježen je kod fotonaponskih panela, čija je količina povećana sa 815 tona u 2020. godini na 7,2 hiljade tona u 2023. godini. Istovremeno, količine ekrana i monitora te male informatičke i telekomunikacione opreme ostale su relativno stabilne, dok su količine lampi tokom cijelog perioda bile znatno manje u odnosu na ostale kategorije.

In Bosnia and Herzegovina, the quantity of electrical and electronic equipment placed on the market according to EU6 categories in the period from 2020 to 2023 generally recorded growth. The largest share was accounted for by large equipment, the quantity of which increased from 14.4 thousand tons in 2020 to 18.3 thousand tons in 2023, as well as equipment for temperature change, which increased from 10.5 thousand tons to 15.9 thousand tons. Particularly pronounced growth was recorded for photovoltaic panels, the quantity of which increased from 815 tons in 2020 to 7.2 thousand tons in 2023. At the same time, the quantities of screens and monitors and small IT and telecommunications equipment remained relatively stable, while the quantities of lamps were significantly lower than in other categories throughout the period.

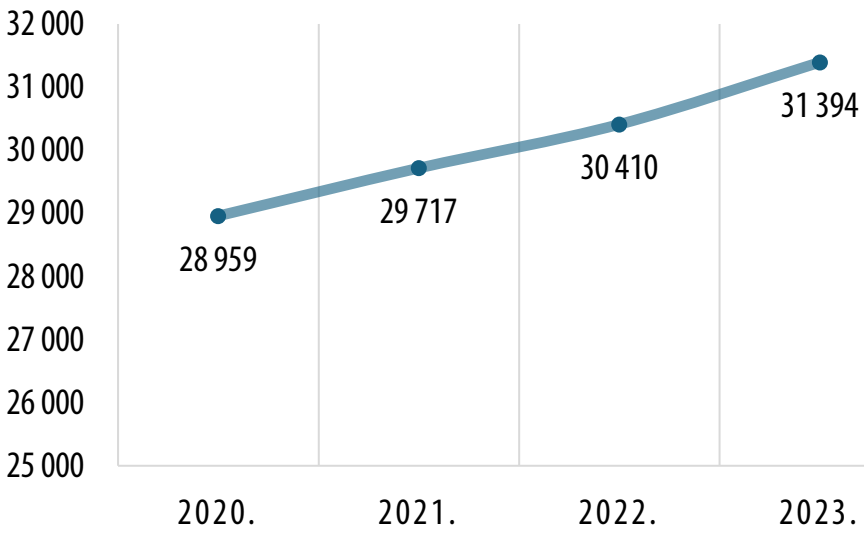
Tabela 1.3.3. Ukupno gerenisani električni i elektronski otpad, 2020.-2023., Bosna i Hercegovina
Table 1.3.3. Total generated electrical and electronic waste, 2020-2023, Bosnia and Herzegovina

Tona /*Tonnes*

	2020.	2021.	2022.	2023.
Ukupno generisani e-otpad *Total e-waste generated*	28.959	29.717	30.410	31.394

Izvor /*Source*: BHAS

Grafikon 1.3.3. Ukupno gerenisani električni i elektronski otpad, 2020.-2023., Bosna i Hercegovina
Graph 1.3.3. Total generated electrical and electronic waste, 2020-2023, Bosnia and Herzegovina



U Bosni i Hercegovini je količina generisanog električnog i elektronskog otpada u periodu od 2020. do 2023. godine kontinuirano rasla. Ukupno generisani e-otpad povećan je sa 28,9 hiljada tona u 2020. godini na 31,4 hiljade tona u 2023. godini, što predstavlja povećanje za 8,4%. Rast je zabilježen tokom cijelog posmatranog perioda, a najveća količina e-otpada evidentirana je u 2023. godini. Ovi podaci ukazuju na kontinuirano povećanje količine električnog i elektronskog otpada, što je povezano sa rastom upotrebe električne i elektronske opreme.

In Bosnia and Herzegovina, the amount of electrical and electronic waste generated has been continuously increasing in the period from 2020 to 2023. The total amount of e-waste generated has increased from 28.9 thousand tons in 2020 to 31.4 thousand tons in 2023, which represents an increase of 8.4%. Growth was recorded throughout the observed period, and the largest amount of e-waste was recorded in 2023. These data indicate a continuous increase in the amount of electrical and electronic waste, which is associated with the growth in the use of electrical and electronic equipment.

1.4. PREKOGRANIČNI PROMET OTPADA

1.4. TRANSBOUNDARY MOVEMENTS OF WASTE

Tabela 1.4.1. Izvori prerađenog i odstranjenog otpada, 2014.-2024., Bosna i Hercegovina
Table 1.4.1. Sources of processed and disposed waste, 2014-2024, Bosnia and Herzegovina

Tona /*Tonnes*

	Ukupno *Total*	S područja BiH *From BiH territory*	Uvezeno u BiH *Imported to BiH*	Privremeno skladišteno *Temporarily stored*
2014.	534.869	474.144	5.774	54.951
2015.	528.002	438.598	17.989	71.415
2016.	598.865	501.712	31.602*	65.551
2017.	635.547	542.685	37.421*	55.441
2018.	689.708	583.293	45.568	60.847
2019.	638.423	525.249	29.763	83.411
2020.	613.597	502.628	9.415	101.554
2021.	781.234*	686.610	19.550	75.074*
2022.	790.565	681.655	16.070	92.840
2023.	656.248	522.908	20.670	112.670
2024.	878.955	724.802*	25.221	128.932

*Korigovan podatak /**Data corrected*
Izvor /*Source*: BHAS

U Bosni i Hercegovini je u periodu 2014.–2024. zabilježen rast količine prerađenog i odstranjenog otpada, sa 534 869 tona u 2014. godini na 878 955 tona u 2024. godini. Najveći dio otpada tokom cijelog perioda potiče s područja BiH (724 802 tone u 2024.), dok uvezeni otpad čini znatno manji udio. Istovremeno, količina privremeno skladištenog otpada povećana je sa 54 951 na 128 932 tone, što ukazuje na rast ukupnih količina otpada kojima se upravlja.

In Bosnia and Herzegovina, an increase in the amount of processed and disposed waste was recorded in the period 2014–2024, from 534,869 tons in 2014 to 878,955 tons in 2024. The largest part of the waste throughout the period originated from the territory of BiH (724,802 tons in 2024), while imported waste accounts for a significantly smaller share. At the same time, the amount of temporarily stored waste increased from 54,951 to 128,932 tons, indicating an increase in the total amount of waste managed.

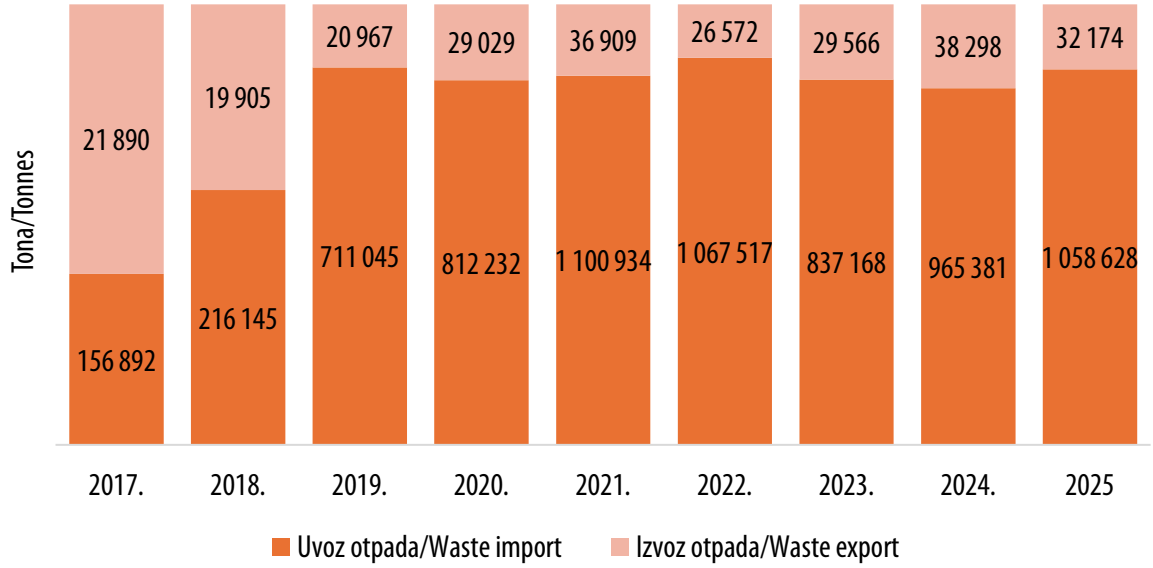
Tabela 1.4.2. Uvoz i izvoz otpada, 2017-2025., Bosna i Hercegovina
Table 1.4.2. Waste import and export, 2017-2025, Bosnia and Herzegovina

Tona /*Tonnes*

	2017.	2018.	2019.	2020.	2021.	2022.	2023.	2024.	2025.
Uvoz otpada *Waste import*	156.892	216.145	711.045	812.232	1.100.934	1.067.517	837.168	965.381	1.058.628
Izvoz otpada *Waste export*	21.890	19.905	20.967	29.029	36.909	26.572	29.566	38.298	32.174

Izvor /*Source*: BHAS

Grafikon 1.4.1. Uvoz i izvoz otpada, 2017.-2025., Bosna i Hercegovina
Graph 1.4.1. Waste import and export, 2017-2025, Bosnia and Herzegovina



U Bosni i Hercegovini je u periodu od 2017. do 2025. godine uvoz otpada značajno porastao, sa 156,9 hiljada tona u 2017. godini na 1,06 miliona tona u 2025. godini, pri čemu je najveća količina uvezenog otpada zabilježena 2021. godine i iznosila je 1,10 miliona tona. Istovremeno, izvoz otpada bio je znatno manji i kretao se između 19,9 hiljada i 38,3 hiljade tona, pri čemu je najveća količina izvezena 2024. godine. Tokom cijelog posmatranog perioda količine uvezenog otpada višestruko su premašivale količine izvezenog otpada, što ukazuje na izraženu uvoznu komponentu u prekograničnom prometu otpada u Bosni i Hercegovini.

In Bosnia and Herzegovina, waste imports increased significantly from 156.9 thousand tons in 2017 to 1.06 million tons in 2025, with the highest amount of imported waste recorded in 2021, amounting to 1.10 million tons. At the same time, waste exports were significantly lower, ranging between 19.9 thousand and 38.3 thousand tons, with the highest amount exported in 2024. Throughout the observed period, the quantities of imported waste exceeded the quantities of exported waste by several times, indicating a significant import component in cross-border waste traffic in Bosnia and Herzegovina.

2.
VODE
WATER

2.1. ZAŠTITA VODA U INDUSTRIJI

1.4. PROTECTION OF WATER IN INDUSTRY

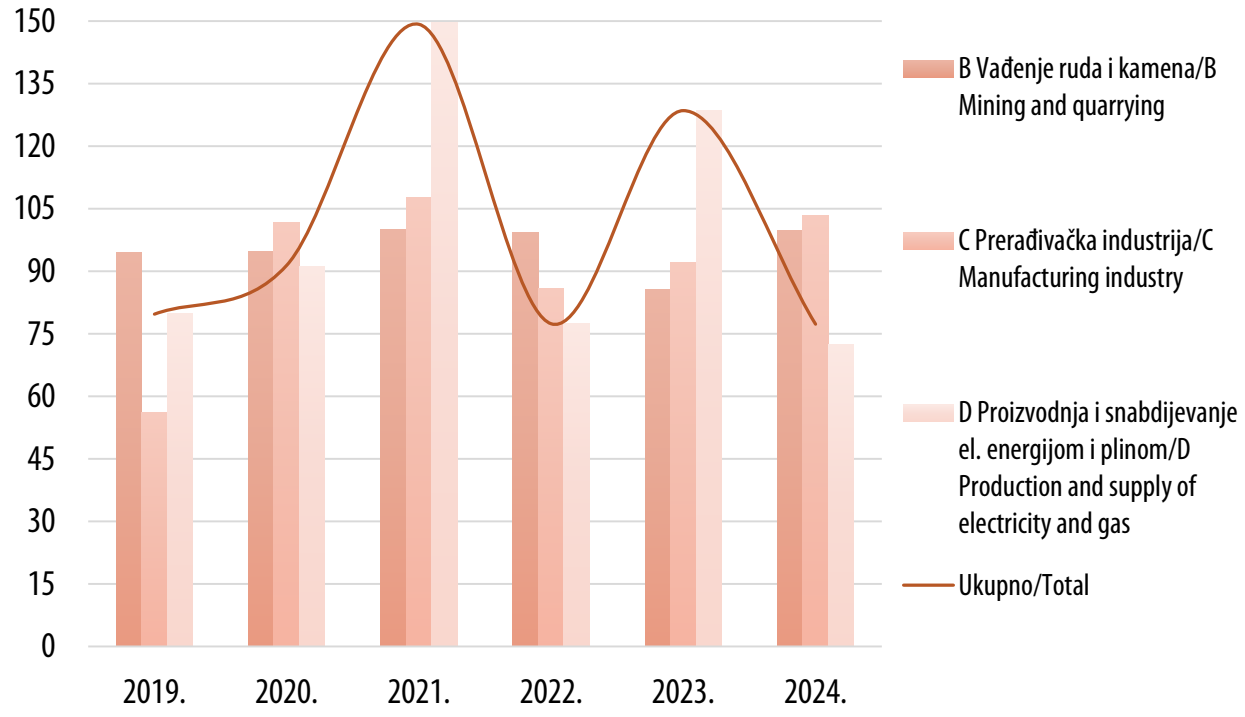
Tabela 2.1.1. Korištena voda u industriji, 2019.-2024., Bosna i Hercegovina
Table 2.1.1. Water used in industry, 2019-2024, Bosnia and Herzegovina

Indeks */Index*

	2019.	2020.	2021.	2022.	2023.	2024.
Ukupno *Total*	79.7	91.4	149.2	77.4	128.5	77.3
B Vađenje ruda i kamena *B Mining and quarrying*	94.4	94.7	99.9	99.3	85.5	99.7
C Prerađivačka industrija *C Manufacturing industry*	56.1	101.7	107.7	86	92.2	103.3
D Proizvodnja i snabdijevanje el. energijom i plinom *D Production and supply of electricity and gas*	79.9	91.2	149.6	77.4	128.6	72.3

Izvor /*Source*: BHAS

Grafikon 2.1.1. Korištena voda u industriji, 2019.-2024., Bosna i Hercegovina
Graph 2.1.1. Water used in industry, 2019-2024, Bosnia and Herzegovina



U Bosni i Hercegovini je korištenje vode u industriji u periodu od 2019. do 2024. godine pokazalo značajne oscilacije. Ukupan indeks korištene vode dostigao je najvišu vrijednost u 2021. (149,2), nakon čega je uslijedio pad na 77,4 u 2022., dok je u 2023. godini ponovo zabilježen rast na 128,5. U 2024. godini indeks je iznosio 77,3, što je niže u odnosu na početak posmatranog perioda. Posmatrano po djelatnostima, najveće oscilacije zabilježene su u sektoru proizvodnje i snabdijevanja električnom energijom i plinom, gdje je indeks porastao na 149,6 u 2021., a zatim pao na 72,3 u 2024. godini. Prerađivačka industrija je također bilježila promjene, pri čemu je indeks u 2024. iznosio 103,3, dok je u vađenju ruda i kamena korištenje vode bilo relativno stabilno tokom cijelog perioda, s vrijednostima između 85,5 i 99,9. Ovi podaci ukazuju na promjenjive obrasce korištenja vode u industriji, prvenstveno pod uticajem kretanja u energetskom i prerađivačkom sektoru.

In Bosnia and Herzegovina, water use in industry showed significant fluctuations between 2019 and 2024. The total water use index reached its highest value in 2021 (149.2), followed by a decline to 77.4 in 2022, while in 2023 it increased again to 128.5. In 2024, the index was 77.3, which is lower than at the beginning of the observed period. Observed by activity, the largest fluctuations were recorded in the electricity and gas production and supply sector, where the index increased to 149.6 in 2021, and then decreased to 72.3 in 2024. The manufacturing industry also experienced changes, with an index of 103.3 in 2024, while in mining and quarrying water use was relatively stable throughout the period, with values between 85.5 and 99.9. These data indicate changing patterns of water use in industry, primarily influenced by developments in the energy and manufacturing sectors.

2.2. JAVNO VODOSNADBIJEVANJE

2.2. PUBLIC WATER SUPPLY

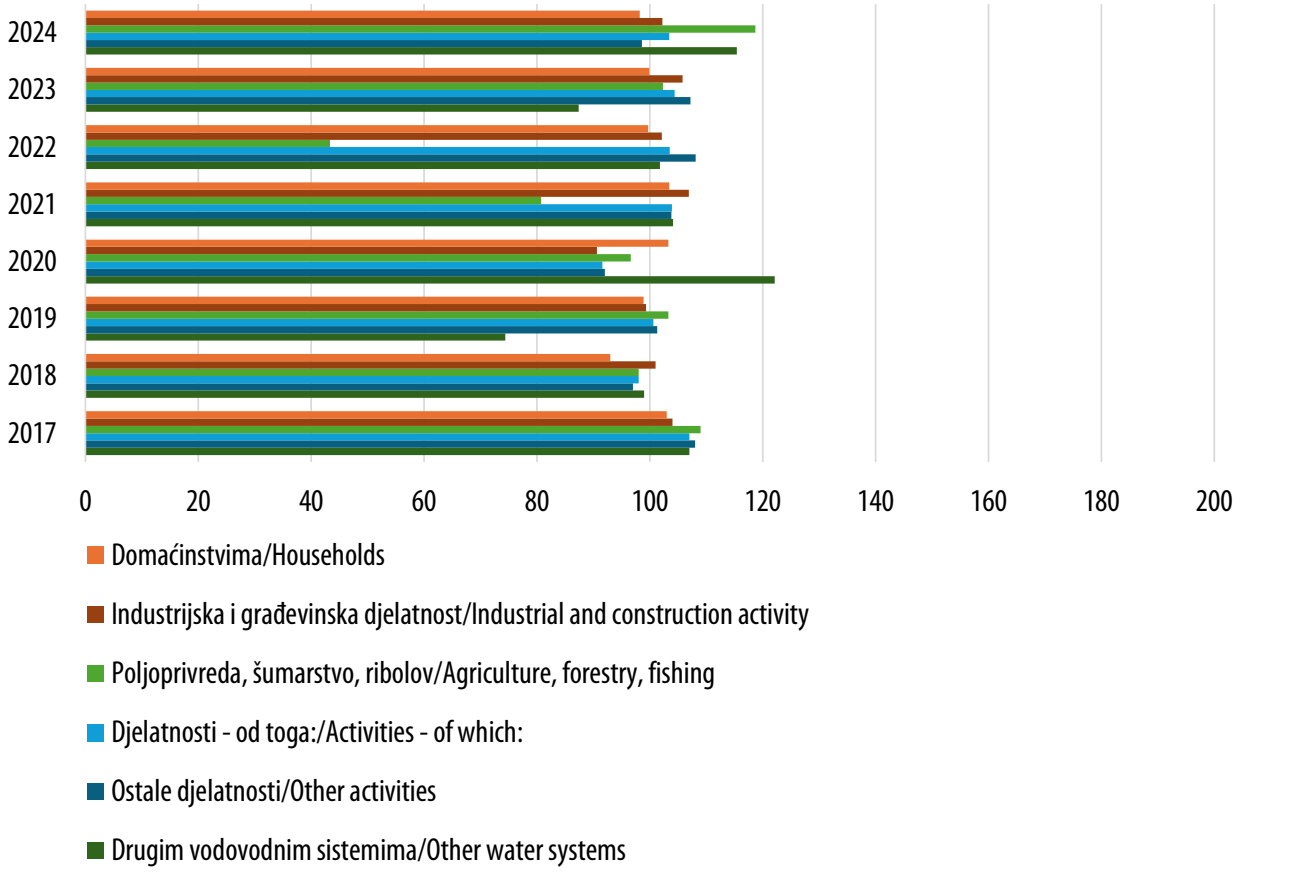
Tabela 2.2.1. Isporučene vode iz javnog vodovoda, 2017.-2024., Bosna i Hercegovina
Table 2.2.1. Water supplied from public water supply, 2017-2024, Bosnia and Herzegovina

Indeks /*Index*

	2017.	2018.	2019.	2020.	2021.	2022.	2023.	2024.
Ukupno *Total*	102	98	98.9	101.4	103.3	100.5	102.1	100.3
Domaćinstvima *Households*	103	93	98.9	103.3	103.4	99.7	99.9	98.2
Djelatnosti – od toga: *Activities – of which:*	107	98	100.6	91.6	103.9	103.5	104.4	103.4
Poljoprivreda, šumarstvo, ribolov *Agriculture, forestry, fishing*	109	98	103.3	96.6	80.7	43.3	102.3	118,7
Industrijska i građevinska djelatnost *Industrial and construction activity*	104	101	99.3	90.6	106.9	102.1	105.8	102.2
Ostale djelatnosti *Other activities*	108	97	101.3	92	103.8	108.1	107.2	98.6
Drugim vodovodnim sistemima *Other water systems*	107	99	74.4	122.1	104.1	101.8	87.4	115.4

Izvor /*Source*: BHAS

Grafikon 2.2.1. Isporučene vode iz javnog vodovoda, 2017.-2024., Bosna i Hercegovina
Graph 2.2.1. Water supplied from public water supply, 2017-2024, Bosnia and Herzegovina



U Bosni i Hercegovini indeks isporučene vode iz javnog vodovoda u periodu od 2017. do 2024. godine ukazuje na relativno stabilno kretanje isporuka. Ukupni indeks kretao se od 98,0 u 2018. do 103,3 u 2021., dok je u 2024. godini iznosio 100,3, što pokazuje da nije bilo značajnijih odstupanja u odnosu na bazni period. Najveći dio isporučene vode odnosio se na domaćinstva, gdje se indeks kretao između 93,0 i 103,4, uz blagi pad na 98,2 u 2024. godini. Kod ekonomskih djelatnosti također su zabilježena uglavnom stabilna kretanja, pri čemu se ukupni indeks kretao između 91,6 i 107,0. Najizraženije oscilacije zabilježene su u sektoru poljoprivrede, šumarstva i ribolova, gdje je indeks opao na 43,3 u 2022. godini, a zatim porastao na 118,7 u 2024. godini. Posmatrano u cjelini, indeksi isporuke vode iz javnih vodovoda ukazuju na stabilan nivo snabdijevanja tokom cijelog posmatranog perioda, uz povremene oscilacije u pojedinim djelatnostima.

In Bosnia and Herzegovina, the index of delivered water from the public water supply system in the period from 2017 to 2024 indicates a relatively stable movement of deliveries. The total index ranged from 98.0 in 2018 to 103.3 in 2021, while in 2024 it was 100.3, which shows that there were no significant deviations compared to the base period. Most of the delivered water was for households, where the index ranged between 93.0 and 103.4, with a slight drop to 98.2 in 2024. In the case of economic activities, mostly stable trends were also recorded, with the overall index ranging between 91.6 and 107.0. The most pronounced oscillations were recorded in the agriculture, forestry and fishing sector, where the index fell to 43.3 in 2022, and then increased to 118.7 in 2024. Viewed as a whole, the indices of water delivery from public water supply systems indicate a stable level of supply throughout the observed period, with occasional oscillations in individual sectors.

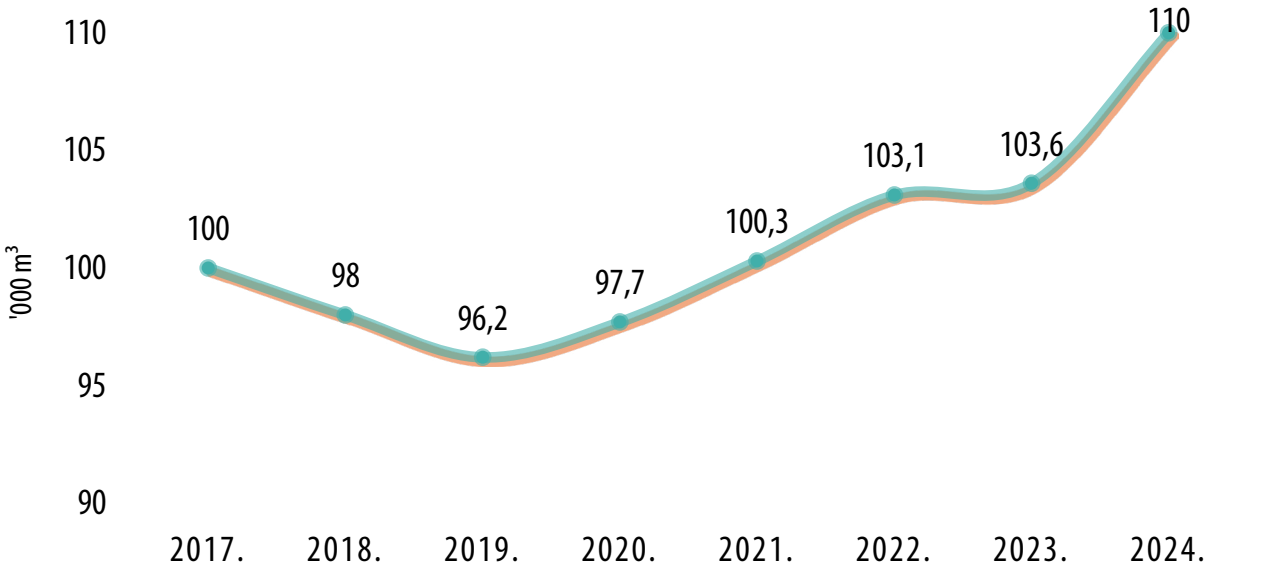
Tabela 2.2.2. Gubici vode iz javnog vodovoda, 2017.-2024., Bosna i Hercegovina
Table 2.2.2. Losses of water from the public water supply, 2017-2024, Bosnia and Herzegovina

Indeks */Index*

2017.	2018.	2019.	2020.	2021.	2022.	2023.	2024.
100	98	96.2	97.7	100.3	103.1	103.6	110

Izvor /*Source*: BHAS

Grafikon 2.2.2. Gubici vode iz javnog vodovoda, 2017.-2024., Bosna i Hercegovina
Graph 2.2.2. Losses of water from the public water supply, 2017-2024, Bosnia and Herzegovina



U Bosni i Hercegovini indeks gubitaka vode iz javnog vodovoda u periodu od 2017. do 2024. godine pokazao je blage oscilacije, uz trend rasta u posljednjim godinama. Nakon smanjenja sa indeksa 100,0 u 2017. na 96,2 u 2019. godini, indeks gubitaka vode je postepeno rastao, dostigavši 103,6 u 2023. i 110,0 u 2024. godini. Najviša vrijednost indeksa zabilježena je upravo 2024. godine, što ukazuje na povećanje gubitaka vode u distributivnoj mreži u odnosu na početak posmatranog perioda.

In Bosnia and Herzegovina, the water loss index from public water supply systems in the period from 2017 to 2024 showed slight oscillations, with an upward trend in recent years. After a decrease from an index of 100.0 in 2017 to 96.2 in 2019, the water loss index gradually increased, reaching 103.6 in 2023 and 110.0 in 2024. The highest value of the index was recorded in 2024, indicating an increase in water losses in the distribution network compared to the beginning of the observed period.

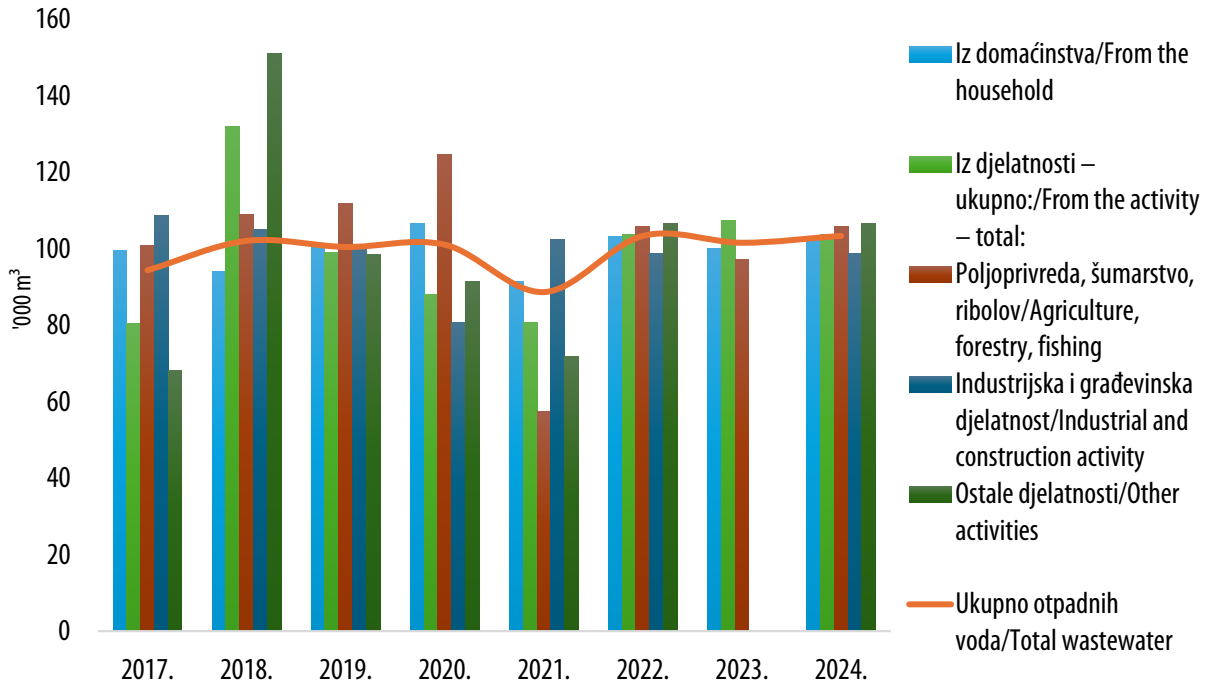
Tabela 2.2.3. Porijeklo otpadnih voda, 2017.-2024., Bosna i Hercegovina
Table 2.2.3. Origin of wastewater, 2017-2024, Bosnia and Herzegovina

Indeks /*Index*

	2017.	2018.	2019.	2020.	2021.	2022.	2023.	2024.
Ukupno otpadnih voda *Total wastewater*	94.3	102	100.4	101	88.6	103.3	101.5	103.3
Iz domaćinstva *From the household*	99.4	94	101	106.5	91.4	103.2	100.1	103.2
Iz djelatnosti – ukupno *From the activity – total*	80.4	132	99	88.1	80.7	103.7	107.4	103.7
Poljoprivreda, šumarstvo, ribolov *Agriculture, forestry, fishing*	100.9	109	111.9	124.6	57.4	105.8	97	105.8
Industrijska i građevinska djelatnost *Industrial and construction activity*	108.6	105	99.7	80.6	102.4	98.7	/	98.7
Ostale djelatnosti *Other activities*	68.2	151	98.5	91.3	71.8	106.7	/	106.7

Izvor /*Source:* BHAS

Grafikon 2.2.3. Porijeklo otpadnih voda, 2017.-2024., Bosna i Hercegovina
Graph 2.2.3. Origin of wastewater, 2017-2024, Bosnia and Herzegovina



U Bosni i Hercegovini indeks porijekla otpadnih voda u periodu od 2017. do 2024. godine pokazuje uglavnom stabilna kretanja, uz određene oscilacije. Ukupni indeks otpadnih voda kretao se od 88,6 u 2021. do 103,3 u 2022. i 2024. godini. Najveći dio otpadnih voda poticao je iz domaćinstava, gdje se indeks kretao između 91,4 i 106,5. Indeks otpadnih voda iz ekonomskih djelatnosti pokazivao je izraženije varijacije, posebno u sektoru poljoprivrede, šumarstva i ribolova, gdje su vrijednosti indeksa oscilirale od 57,4 u 2021. do 124,6 u 2020. godini. Posmatrano u cjelini, ukupni indeks otpadnih voda u 2024. godini bio je viši nego na početku posmatranog perioda.

In Bosnia and Herzegovina, the wastewater origin index in the period from 2017 to 2024 shows mostly stable trends, with some oscillations. The total wastewater index ranged from 88.6 in 2021 to 103.3 in 2022 and 2024. The largest share of wastewater originated from households, where the index ranged between 91.4 and 106.5. The wastewater index from economic activities showed more pronounced variations, especially in the agriculture, forestry and fishing sector, where index values oscillated from 57.4 in 2021 to 124.6 in 2020. Viewed as a whole, the total wastewater index in 2024 was higher than at the beginning of the observed period.

3.
RAČUNI OKOLIŠA
ENVIRONMENTAL ACCOUNTS

3.1. MONETARNI RAČUNI

3.1. MONETARY ENVIRONMENTAL ACCOUNTS

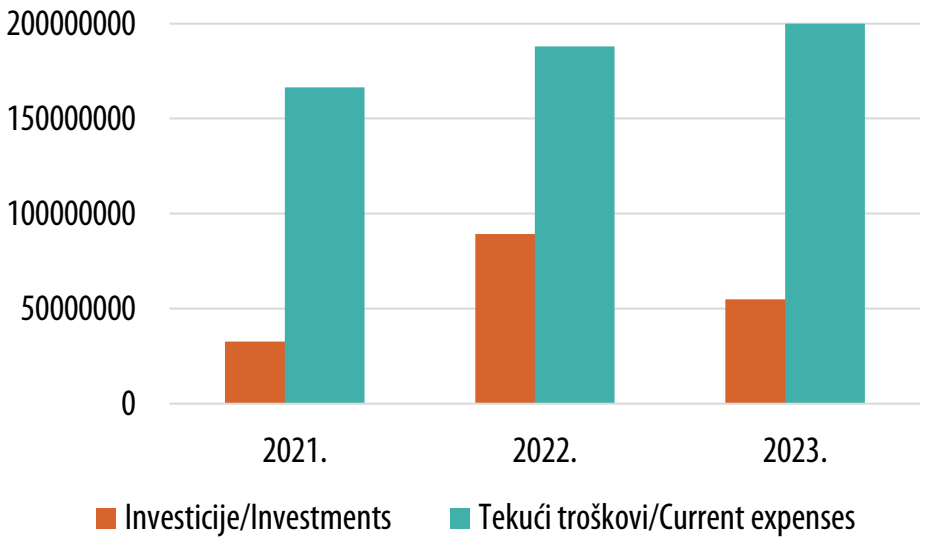
Tabela 3.1.1., Ukupni troškovi za zaštitu okoliša, 2021.-2023., Bosna i Hercegovina
Table 3.1.1., Total costs for environmental protection, 2021-2023, Bosnia and Herzegovina

KM /*BAM*

	2021.	2022.	2023.
Investicije *Investments*	32.649.726	89.325.956	54.859.686
Tekući troškovi *Current expenses*	166.443.893	187.987.970	199.976.100

Izvor /*Source*: BHAS

Grafikon 3.1.1., Ukupni troškovi za zaštitu okoliša, 2021.-2023., Bosna i Hercegovina
Graph 3.1.1., Total costs for environmental protection, 2021-2023, Bosnia and Herzegovina



U Bosni i Hercegovini su ukupni troškovi za zaštitu okoliša u periodu od 2021. do 2023. godine pokazali rast, prvenstveno zahvaljujući povećanju tekućih troškova. Tekući troškovi porasli su sa 166,4 miliona KM u 2021. godini na 200,0 miliona KM u 2023. godini, što predstavlja povećanje za 20,1%. Investicije u zaštitu okoliša zabilježile su značajne oscilacije, pri čemu su sa 32,6 miliona KM u 2021. godini porasle na 89,3 miliona KM u 2022. godini, a zatim smanjene na 54,9 miliona KM u 2023. godini. Uprkos smanjenju u odnosu na 2022. godinu, investicije u 2023. godini bile su veće nego na početku posmatranog perioda, što ukazuje na kontinuirana ulaganja u aktivnosti zaštite okoliša.

In Bosnia and Herzegovina, total environmental protection expenditures increased between 2021 and 2023, primarily due to an increase in current expenditures. Current expenditures increased from 166.4 million KM in 2021 to 200.0 million KM in 2023, an increase of 20.1%. Investments in environmental protection recorded significant oscillations, increasing from 32.6 million KM in 2021 to 89.3 million KM in 2022, and then decreasing to 54.9 million KM in 2023. Despite the decrease compared to 2022, investments in 2023 were higher than at the beginning of the observed period, indicating continued investments in environmental protection activities.

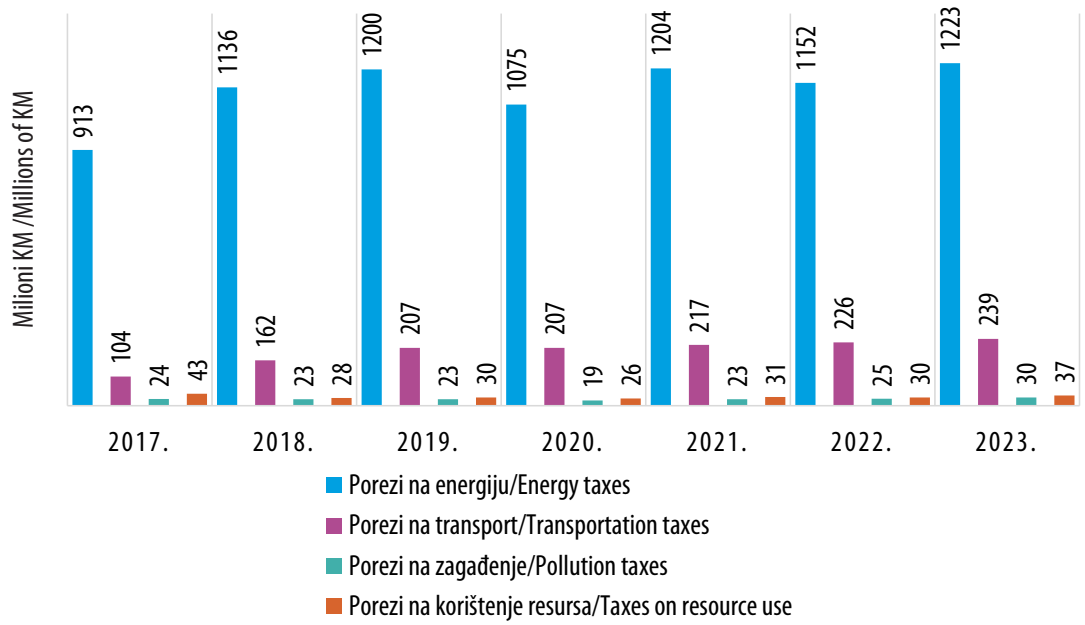
Tabela 3.1.2., Porezi vezani za okoliš po kategorijama, 2017.-2023., Bosna i Hercegovina
Table 3.1.2., Total costs for environmental protection, 2017-2023, Bosnia and Herzegovina

Milioni KM/Millions of KM

	2017.	2018.	2019.	2020.	2021.	2022.	2023.
Porezi na energiju *Energy taxes*	913	1.136	1.200	1.075	1.204	1.152	1.223
Porezi na transport *Transportation taxes*	104	162	207	207	217	226	239
Porezi na zagađenje *Pollution taxes*	24	23	23	19	23	25	30
Porezi na korištenje resursa *Taxes on resource use*	43	28	30	26	31	30	37
Ukupan prihod od poreza za okoliš *Total environmental tax revenue*	1.084	1.350	1.459	1.326	1.475	1.432	1.529

Izvor /*Source*: BHAS

Grafikon 3.1.2., Porezi vezani za okoliš po kategorijama, 2017.-2023., Bosna i Hercegovina
Graph 3.1.2., Total costs for environmental protection, 2017-2023, Bosnia and Herzegovina



U Bosni i Hercegovini su prihodi od poreza vezanih za okoliš u periodu od 2017. do 2023. godine pokazali trend rasta. Ukupan prihod od poreza za okoliš povećan je sa 1.084,1 miliona KM u 2017. na 1.528,6 miliona KM u 2023. godini, što predstavlja povećanje za 41,0%. Najveći dio prihoda tokom cijelog perioda ostvarivan je od poreza na energiju, koji su u 2023. godini iznosili 1.223,3 miliona KM, dok su porezi na transport ostvarili prihod od 238,7 miliona KM. Prihodi od poreza na zagađenje i poreza na korištenje resursa bili su znatno manji i u 2023. godini iznosili su 29,9 miliona KM, odnosno 36,8 miliona KM. Ovi podaci ukazuju na kontinuirani rast prihoda od okolišnih poreza, pri čemu porezi na energiju imaju dominantan udio u ukupnim prihodima.

In Bosnia and Herzegovina, revenues from taxes related to the environment in the period from 2017 to 2023 showed a growing trend. The total revenue from environmental taxes increased from 1,084.1 million KM in 2017 to 1,528.6 million KM in 2023, which represents an increase of 41.0%. Most of the income during the entire period was generated from energy taxes, which in 2023 amounted to 1,223.3 million KM, while transport taxes generated income of 238.7 million KM. Revenues from pollution tax and resource use tax were significantly lower and in 2023 amounted to 29.9 million KM and 36.8 million KM, respectively. These data indicate a continuous growth of revenues from environmental taxes, with energy taxes having a dominant share in total revenues.

3.2. FIZIČKI RAČUNI OKOLIŠA

3.2. PHYSICAL ENVIRONMENTAL ACCOUNTS

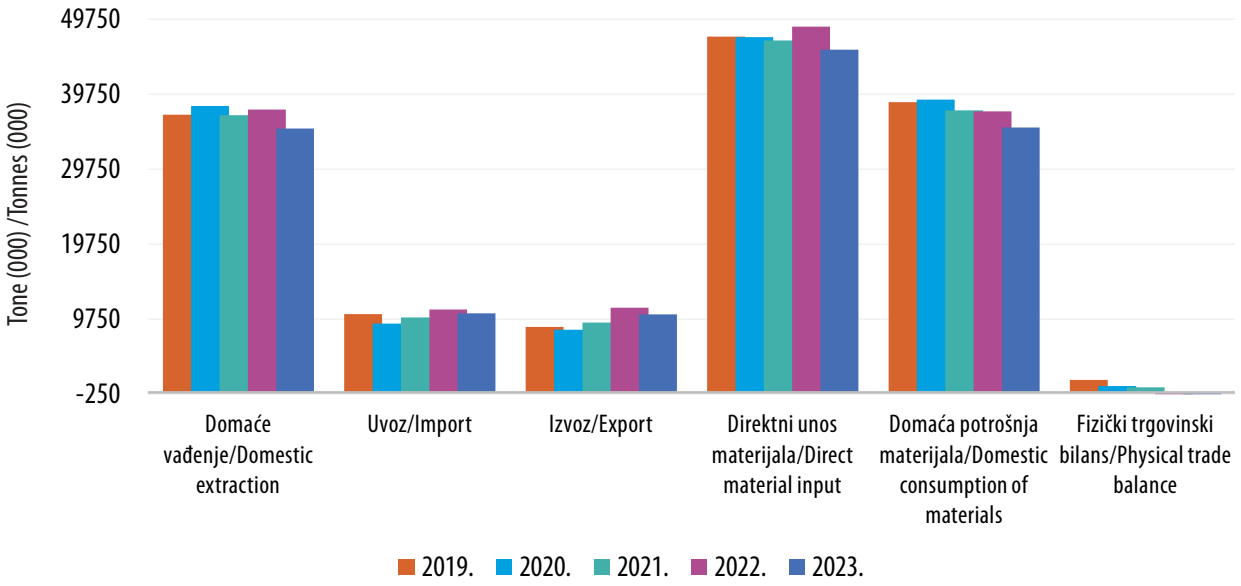
Tabela 3.2.1., Produktivnost resursa – BDP/DPM, 2016.-2023., Bosna i Hercegovina
Table 3.2.1., Resource productivity – GDP/DMC, 2016-2023, Bosnia and Herzegovina

Indeks 2021=100 */Index 2021=100*

	2016.	2017.	2018.	2019.	2020.	2021.	2022.	2023.
BDP *GDP*	87.05	89.87	93.31	96.01	93.11	100	104.22	106.30
DPM *DMC*	105.12	97.52	102.66	102.88	103.75	100	99.59	93.83
Produktivnost resursa *Resource productivity*	82.81	92.15	90.89	93.32	89.74	100	104.65	113.28

Izvor /*Source*: BHAS

Tabela 3.2.1., Produktivnost resursa – BDP/DPM, 2016.-2023., Bosna i Hercegovina
Table 3.2.1., Resource productivity – GDP/DMC, 2016-2023, Bosnia and Herzegovina



U Bosni i Hercegovini su indikatori protoka materijala u periodu od 2019. do 2023. godine pokazali blage oscilacije, uz trend smanjenja u posljednjim godinama. Domaće vađenje materijala smanjeno je sa 37,0 miliona tona u 2019. godini na 35,2 miliona tona u 2023. godini, dok je domaća potrošnja materijala pala sa 38,7 miliona tona na 35,3 miliona tona. Direktni unos materijala također je smanjen, sa 47,4 miliona tona u 2019. godini na 45,7 miliona tona u 2023. godini. Uvoz i izvoz materijala kretali su se na približno istom nivou tokom cijelog perioda, a fizički trgovinski bilans prešao je iz pozitivnih vrijednosti u 2019. godini na negativnu vrijednost od 237 hiljada tona u 2022. i 2023. godini. Ovi podaci ukazuju na smanjenje ukupnih tokova materijala i domaće potrošnje materijala u Bosni i Hercegovini.

In Bosnia and Herzegovina, the material flow indicators in the period from 2019 to 2023 showed slight oscillations, with a decreasing trend in recent years. Domestic material extraction decreased from 37.0 million tons in 2019 to 35.2 million tons in 2023, while domestic material consumption fell from 38.7 million tons to 35.3 million tons. Direct input of materials also decreased, from 47.4 million tons in 2019 to 45.7 million tons in 2023. The import and export of materials moved at approximately the same level during the entire period, and the physical trade balance went from positive values in 2019 to a negative value of 237 thousand tons in 2022 and 2023. These data indicate a decrease in total material flows and domestic material consumption in Bosnia and Herzegovina.

Tabela 3.2.3., Emisije u zrak, 2017.-2021., Bosna i Hercegovina
Table 3.2.3., Air emissions, 2017-2021, Bosnia and Herzegovina

Milioni KM/Millions of KM

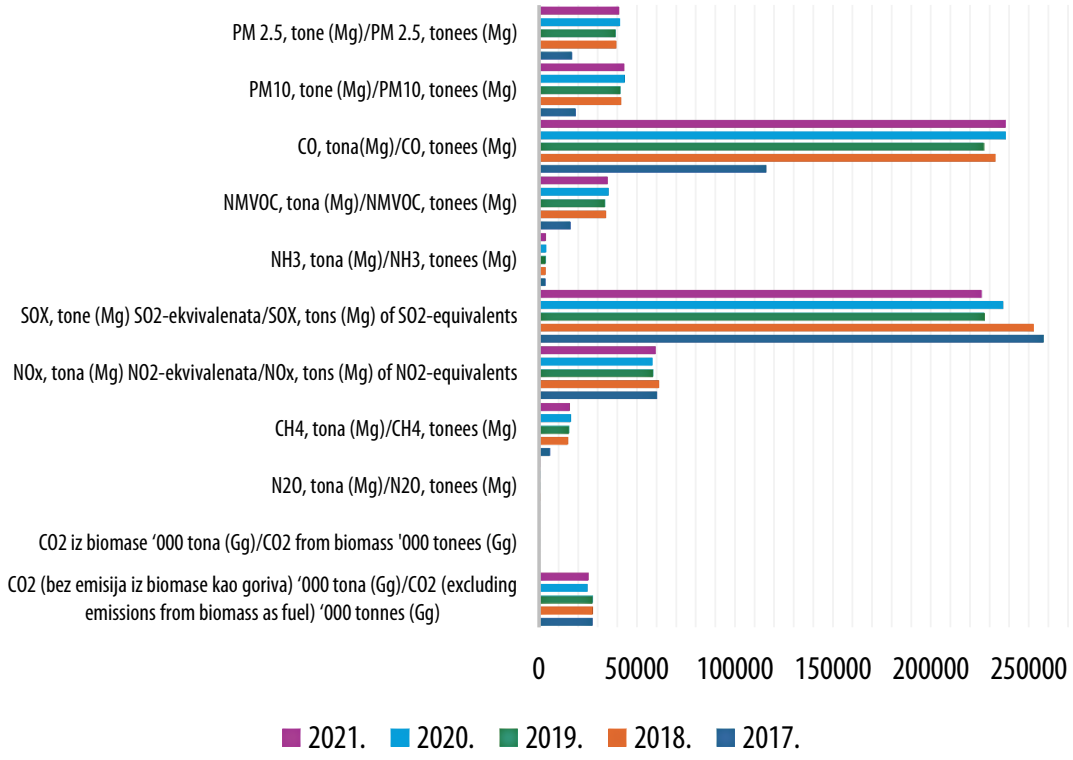
	2017.	2018.	2019.	2022.	2023.
CO_2 (bez emisija iz biomase kao goriva) '000 tona (Gg) *CO_2 (excluding emissions from biomass as fuel) '000 tonnes (Gg)*	27.431	27.649	27.579	24.814	25.361
CO_2 iz biomase '000 tona (Gg) *CO_2 from biomass '000 tonnes (Gg)*	415	382	538	407	472
N_2O, tona (Mg) *N_2O, tonnes (Mg)*	560	687	693	691	699
CH_4, tona (Mg) *CH_4, tonnes (Mg)*	5.821	14.987	15.520	16.377	15.864
NO_x, tona (Mg) NO_2-ekvivalenata *NO_x, tonnes (Mg) of NO_2-equivalents*	60.358	61.335	58.415	57.953	59.577
SO_x, tone (Mg) SO_2-ekvivalenata *SO_x, tonnes (Mg) of SO_2-equivalents*	257.237	252.416	227.350	236.890	225.654
NH_3, tona (Mg) *NH_3, tonnes (Mg)*	3.505	3.504	3.568	3.747	3.599
NMVOC, tona (Mg) *NMVOC, tonnes (Mg)*	16.295*	34.284	33.875	35.667	35.210
CO, tona (Mg) *CO, tonnes (Mg)*	116.049*	232.900	226.909	238.191	237.968
PM10, tone (Mg) *PM10, tonnes (Mg)*	18.849*	42.031	41.672	43.853	43.542
PM 2.5, tone (Mg) *PM 2.5, tonnes (Mg)*	16.959*	39.493	39.197	41.355	40.953

Izvor /*Source*: BHAS

*Smanjenje emisija uzrokovano je smanjenjem potrošnje energije u 2017. godini koji su prikazani u Energetskom bilansu za Bosnu i Hercegovinu. Najveće odstupanje je zabilježeno u sektoru domaćinstva kod potrošnje "Primarna čvrsta biogoriva".

** The decrease in emissions is caused by the decrease in energy consumption in 2017, which is shown in the Energy Balance for Bosnia and Herzegovina. The biggest deviation was recorded in the household sector in the consumption of "Primary solid biofuel".*

Grafikon 3.2.3., Emisije u zrak, 2017.-2021., Bosna i Hercegovina
Graph 3.2.3., Air emissions, 2017-2021, Bosnia and Herzegovina



U Bosni i Hercegovini su emisije u zrak u periodu od 2017. do 2021. godine pokazivale određene oscilacije. Emisije ugljičnog dioksida (CO_2), isključujući emisije iz biomase, smanjene su sa 27,4 miliona tona u 2017. godini na 25,4 miliona tona u 2021. godini. Istovremeno, emisije metana (CH_4) značajno su porasle, sa 5,8 hiljada tona na 15,9 hiljada tona, dok su emisije azotnog oksida (N_2O) ostale relativno stabilne na nivou od oko 700 tona. Emisije sumpornih oksida (SO_x) pokazale su trend smanjenja, sa 257,2 hiljade tona u 2017. godini na 225,7 hiljada tona u 2021. godini, dok su emisije azotnih oksida (NO_x) ostale na približno istom nivou tokom cijelog perioda. Posmatrano u cjelini, smanjenje emisija CO_2 i SO_x ukazuje na određeni napredak u smanjenju zagađenja zraka, iako su pojedini zagađivači, poput metana, zabilježili rast.

In Bosnia and Herzegovina, air emissions showed some fluctuations between 2017 and 2021. Carbon dioxide (CO_2) emissions, excluding emissions from biomass, decreased from 27.4 million tons in 2017 to 25.4 million tons in 2021. At the same time, methane (CH_4) emissions increased significantly, from 5.8 thousand tons to 15.9 thousand tons, while nitrous oxide (N_2O) emissions remained relatively stable at around 700 tons. Sulfur oxide (SO_x) emissions showed a decreasing trend, from 257.2 thousand tons in 2017 to 225.7 thousand tons in 2021, while nitrogen oxide (NO_x) emissions remained at approximately the same level throughout the period. Taken as a whole, the reduction in CO_2 and SO_x emissions indicates some progress in reducing air pollution, although some pollutants, such as methane, have seen increases

3.3. TRENDOVI EMISIJA CO_2 — *3.3. CO_2 EMISSION TRENDS*

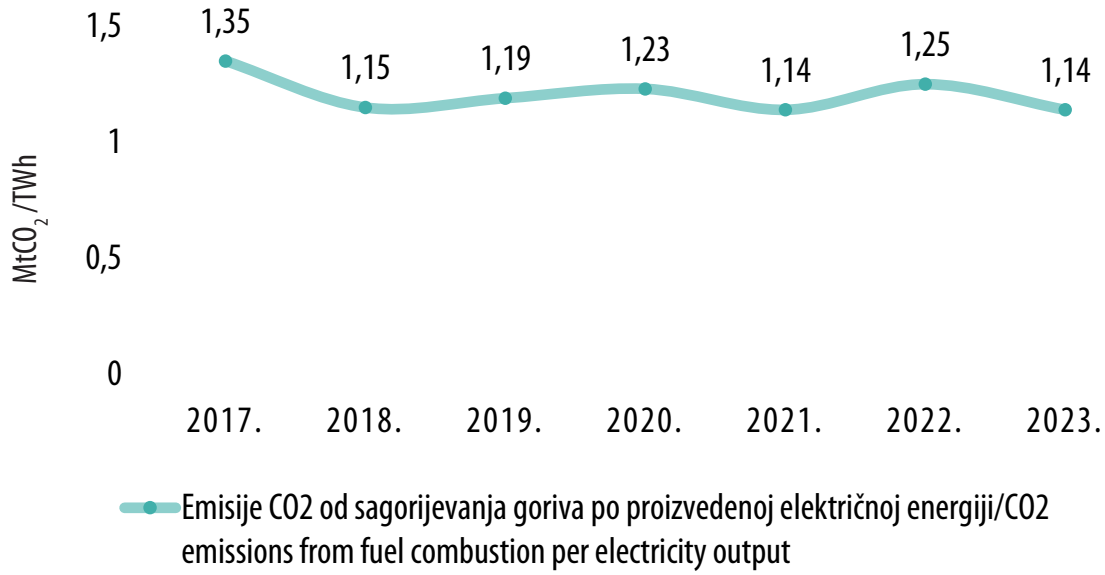
Tabela 3.3.1., Emisije CO2 od sagorijevanja goriva po proizvedenoj električnoj energiji, 2017.-2023., Bosna i Hercegovina
Table 3.3.1., CO2 emissions from fuel combustion per electricity output, 2017-2023, Bosnia and Herzegovina

$MtCO_2/TWh$

	2017.	2018.	2019.	2020.	2021.	2022.	2023.
Emisije CO_2 od sagorijevanja goriva po proizvedenoj električnoj energiji *CO_2 emissions from fuel combustion per electricity output*	1.35	1.15	1.19	1.23	1.14	1.25	1.14

Izvor /*Source*: BHAS

Grafikon 3.3.1., Emisije CO2 od sagorijevanja goriva po proizvedenoj električnoj energiji, 2017.-2023., Bosna i Hercegovina /*Graph 3.3.1., CO2 emissions from fuel combustion per electricity output, 2017-2023, Bosnia and Herzegovina*



U Bosni i Hercegovini su emisije CO_2 od sagorijevanja goriva po proizvedenoj električnoj energiji u periodu od 2017. do 2023. godine pokazivale manje oscilacije. Vrijednost pokazatelja smanjena je sa 1,35 $MtCO_2$/TWh u 2017. godini na 1,14 $MtCO_2$/TWh u 2023. godini, što predstavlja smanjenje za 15,6%. Najniže vrijednosti zabilježene su u 2021. i 2023. godini, dok je najveća vrijednost evidentirana 2017. godine. Ovi podaci ukazuju na blago smanjenje emisija CO_2 po jedinici proizvedene električne energije, odnosno na poboljšanje emisijske efikasnosti elektroenergetskog sektora tokom posmatranog perioda.

In Bosnia and Herzegovina, CO_2 emissions from fuel combustion produced in electricity showed smaller oscillations in the period from 2017 to 2023. The value of the indicator decreased from 1.35 $MtCO_2$/TWh in 2017 to 1.14 $MtCO_2$/TWh in 2023, which represents a decrease of 15.6%. The lowest values were recorded in 2021 and 2023, while the highest value was recorded in 2017. These data indicate a decrease in CO_2 emissions per unit of electricity produced, i.e. an improvement in the emission efficiency of the electricity sector during the observed period.

4.
EKOLOŠKI ASPEKTI POLJOPRIVREDE
ENVIRONMENTAL ASPECTS OF AGRICULTURE

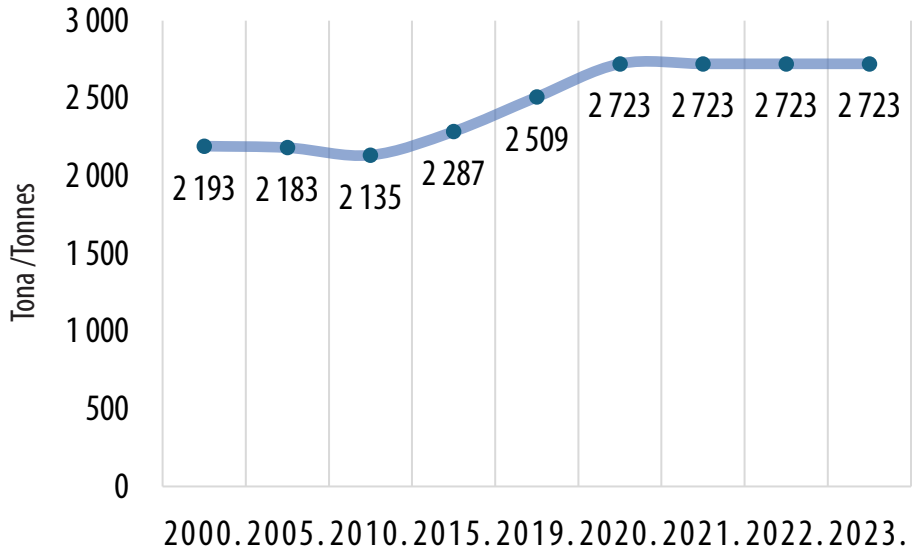
Tabela 4.1.1. Upotreba pesticida, 2000.-2023., Bosna i Hercegovina
Table 4.1.1. Pesticide use, 2000-2023, Bosnia and Herzegovina

Tone /*Tonnes*

2000.	2005.	2010.	2015.	2019.	2020.	2021.	2022.	2023.
2.193	2.183	2.135	2.287	2.509	2.723	2.723	2.723	2.723

Izvor /*Source*: FAO

Grafikon 4.1.1. Upotreba pesticida, 2000.-2023., Bosna i Hercegovina
Graph 4.1.1. Pesticide use, 2000-2023, Bosnia and Herzegovina



Upotreba pesticida u Bosni i Hercegovini u periodu od 2000. do 2023. godine pokazuje trend rasta. Količina upotrijebljenih pesticida povećana je sa 2.193 tone u 2000. godini na 2.723 tona u 2023. godini, što predstavlja povećanje za 24,2%. Nakon blagog smanjenja u periodu do 2010. godine, upotreba pesticida je postepeno rasla, dostigavši 2.723 tone u 2020. godini, nakon čega je zadržana na istom nivou do kraja posmatranog perioda. Ovi podaci ukazuju na povećanu upotrebu pesticida u poljoprivrednoj proizvodnji u odnosu na početak perioda.

The use of pesticides in Bosnia and Herzegovina in the period from 2000 to 2023 shows an increasing trend. The amount of pesticides used increased from 2,193 tons in 2000 to 2,723 tons in 2023, which represents an increase of 24.2%. After a slight decrease in the period until 2010, the use of pesticides gradually increased, reaching 2,723 tons in 2020, after which it was maintained at the same level until the end of the observed period. These data indicate an increased use of pesticides in agricultural production compared to the beginning of the period.

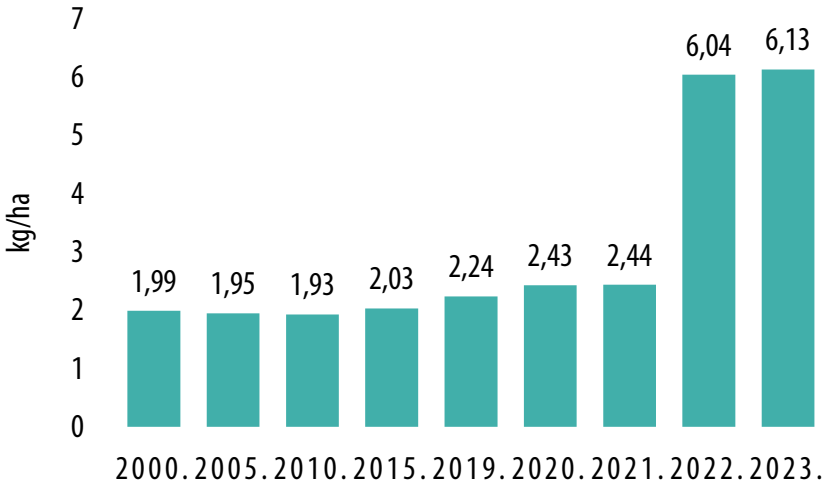
Tabela 4.1.2 Upotreba pesticida po površini poljoprivrednog zemljišta, 2000.-2023., Bosna i Hercegovina
Table 4.1.2. Pesticide use by agricultural land area, 2000-2023, Bosnia and Herzegovina

Kg/ha

2000.	2005.	2010.	2015.	2019.	2020.	2021.	2022.	2023.
1.99	1.95	1.93	2.03	2.24	2.43	2.44	6.04	6.13

Izvor /*Source*: FAO

Grafikon 4.1.2. Upotreba pesticida po površini poljoprivrednog zemljišta, 2000-2023., Bosna i Hercegovina
Graph 4.1.2. Pesticide use by agricultural land area, 2000-2023, Bosnia and Herzegovina



Upotreba pesticida po površini poljoprivrednog zemljišta u Bosni i Hercegovini porasla je sa 1,99 kg/ha u 2000. na 6,13 kg/ha u 2023. Najveći porast upotrebe pesticida po površini poljoprivrednog zemljišta vidljiv je na prelazu 2021. na 2022. godinu u iznosu od 147,5%.

Pesticide use per agricultural land area in Bosnia and Herzegovina increased from 1.99 kg/ha in 2000 to 6.13 kg/ha in 2023. The largest increase in pesticide use per agricultural land area is visible at the turn of 2021 to 2022, amounting to 147.5%.

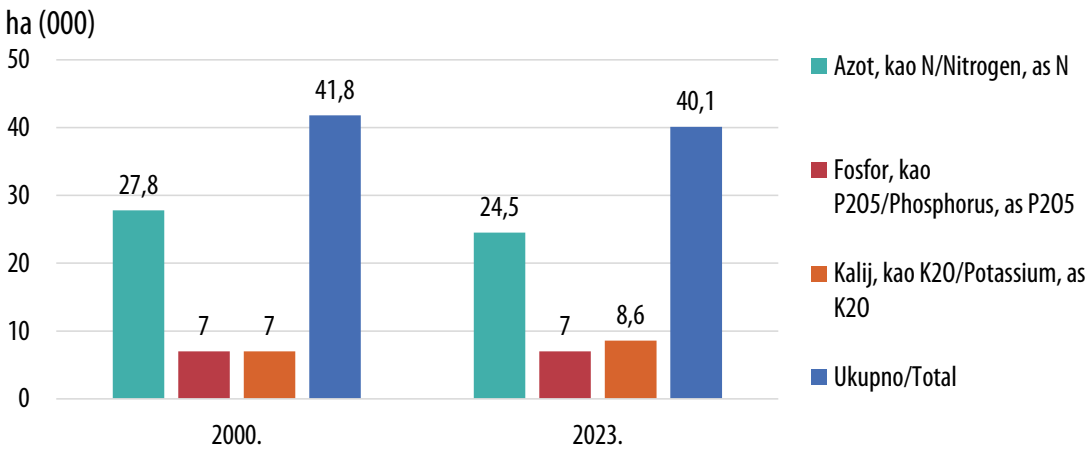
Tabela 4.1.3. Upotreba neorganskih đubriva po nutrijentima, 2000.-2023., Bosna i Hercegovina
Table 4.1.3. Use of inorganic fertilizers by nutrient, 2000-2023, Bosnia and Herzegovina

Hiljade ha /*Thousands of ha*

Azot, kao N *Nitrogen, as N*		Fosfor, kao P_2O_5 *Phosphorus, as P_2O_5*		Kalij, kao K_2O *Potassium, as K_2O*		Ukupno *Total*	
2000.	2023.	2000.	2023.	2000.	2023.	2000.	2023.
27.8	24.5	7	7	7	8.6	41.8	40.1

Izvor /*Source*: FAO

Grafikon 4.1.3. Upotreba neorganskih đubriva po nutrijentima, 2000.-2023., Bosna i Hercegovina
Graph 4.1.3. Use of inorganic fertilizers by nutrient, 2000-2023, Bosnia and Herzegovina



U Bosni i Hercegovini je upotreba neorganskih đubriva po nutrijentima u periodu od 2000. do 2023. godine ostala relativno stabilna, uz određene promjene u strukturi primijenjenih hranjivih materija. Količina azota (N) smanjena je sa 27,8 hiljada tona na 24,5 hiljada tona, što predstavlja smanjenje za 11,9%, dok je upotreba fosfora (P_2O_5) ostala nepromijenjena na nivou od 7,0 hiljada tona. Istovremeno, upotreba kalija (K_2O) povećana je sa 7,0 hiljada tona na 8,6 hiljada tona, što predstavlja povećanje za 22,9%. Ukupna upotreba neorganskih đubriva smanjena je sa 41,8 hiljada tona u 2000. godini na 40,1 hiljadu tonu u 2023. godini, odnosno za 4,1%.

In Bosnia and Herzegovina, the use of inorganic fertilizers by nutrient remained relatively stable between 2000 and 2023, with some changes in the structure of applied nutrients. The amount of nitrogen (N) decreased from 27.8 thousand tons to 24.5 thousand tons, which is a decrease of 11.9%, while the use of phosphorus (P_2O_5) remained unchanged at 7.0 thousand tons. At the same time, the use of potassium (K_2O) increased from 7.0 thousand tons to 8.6 thousand tons, which is an increase of 22.9%. The total use of inorganic fertilizers decreased from 41.8 thousand tons in 2000 to 40.1 thousand tons in 2023, or by 4.1%.

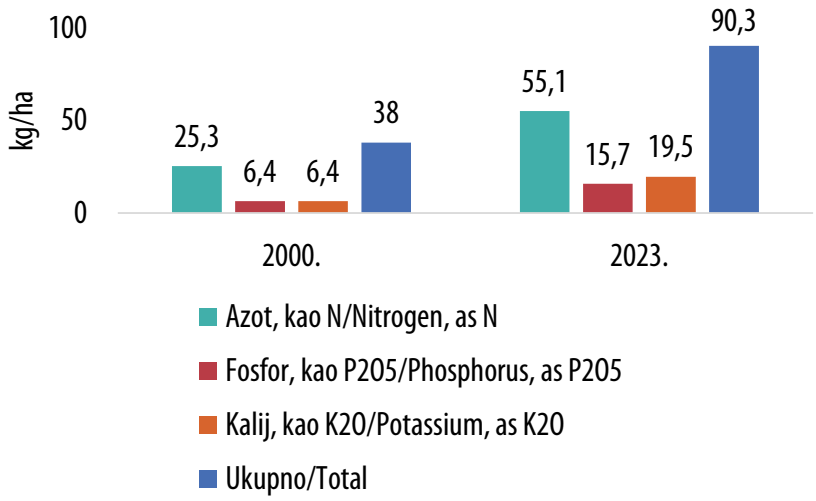
Tabela 4.1.4. Upotreba neorganskih đubriva po površini usjeva po nutrijentima, 2000.-2023., Bosna i Hercegovina
Table 4.1.4. Inorganic fertilizer use per crop area by nutrient, 2000-2023, Bosnia and Herzegovina

Hiljade ha /*Thousands of ha*

Azot, kao N *Nitrogen, as N*		Fosfor, kao P_2O_5 *Phosphorus, as P_2O_5*		Kalij, kao K_2O *Potassium, as K_2O*		Ukupno *Total*	
2000.	2023.	2000.	2023.	2000.	2023.	2000.	2023.
25.3	55.1	6.4	15.7	6.4	19.5	38	90.3

Izvor /*Source*: FAO

Grafikon 4.1.4. Upotreba neorganskih đubriva po površini usjeva po nutrijentima, 2000.-2023., Bosna i Hercegovina /*Graph 4.1.4. Inorganic fertilizer use per crop area by nutrient, 2000-2023, Bosnia and Herzegovina*



Poljoprivredna upotreba neorganskih đubriva po površini usjeva porasla je za 137,6% između 2000. i 2023. godine na 90,3 kg hranjivih materija po hektaru – izraženo kao zbir azota, fosfora i kalija. Ovo odgovara povećanju od 52,3 kg/ha u odnosu na 2000. Ukupnoj količini, 55,1 kg/ha odgovara azotu (porast od 117,7%), 15,7 kg/ha fosforu (porast od 145,3%) i 19,5 kg/ha kaliju (porast od 204,6%).

Agricultural use of inorganic fertilizers per crop area increased by 137.6% between 2000 and 2023 to 90.3 kg of nutrients per hectare – expressed as the sum of nitrogen, phosphorus and potassium. This corresponds to an increase of 52.3 kg/ha compared to 2000. Of the total amount, 55.1 kg/ha corresponds to nitrogen (an increase of 117.7%), 15.7 kg/ha to phosphorus (an increase of 145.3%) and 19.5 kg/ha to potassium (an increase of 204.6%).

4.2. NETO TRGOVINA HRANOM

4.2. FOOD NET TRADE

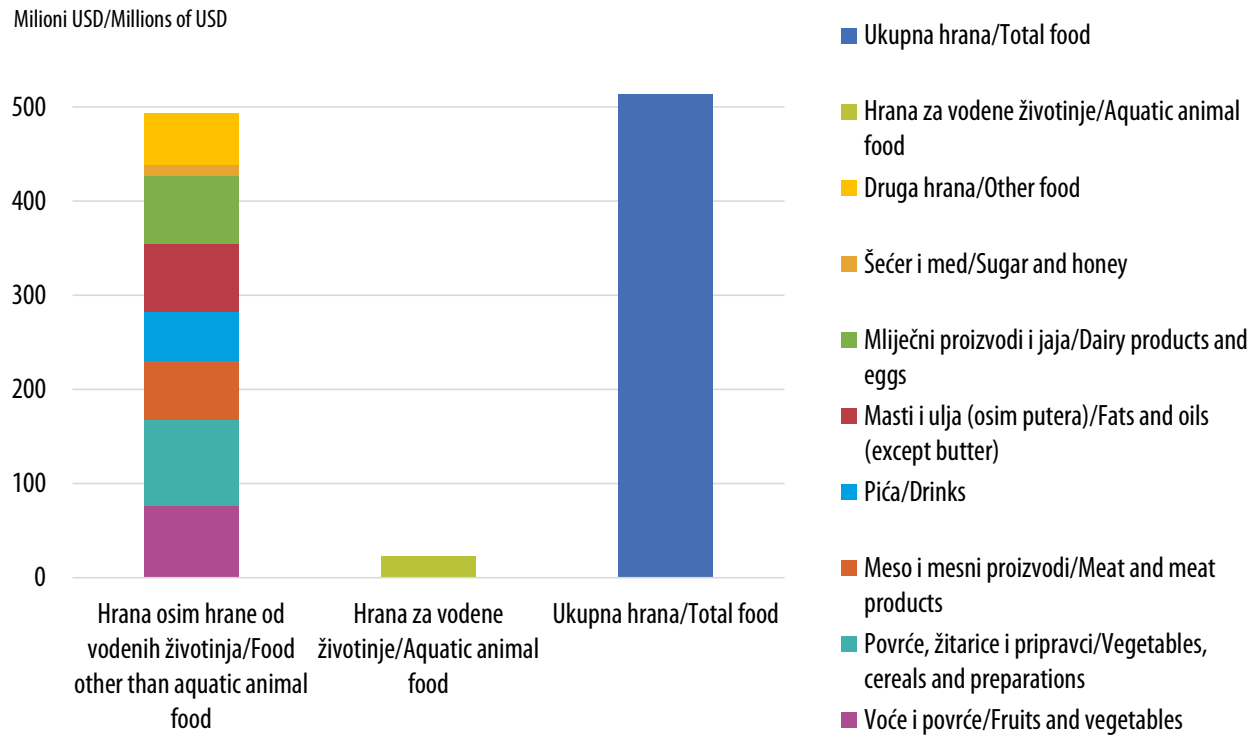
Tabela 4.2.1. Izvoz hrane, mil. USD, 2023., Bosna i Hercegovina
Table 4.2.1. Food export, mil. USD, 2023, Bosnia and Herzegovina

Milioni USD /*Milions of USD*

Hrana osim hrane od vodenih životinja *Food other than aquatic animal food*								Hrana za vodene životinje *Aquatic animal food*	Ukupna hrana *Total food*
Voće i povrće *Fruits and vegetables*	Povrće, žitarice i pripravci *Vegetables, cereals and preparations*	Meso i mesni proizvodi *Meat and meat products*	Pića *Drinks*	Masti i ulja (osim putera) *Fats and oils (except butter)*	Mliječni proizvodi i jaja *Dairy products and eggs*	Šećer i med *Sugar and honey*	Druga hrana *Other food*		
76	92	62	52	72	73	11	55	23	514

Izvor /*Source*: FAO

Grafikon 4.2.1. Izvoz hrane, mil. USD, 2023., Bosna i Hercegovina
Graph 4.2.1. Food export, mil. USD, 2023, Bosnia and Herzegovina



U 2023. godini ukupna vrijednost izvoza hrane u Bosni i Hercegovini iznosila je 514 miliona USD. Najveći udio u izvozu ostvarili su povrće, žitarice i pripravci sa 92 miliona USD, a slijede voće i povrće sa 76 miliona USD, mliječni proizvodi i jaja sa 73 miliona USD te masti i ulja (osim putera) sa 72 miliona USD. Vrijednost izvoza mesa i mesnih proizvoda iznosila je 62 miliona USD,

In 2023, the total value of food exports in Bosnia and Herzegovina amounted to 514 million USD. The largest share of exports was achieved by vegetables, grains and preparations with USD 92 million, followed by fruits and vegetables with USD 76 million, dairy products and eggs with USD 73 million, and fats and oils (except butter) with USD 72 million. The value of exports of meat and meat

dok je izvoz pića dostigao 52 miliona USD. Najmanju vrijednost izvoza među navedenim kategorijama zabilježili su šećer i med sa 11 miliona USD. Izvoz hrane za vodene životinje iznosio je 23 miliona USD.

products was 62 million USD, while exports of beverages reached 52 million USD. Sugar and honey recorded the lowest export value among the listed categories with USD 11 million. Aquatic feed exports amounted to USD 23 million.

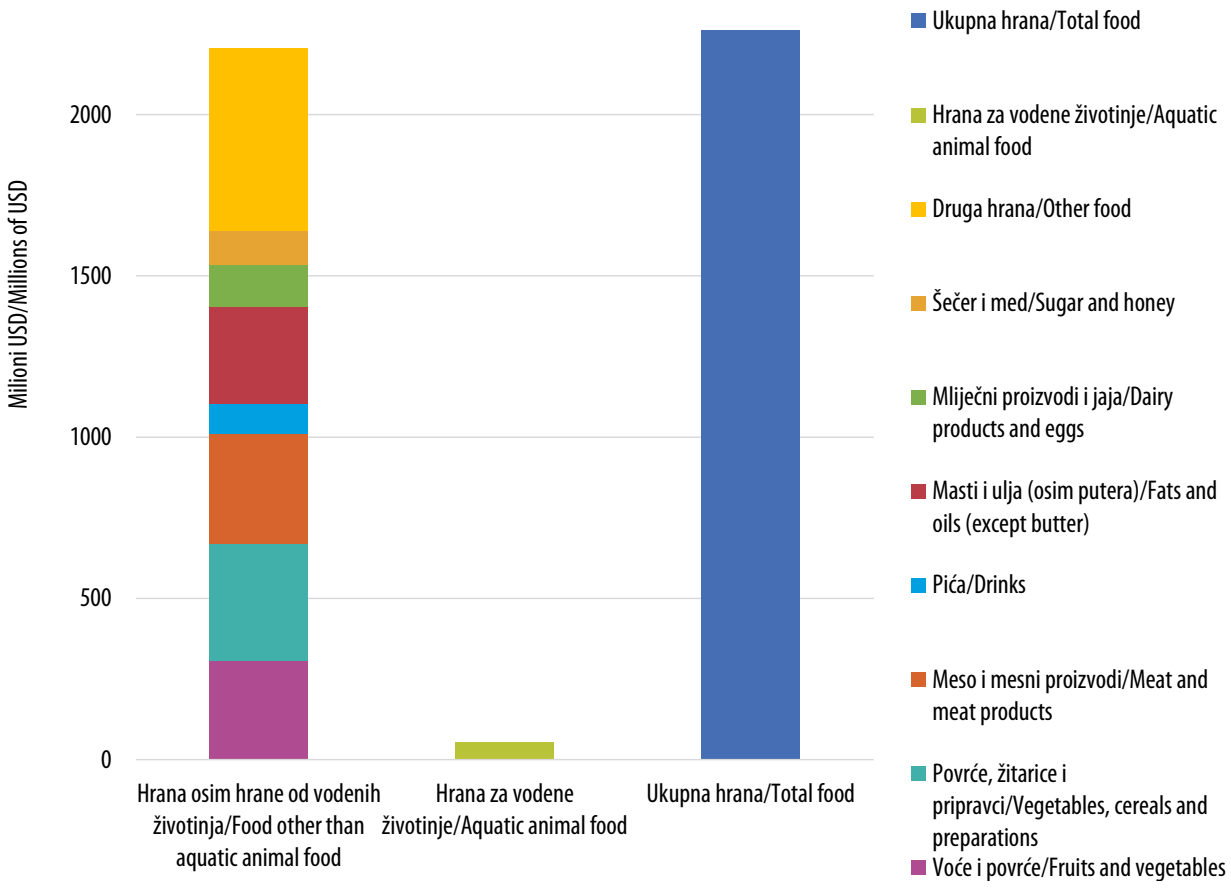
Tabela 4.2.2. Uvoz hrane, mil. USD, 2023., Bosna i Hercegovina
Table 4.2.2. Food imports, mil. USD, 2023, Bosnia and Herzegovina

Milioni USD /*Milions of USD*

Hrana osim hrane od vodenih životinja *Food other than aquatic animal food*								Hrana za vodene životinje *Aquatic animal food*	Ukupna hrana *Total food*
Voće i povrće *Fruits and vegetables*	Povrće, žitarice i pripravci *Vegetables, cereals and preparations*	Meso i mesni proizvodi *Meat and meat products*	Pića *Drinks*	Masti i ulja (osim putera) *Fats and oils (except butter)*	Mliječni proizvodi i jaja *Dairy products and eggs*	Šećer i med *Sugar and honey*	Druga hrana *Other food*		
307	361	343	94	298	132	105	566	55	2 261

Izvor /*Source*: FAO

Grafikon 4.2.2. Uvoz hrane, mil. USD, 2023., Bosna i Hercegovina
Graph 4.2.2. Food imports, mil. USD, 2023, Bosnia and Herzegovina



U 2023. godini ukupna vrijednost uvoza hrane u Bosnu i Hercegovinu iznosila je 2.261 milion USD. Najveći udio u uvozu ostvarila je kategorija druga hrana sa 566 miliona USD, a slijede povrće, žitarice i pripravci sa 361 milion USD te meso i mesni proizvodi sa 343 miliona USD. Vrijednost uvoza voća i povrća iznosila je 307 miliona USD, dok je uvoz masti i ulja (osim putera) dostigao 298 miliona USD. Uvoz mliječnih proizvoda i jaja iznosio je 132 miliona USD, šećera i meda 105 miliona USD, a pića 94 miliona USD. Vrijednost uvoza hrane za vodene životinje iznosila je 55 miliona USD.

In 2023, the total value of food imports to Bosnia and Herzegovina was 2,261 million USD. The largest share of imports was achieved by the category of other food with USD 566 million, followed by vegetables, cereals and preparations with USD 361 million and meat and meat products with USD 343 million. The value of fruit and vegetable imports amounted to USD 307 million, while the import of fats and oils (except butter) reached USD 298 million. Imports of dairy products and eggs amounted to USD 132 million, sugar and honey USD 105 million, and beverages USD 94 million. The value of aquatic feed imports was USD 55 million.

4.3. ODRŽIVOST I EKOLOŠKI ASPEKTI POLJOPRIVREDE

4.3. SUSTAINABILITY AND ENVIRONMENTAL ASPECTS OF AGRICULTURE

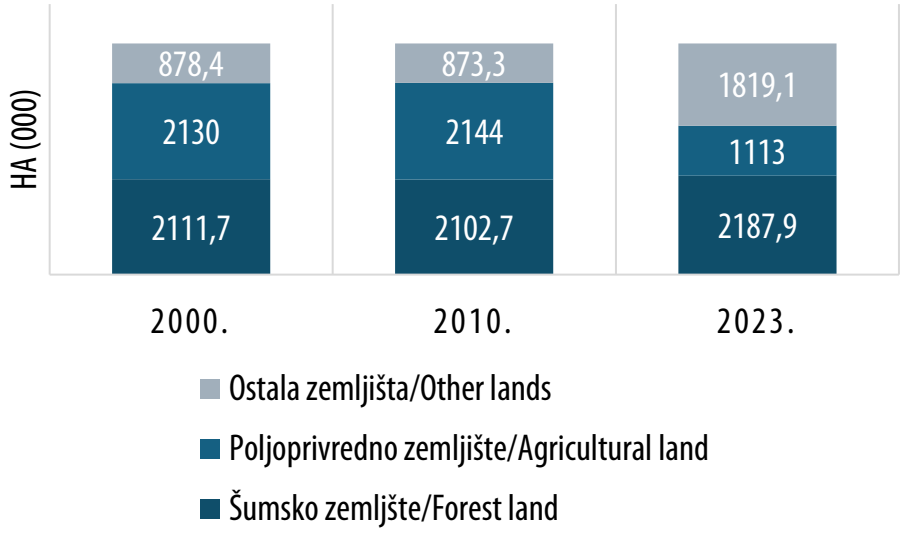
Tabela 4.3.1. Površina zemljišta po tipu, 2000.-2023., Bosna i Hercegovina
Table 4.3.1. Land area by type, 2000-2023, Bosnia and Herzegovina

Milioni USD /*Milions of USD*

Šumsko zemljište *Forest land*			Poljoprivredno zemljište *Agricultural land*			Ostala zemljišta *Other lands*		
2000.	2010.	2023.	2000.	2010.	2023.	2000.	2010.	2023.
2.111,7	2.102,7	2.187,9	2.130	2.144	1.113	878,4	873,3	1.819,1

Izvor /*Source:* FAO

Tabela 4.3.1. Površina zemljišta po tipu, 2000.-2023., Bosna i Hercegovina
Table 4.3.1. Land area by type, 2000-2023, Bosnia and Herzegovina



U Bosni i Hercegovini je u periodu od 2000. do 2023. godine zabilježeno blago povećanje površine šumskog zemljišta, sa 2 111,7 hiljada ha na 2 187,9 hiljada ha, što predstavlja povećanje za 3,6%. Istovremeno, površina poljoprivrednog zemljišta značajno je smanjena sa 2 130 hiljada ha na 1 113 hiljada ha, što predstavlja smanjenje za 47,7%, dok je površina ostalih zemljišta više nego udvostručena, porastavši sa 878,4 hiljade ha na 1 819,1 hiljadu ha, što predstavlja povećanje za 107,1%. Ovi podaci ukazuju na značajne promjene u strukturi korištenja zemljišta, prvenstveno kroz smanjenje poljoprivrednih površina i povećanje površina koje pripadaju ostalim kategorijama zemljišta.

In Bosnia and Herzegovina, a slight increase in the area of forest land was recorded in the period from 2000 to 2023, from 2,111.7 thousand ha to 2,187.9 thousand ha, which represents an increase of 3.6%. At the same time, the area of agricultural land significantly decreased from 2,130 thousand ha to 1,113 thousand ha, which represents a decrease of 47.7%, while the area of other land more than doubled, increasing from 878.4 thousand ha to 1,819.1 thousand ha, which represents an increase of 107.1%. These data indicate significant changes in the structure of land use, primarily through a decrease in agricultural land and an increase in areas belonging to other land categories.

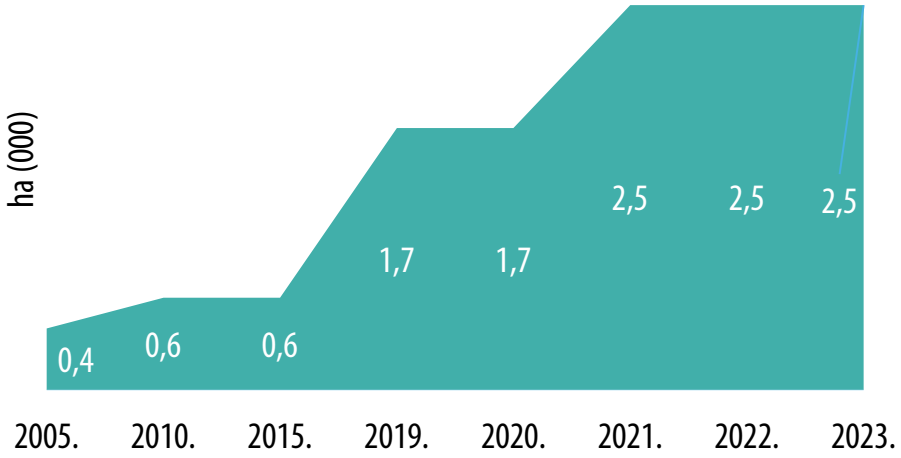
Tabela 4.3.2. Površina pod organskom poljoprivredom, 2004.-2023, Bosna i Hercegovina
Table 4.3.2. Area under organic agriculture, 2004-2023, Bosnia and Herzegovina

Milioni USD /*Milions of USD*

2004.	2005.	2010.	2015.	2019.	2020.	2021.	2022.	2023.
-	0.4	0.6	0.6	1.7	1.7	2.5	2.5	2.5

Izvor /*Source*: FAO

Grafikon 4.3.2. Površina pod organskom poljoprivredom, 2004.-2023., Bosna i Hercegovina
Graph 4.3.2. Area under organic agriculture, 2004-2023, Bosnia and Herzegovina



U Bosni i Hercegovini je površina zemljišta pod organskom poljoprivrednom proizvodnjom u periodu od 2005. do 2023. godine povećana sa 0,4 hiljade ha na 2,5 hiljada ha, što predstavlja povećanje za 525,0%. Najizraženiji rast zabilježen je nakon 2015. godine, dok se od 2021. godine površina zadržala na nivou od 2,5 hiljada ha. Ovi podaci ukazuju na značajno širenje organskih poljoprivrednih površina u Bosni i Hercegovini tokom posmatranog perioda.

In Bosnia and Herzegovina, the area of land under organic agricultural production increased from 0.4 thousand ha to 2.5 thousand ha between 2005 and 2023, which represents an increase of 525.0%. The most pronounced growth was recorded after 2015, while since 2021 the area has remained at the level of 2.5 thousand ha. These data indicate a significant expansion of organic agricultural areas in Bosnia and Herzegovina during the observed period.

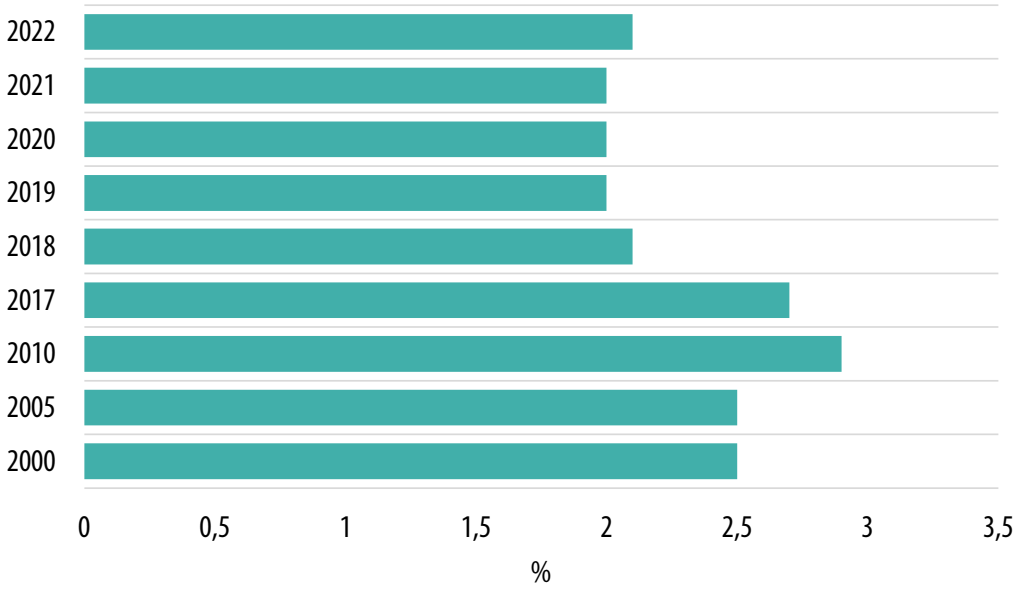
Tabela 4.3.3. Vodni stres, 2000.-2023., Bosna i Hercegovina
Table 4.3.3. Water stress, 2000-2023, Bosnia and Herzegovina

Milioni USD /*Milions of USD*

2000.	2005.	2010.	2017.	2018.	2019.	2020.	2021.	2022.
2.5	2.5	2.9	2.7	2.1	2	2	2	2.1

Izvor /*Source*: FAO

Grafikon 4.3.3. Vodni stres, 2000.-2023., Bosna i Hercegovina
Graph 4.3.3. Water stress, 2000-2023, Bosnia and Herzegovina



U Bosni i Hercegovini je nivo vodnog stresa u periodu od 2000. do 2022. godine ostao relativno nizak i stabilan, uz manje oscilacije. Vrijednost pokazatelja povećana je sa 2,5% u 2000. godini na 2,9% u 2010. godini, nakon čega je uslijedio postepeni pad na 2,0% u 2019. i 2020. godini. U 2022. godini zabilježeno je blago povećanje na 2,1%. Posmatrano u cjelini, nivo vodnog stresa u Bosni i Hercegovini ostao je nizak tokom cijelog perioda, što ukazuje da ukupna potrošnja slatkovodnih resursa nije predstavljala značajan pritisak na raspoložive vodne resurse.

In Bosnia and Herzegovina, the level of water stress remained relatively low and stable between 2000 and 2022, with minor fluctuations. The indicator value increased from 2.5% in 2000 to 2.9% in 2010, followed by a gradual decline to 2.0% in 2019 and 2020. In 2022, a slight increase to 2.1% was recorded. Overall, the level of water stress in Bosnia and Herzegovina remained low throughout the period, indicating that the overall consumption of freshwater resources did not pose a significant pressure on available water resources.

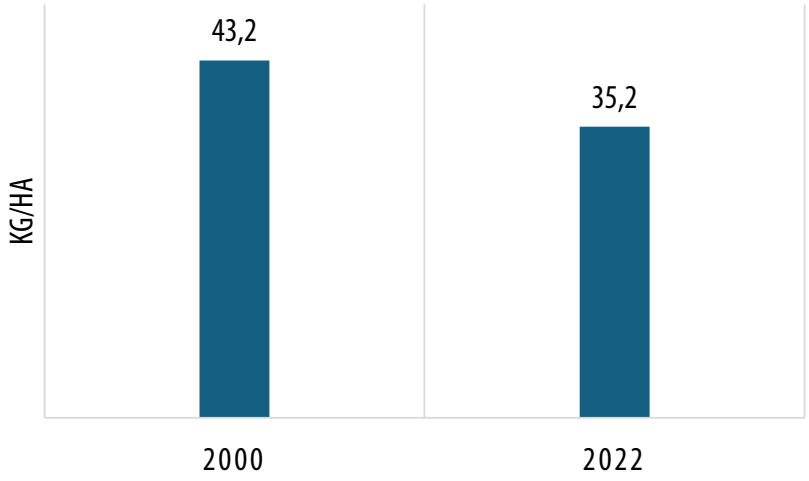
Tabela 4.3.4. Bilans azota u poljoprivrednom zemljištu, 2000.-2022., Bosna i Hercegovina
Table 4.3.4. Nitrogen balance in agricultural soil, 2000-2022, Bosnia and Herzegovina

Milioni USD /*Milions of USD*

2022.						Bilans azota na obradivom zemljištu *Nitrogen balance on arbitrable land*	
Ulaz: atmosferske padavine *Input: precipitation*	Ulaz: biološka fiksacija *Input: biological fixation*	Ulaz: stajnjak primijenjen na zemljištu *Input: manure applied to the land*	Ulaz: mineralna đubriva *Input: mineral fertilizers*	Ulaz: sjeme *Input: seed*	Izlaz: uklanjanje usijeva *Output: crop removal*	2000.	2022.
8.1	2.9	22.1	29.6	0.5	28	43.2	35.2

Izvor /*Source*: FAO

Grafikon 4.3.4. Bilans azota u poljoprivrednom zemljištu, 2000.-2022., Bosna i Hercegovina
Graph 4.3.4. Nitrogen balance in agricultural soil, 2000-2022, Bosnia and Herzegovina



U Bosni i Hercegovini je bilans azota na obradivom zemljištu u 2022. godini iznosio 35,2 kg/ha, što predstavlja smanjenje u odnosu na 2000. godinu kada je iznosio 43,2 kg/ha. U strukturi ulaza azota najveći doprinos ostvarila su mineralna đubriva sa 29,6 kg/ha i stajnjak primijenjen na zemljištu sa 22,1 kg/ha, dok su manji doprinos dali atmosferske padavine (8,1 kg/ha), biološka fiksacija (2,9 kg/ha) i sjeme (0,5 kg/ha). Istovremeno, uklanjanje azota usjevima iznosilo je 28,0 kg/ha. Smanjenje bilansa azota u odnosu na 2000. godinu ukazuje na niži višak azota na obradivom zemljištu i potencijalno manji pritisak na okoliš usljed gubitaka azota.

In Bosnia and Herzegovina, the nitrogen balance on arable land in 2022 was 35.2 kg/ha, which is a decrease compared to 2000 when it was 43.2 kg/ha. In the structure of nitrogen input, the largest contribution was made by mineral fertilizers with 29.6 kg/ha and manure applied to the land with 22.1 kg/ha, while smaller contributions were made by atmospheric precipitation (8.1 kg/ha), biological fixation (2.9 kg/ha) and seeds (0.5 kg/ha). At the same time, nitrogen removal by crops was 28.0 kg/ha. The decrease in the nitrogen balance compared to 2000 indicates a lower nitrogen surplus on arable land and potentially lower pressure on the environment due to nitrogen losses.

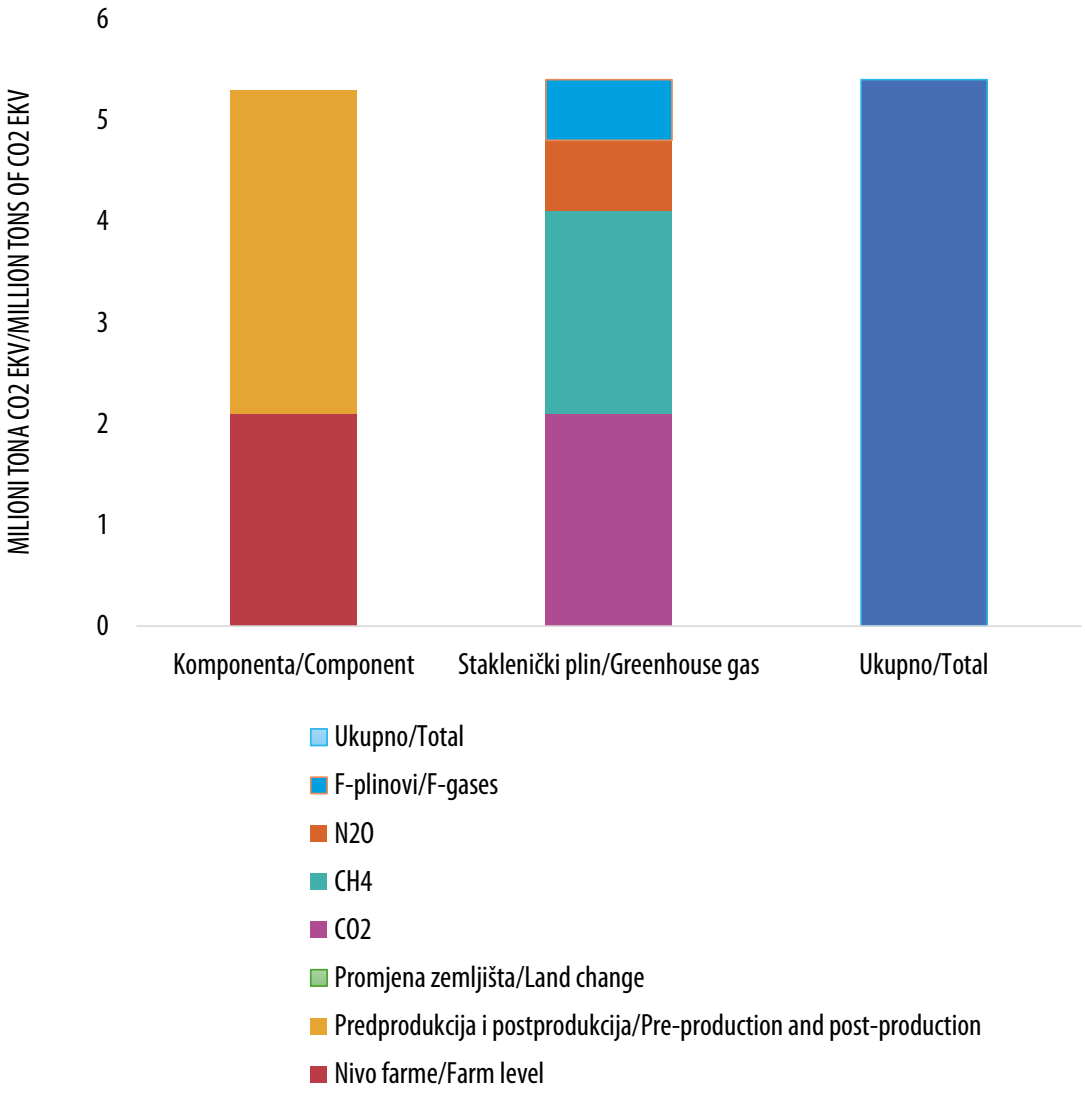
Tabela 4.3.5. Emisije stakleničkih gasova iz agroprehrambenih sistema, 2023., Bosna i Hercegovina
Table 4.3.5. Greenhouse gas emissions from agri-food systems, 2023, Bosnia and Herzegovina

Milioni tona CO2 ekvivalenta */Million tons of CO2 equivalent*

Komponenta *Component*			Staklenički plin *Greenhouse gas*				Ukupno *Total*
Nivo farme *Farm level*	Predprodukcija i postprodukcija *Pre-production and post-production*	Promjena namjene zemljišta *Change of land use*	CO2	CH4	N2O	F-plinovi *F-gases*	
2.1	3.2	0	2.1	2	0.7	0.6	5.4

Izvor /*Source*: FAO

Grafikon 4.3.5. Emisije stakleničkih gasova iz agroprehrambenih sistema, 2023., Bosna i Hercegovina
Graph 4.3.5. Greenhouse gas emissions from agri-food systems, 2023, Bosnia and Herzegovina



U Bosni i Hercegovini su emisije stakleničkih gasova iz agroprehrambenih sistema u 2023. godini iznosile 5,4 miliona tona CO_2 ekvivalenta. Najveći doprinos emisijama imale su aktivnosti povezane s predprodukcijom i postprodukcijom hrane, koje su iznosile 3,2 miliona tona CO_2 ekvivalenta, dok su emisije na nivou farme iznosile 2,1 milion tona CO_2 ekvivalenta. Emisije nastale usljed promjene namjene zemljišta nisu zabilježene. Posmatrano prema vrstama stakleničkih plinova, najveći udio činile su emisije ugljičnog dioksida (CO_2) od 2,1 milion tona CO_2 ekvivalenta, zatim metana (CH_4) sa 2,0 miliona tona CO_2 ekvivalenta, azotnog oksida (N_2O) sa 0,7 miliona tona CO_2 ekvivalenta te F-plinova sa 0,6 miliona tona CO_2 ekvivalenta.

In Bosnia and Herzegovina, greenhouse gas emissions from agri-food systems in 2023 amounted to 5.4 million tonnes of CO_2 equivalent. The largest contribution to emissions came from activities related to pre- and post-production of food, which amounted to 3.2 million tonnes of CO_2 equivalent, while emissions at the farm level amounted to 2.1 million tonnes of CO_2 equivalent. Emissions resulting from land use change were not recorded. Observed by type of greenhouse gas, the largest share was made up of emissions of carbon dioxide (CO_2) of 2.1 million tonnes of CO_2 equivalent, followed by methane (CH_4) with 2.0 million tonnes of CO_2 equivalent, nitrous oxide (N_2O) with 0.7 million tonnes of CO_2 equivalent, and F-gases with 0.6 million tonnes of CO_2 equivalent.

Tabela 4.3.6. Promjena temperature mjerena preko zemlje, 2000.-2024., Bosna i Hercegovina
Table 4.3.6. Temperature change measured across the country, 2000-2024, Bosnia and Herzegovina

°C

2000.	2005.	2010.	2015.	2020.	2021.	2022.	2023.	2024.
1.55	0.15	1	1.86	1.92	1.65	2.18	2.56	3.44

Izvor /*Source*: FAO

Grafikon 4.3.6. Promjena temperature mjerena preko zemlje, 2000.-2024., Bosna i Hercegovina
Graph 4.3.6. Temperature change measured across the country, 2000-2024, Bosnia and Herzegovina

