Republika e Kosovës - Republika Kosova - Republic of Kosova

AUTORITETI RREGULLATOR PËR SHËRBIMET E UJIT
REGULATORNI AUTORITET ZA USLUGE VODE
WATER SERVICES REGULATORY AUTHORITY

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ANNUAL PERFORMANCE REPORT FOR WATER SERVICE PROVIDERS IN KOSOVO

2021

WSRA, August 2022

MISSION

"Regulation of water service in an effective and transparent manner in accordance with good European practice, which ensures that water and wastewater service deliver qualitative, sustainable services with affordable prices throughout Kosovo, having into consideration environmental and public health protection"

VISION

"Water efficient, safe and quality service for all customers throughout Kosovo"

CONTENTS

LIST OF ABBREVIATIONS

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WSRA	Water Services Regulatory Authority
KAS	Kosovo Agency of Statistics
MAK	Metrology Agency of Kosovo
BRP	Business Regulatory Plan
RAB	Regulatory Asset Base
BD	Boards of Directors
KNIPH	Kosovo National Institute of Public Health
CPIK	Customer Price Index in Kosovo
WTP	Water Treatment Plant
IMCW	Inter-Ministerial Council on Waters
RWC	Regional Water Company
PMU-POE	Policy and Monitoring Unit of Public Owned Enterprises
WC	Water Center
NRW	Non-Revenue Water
AI	Administrative Instruction
RAG	Regulatory Accounting Guidelines
SP	Service Providers-RWC
GIS	Geographic Information System
KPI	Key Performance Indicators
IIG	Inter-institutional Group (Government, WSRA, RWC, SHUKOS)
PR	RWC Prishtina
PZ	RWC Hidroregjioni Jugor
PE	RWC Hidrodrini
GJA	RWC Gjakova
MIT	RWC Mitrovica
FE	RWC Bifurkacioni
GJI	RWC Hidromorava
HEE	Hydro-Economic Enterprise

1. INTRODUCTION

The Water Services Regulatory Authority (WSRA) is an independent institution, responsible for the regulation and monitoring of the water supply and wastewater sector in Kosovo and has legal responsibility for monitoring performance and for drafting an annual performance report of the water service providers.

This report presents the position and level of water services and evaluates the operational and financial performance of the seven (7) Regional Water Companies (RWC) and the Iber Lepenci Hydro-Economic Enterprise (HEE). The analysis presented in this report are based on the data reported by the water service providers, which have been verified through the audit of these data by WSRA. The report is an instrument for informing the public and all stakeholders involved in the water sector.

In this report, the performance of the water and wastewater services sector during 2021 is presented and it is compared with the previous year (2020), as well as the level of fulfillment of the planned objectives with the tariff process for some key performance indicators is described. For objective reasons, the WSRA management has decided not to include the chapter on the ranking of RWC according to their performance in this report.

In general, the performance of water and wastewater service providers during 2021 in some indicators has been better compared to their performance during 2020. Almost all RWC have achieved the most significant improvement in the collection rate. In 2021, the sector has had positive developments in terms of the water supply stability, reduction of operating expenses and the efficiency of staff. Coverage with water supply services has also had a slightly positive trend, but the level of coverage with wastewater services has remained at the same level as in 2020. The wastewater treatment performance indicator during 2021 has also improved with the operationalization of WTP in Prizren and Peja.

The most challenging and problematic issues for the water sector continue to be high level of non-revenue water (NRW), which during 2021 was at 55%, the same as in 2020, and the low level of implementation of capital investments, which have been planned to be funded from own source revenues.

Whereas, if we analyze the performance of the enterprises in terms of the planned targets with the tariff process, we can conclude that most of the enterprises have not reached the targets in most of the performance indicators.

The authority encourages water service providers to continue their commitment to improving performance indicators with a special focus on improving the continuity of regular water supply, reducing the NRW and to implement the planned capital investments.

WSRA will continue to work with the boards, management of enterprises as well as other parties involved in the sector in improving the performance of enterprises and improving water supply and wastewater services.

We believe that mutual and close cooperation with service providers and not only, will result in the improvement of water supply services as well as on the financial and technical sustainability of water supply and wastewater systems.

2. PERFORMANCE OF SERVICE PROVIDERS

2.1 OPERATIONAL PERFORMANCE – WATER SUPPLY

2.1.1 Water Quality

Water quality is one of the main service standards listed in the legal framework and WSRA regulations; The Kosovo National Institute of Public Health (KNIPH) is the authority responsible for supervising the implementation of testing procedures and the fulfillment of this standard by RWCs. In relation to the water quality, WSRA has not received data from KNIPH for 2021. Namely, the data presented in this report are based on the tests carried out by RWCs (either in their own laboratories or contracted to the Regional Centers of Public Health). The water quality data for 2020 the WSRA has received from KNIPH only for the first six-months.

Based on the data reported by RWCs, the accreditation status of the laboratories is as follows: the laboratories of RWC Gjakova, and RWC Hidroregioni Jugor are accredited, the laboratory of RWC Prishtina was accredited until 2020, but they did not extend their accreditation for 2021. In 2022, the RWC Prishtina has applied for re-accreditation, RWC Hidromorava, RWC Bifurkacioni, and RWC Hidrodrini are in the process of accreditation, while RWC Mitrovica has not yet started the accreditation process.

In 2021, a total of 20,366 samples have been tested, of which 98.1% are in accordance with drinking water quality standards. Regarding the bacteriological aspect, a total of 8,192 samples have been tested, 98.3% of which were in accordance with the allowed parametric norms, whereas in terms of physical and chemical quality, 12,174 samples have been tested, 98% of which were in accordance with the allowed norms. The results of the tests have been presented graphically in figure 1 and 2.

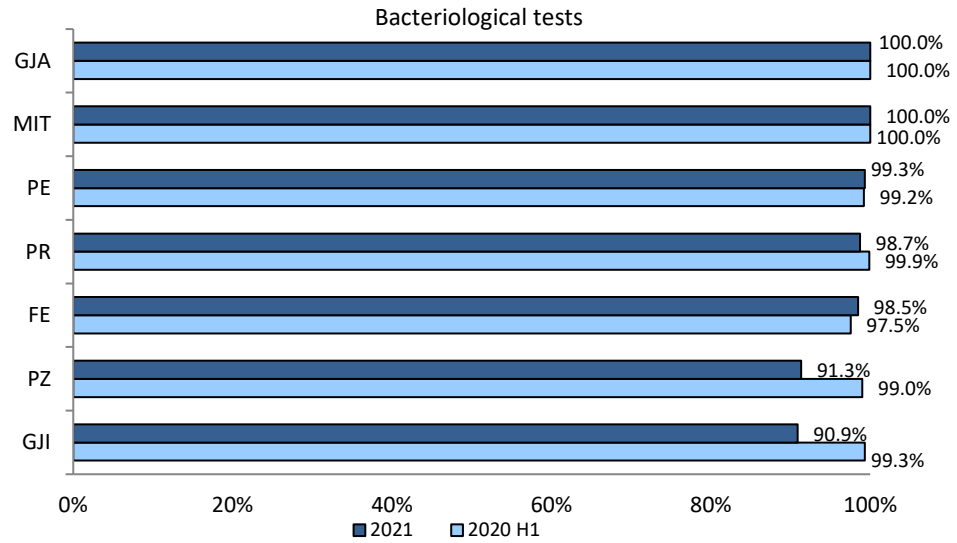


Figure 1. Water quality: bacteriological tests - compliance with the allowed parametric values (2020 H1 and 2021)

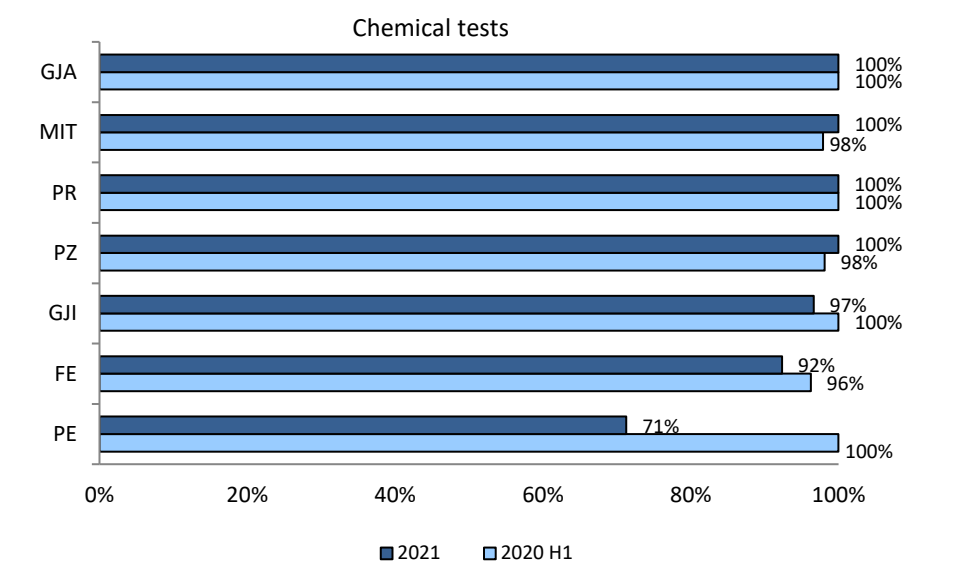


Figure 2. Water quality: chemical tests - compliance with the allowed parametric values (2020 H1 and 2021)

In terms of bacteriology, RWC Hidromorava (90.9% compliance) and RWC Hidroregjioni Jugor (91.3% compliance) had the highest number of failures in the report. Other RWCs have reached the compliance above 98.5, while RWC Gjakova and RWC Mitrovica have reached compliance at 100%.

In terms of chemical analysis RWC Hidrodrini (71.3%) and RWC Bifurkacioni (92.4%) marked the lowest compliance, RWC Hidromorava reached the compliance level (96.7%), whereas RWC Prishtina, RWC Gjakova, RWC Mitrovica and RWC Hidroregjioni Jugor reached the level of 100% in terms of the compliance.

In July 2021 in the service area of RWC Hidrodrini, namely in several villages of the Municipality of Deçan, it had come to a mass poisoning of the population, fortunately without fatal consequences for the residents. Based on the findings, it was established that there was a water pollution and that in some points the water supply system did not meet the standards set by Administrative Instruction No. 16/2012 on the Human Consume Water Quality for Human Consumption.

In order to ensure good quality and sustainability of water quality, investments are needed in water sources, ensuring that surface water does not penetrate wells that are used for drinking water, water treatment plants, reservoirs, pumping stations and in the distribution network. It is also important for the RWCs to accredit their laboratories for performing chemical and bacteriological analyses. The RWCs must finalize the drafting of Water Quality Monitoring Plans, in accordance with Administrative Instruction 10/2021 on the Human Consume Water Quality for Human Consumption.

2.1.2 Coverage with water services

This indicator represents the percentage of the population supplied by the systems managed by the RWC in relation to the general population within the licensed service area. RWCs currently provide water supply services to the residents[1] for 79% of the population in Kosovo. In 2021, this indicator has marked progress for 1% compared to 2020, mainly in RWC Mitrovica and Hidroregjioni Jugor. Expressed in terms of settlements, out of a total of 1,238 settlements, only 665 have access to public water systems managed by RWCs. It needs to be emphasized that the figures presented do not include the settlements that are

[1] Population data are taken from the relevant reports published by the Kosovo Agency of Statistics (more precisely from the Census Report 2011 and the Population Forecast Report 2017-2061)

not managed by the RWCs. A number of settlements have their own water supply systems and are managed by the respective municipalities or the community.

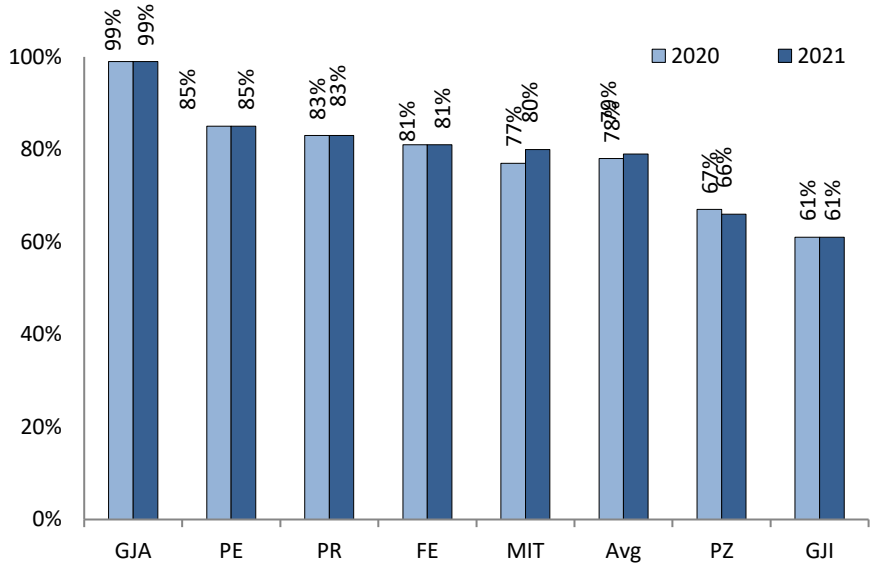


Figure 3. Coverage with water services

During 2021 compared to 2020, 15 rural water supply systems have been added under the management of all RWC. Whereas, according to the information that WSRA has received from the persons responsible for the projects that support the water sector, there are also 93 water supply systems that have already been built in rural areas that should be operationalized and managed by the respective RWCs.

Almost full coverage, within its area of responsibility, has been achieved only by RWC Gjakova, with 99% coverage, while RWC Hidromorava (with 61%) and Hidroregjioni Jugor (with 66%) remain far behind with the extension of their water supply services in their respective service area.

2.1.3 Water Metering

Metering of used water is one of the important standards of water service, it is a prerequisite for a fair billing by charging customers based on their real consumption. Water metering is also an important tool for controlling water consumption and losses.

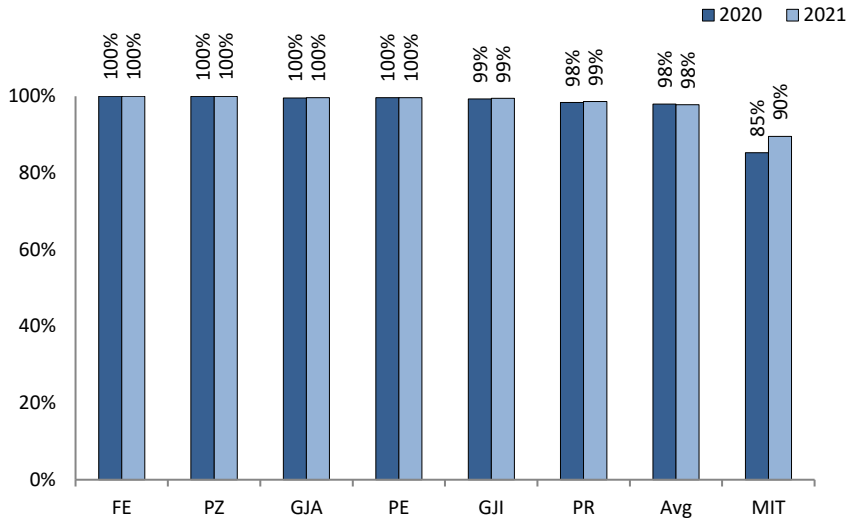


Figure 4. Rate (%) of domestic customers with water meters

All RWCs have marked good performance in equipping household customers with water meters during 2021. The RWC Mitrovica, despite the progress achieved in 2021 in increasing by 5% the customers equipment with water meters compared to 2020 , it still stands at a lower level compared to other companies. WSRA has continuously asked all RWCs to establish the mandatory measurement of water consumption as one of the basic service standards.

Although the coverage with water meters, according to the statement of the RWC, is high, the accuracy of water metering is a very worrying issue due to the age of the water meters. According to the legal framework approved by the Metrology Agency of Kosovo, RWCs are obliged to verify the accuracy of water meters every 5 years. It is estimated that a key element in such high water losses may be the result of old water meters.

2.1.4 Complaints

The number of complaints is an important indicator for assessing customer satisfaction with the service received from their service provider. Complaints are divided into two categories, complaints for technical - operational issues and complaints for financial - commercial issues. RWCs, given that they have suitable software applications for recording complaints, must keep an updated register of customer complaints, classify them based on their nature, and certainly resolve these complaints within a time frame as determined by the legal framework.

Table 1 shows the number of technical and financial complaints, including the comparison with 2020.

Table 1. Customers' complaints for water services

	Technical complaints			Commercial complaints		
RWC	2020	2021	Comparative Ratio: 2021/2020	2020	2021	Comparative ratio: 2021/2020
PR	2,868	3,905	36%	1,189	1388	17%
PZ	2,344	2,021	-14%	668	670	0%
PE	4,558	2,296	-50%	21	43	105%
MIT	5,099	6,785	33%	168	85	-49%
GJA	96	3	-97%	331	338	2%
FE	32	54	69%	82	137	67%
GJI	111	244	120%	88	339	285%
Totali	**15,108**	**15,308**	**1%**	**2,547**	**3,000**	**18%**

The number of complaints that dominate are those related to technical-operational issues; only about 1/3 of the complaints are of a financial - commercial nature. At the sector level for 2021, a significant increase in financial complaints is observed, there are 18% more complaints than in 2020, while the number of technical complaints is 1% higher than in 2020.

2.1.5 Customers affected by low water pressure

This indicator represents the average number of customers served during the reporting period for occurrences in their service areas that regularly face lower water pressure than the minimum pressure level (defined to be 1.5 bar) at the customer's tap, but which do not include temporary and unavoidable cases of low pressure.

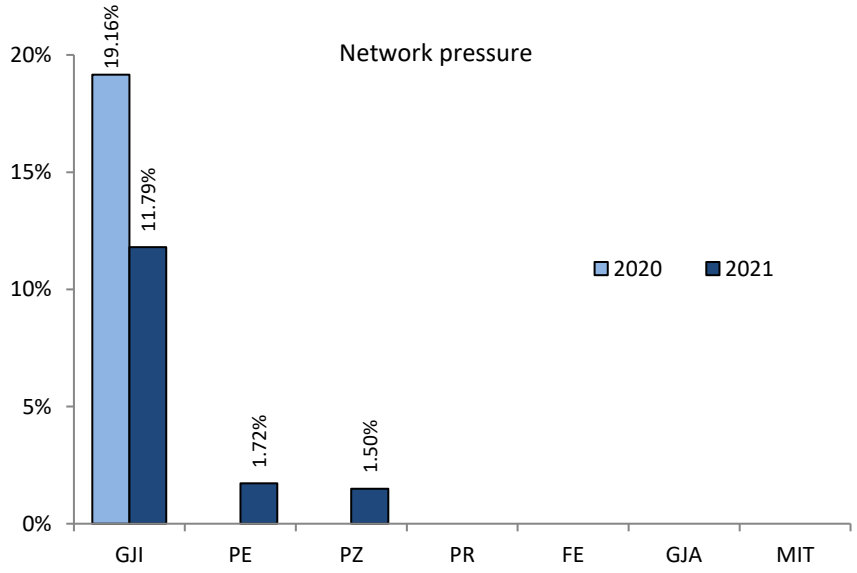


Figure 5. Rate (%) of customers who have problems with low pressure

The same as in 2020, in 2021 the RWC Hidomorava has reported the highest percentage of customers who have problems with obtaining pressure at the reference level. Problems with meeting the pressure level in the service area for 2021 have also been reported by RWCs Hidrodrini and Hidroregjioni Jugor. In these two regions, a smaller number of customers who have a problem with pressure at the reference level has been reported.

This is mainly related to the lack of regular supply. None of the RWCs have installed pressure management and monitoring systems in the distribution network.

The pressure zones are not divided in the entire service area of the RWCs and the data in the GIS has not yet been updated. For effective reduction of water losses, adequate pressure management and monitoring is essential. Therefore RWCs must install a pressure management and monitoring system, namely, build a fully monitored hydraulic model to ensure minimum pressure throughout the water distribution network.

2.1.6 Reliability of water supply

Reliability of service represents one of the important service standards, through which the average number or percentage of properties in the reporting period that have reliable water supply is shown. Reliability of water supply is categorized into three groups: properties that have supply of water for 23 or more hours per day, properties that have 18-23 hours of supply per day and properties that have less than 18 hours of supply per day, excluding the cases of interruptions that may occur due to technical problems or planned interruptions by the RWCs.

Table 2. Rate (%) of customers with water supply <18 hours, 18-23 hours, and 24 hours during 2020 dhe 2021

	<18 h supply %		18-24 h supply %		24 h supply %	
RWC	2020	2021	2020	2021	2020	2021
PR	0.6%	0.8%	1.0%	2.2%	98.4%	97.0%
PZ	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
PE	0.0%	3.8%	0.8%	0.0%	99.2%	96.2%
MIT	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
GJA	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
FE	4.1%	3.8%	2.7%	2.5%	93.2%	93.7%
GJI	77.0%	40.7%	16.5%	0.0%	6.5%	59.3%

The companies which in 2021 managed to supply their customers with drinking water 24 hours a day are the following: RWC Mitrovica, RWC Gjakova, and RWC Hidroregjioni Jugor. It should be emphasized that the entire municipality of Mamusha, which is under the service license of RWC Hidroregioni Jugor, has no drinking water supply at all due to problems with water sources.

In terms of meeting this standard, the RWC Hidromorava stands in a worse position. Namely, roughly 40% of customers have less than 18 hours of water supply per day, although if the supply situation in 2021 is compared to the previous year, it is noted that there has been an improvement; this has resulted due to drought situation in the region. Regression regarding this indicator in relation to the previous year was noted by RWC Prishtina and RWC Hidrodrini, while in relation to RWC Bifurkacioni no improvement of regular water supply was reported in relation to the previous year 2020.

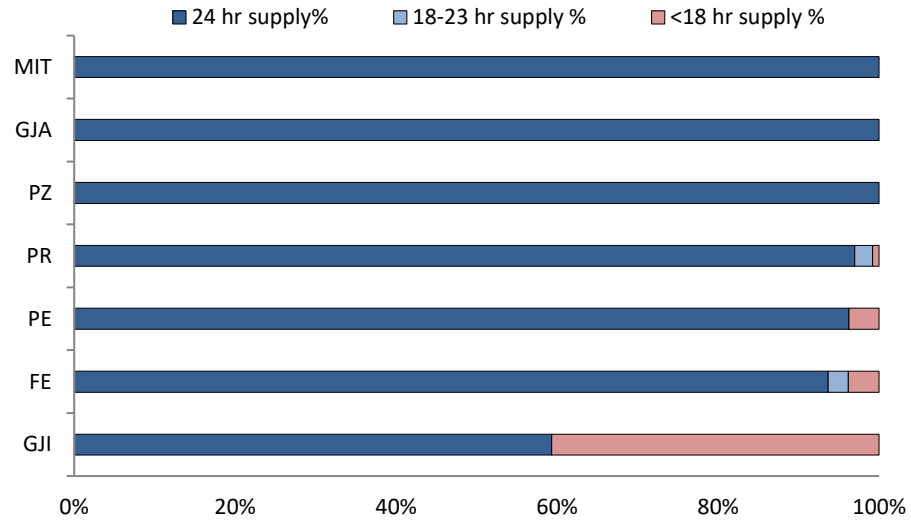


Figure 6. Rate (%) of customers with regular drinking water supply

The same as with the indicator for the level of pressure in the network, this indicator is also difficult to be measured by RWCs in terms of quantity and difficult to be monitored by WSRA in the absence of devices installed in the distribution network of RWCs that would record the flow or pressure of water. Both of these indicators are based on the reporting by RWCs.

2.1.7 Pipe bursts in the water supply network

This indicator represents the total number of defects/damages of water supply pipes during two years per 100 km of the length of the water supply network (excluding damages to household connection pipes). This indicator can be representative to show the condition and performance of the water distribution network.

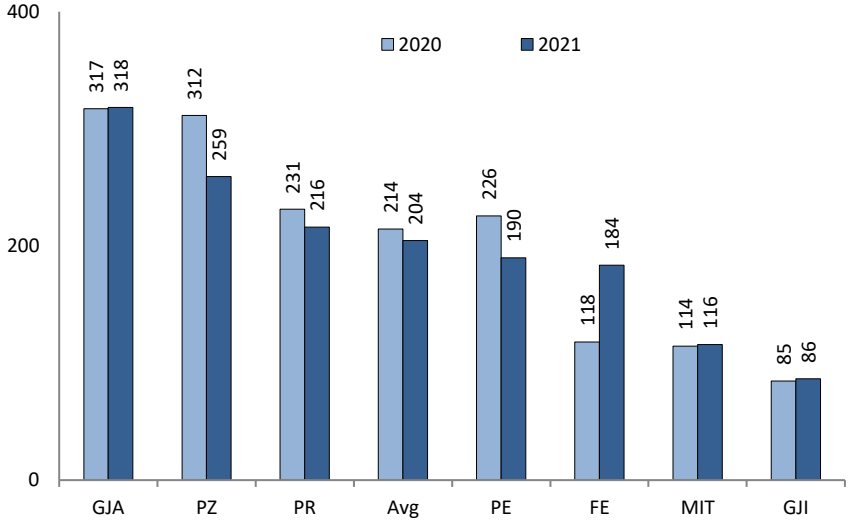


Figure 7. Number of defects in the water supply network per 100 km

During the year 2021, the number of defects in the water supply network per 100 km of network has marked a downward trend, from 214 cases of defects during 2020, this number has decreased to 204 during 2021.

The poor performance of the water supply network has been influenced by: the age of pipes, the lack of adequate maintenance by RWCs. A large number of defects during 2021 was reported in RWC Gjakova with 318 cases, while RWC Hidromorava had the smallest number of defects reported with only 86 defects in 100 km of network. A significant increase in defects in 2021 has been reported by RWC , from 118 defects in 2020, the number has increased to 184 in 2021.

2.1.8 Non-revenue water (water lost)

In 2021 also, non-revenue water (NRW) continues to be at a very high level and remains the biggest challenge that the water sector in Kosovo is facing. For 15 years, the non-revenue water (NRW) expressed in percentage for the sector as a whole, has almost not changed. It is at the level of 55-61%, with small decreases and increases from year to year - as shown in figure 8. The increasing and decreasing rate of NRW throughtout the years prove that no adequate measures or activities are implemented by the RWCs to seriously addressed this very complex problem.

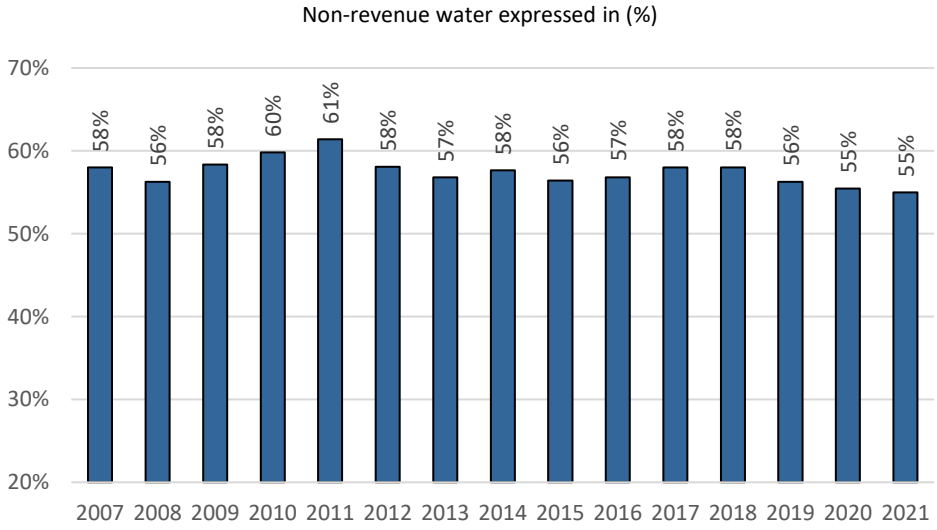


Figure 8. Rate of non-revenue water throughout years (%)

In relation to individual RWCs for 2020 and 2021, NRW is presented in figure 9.

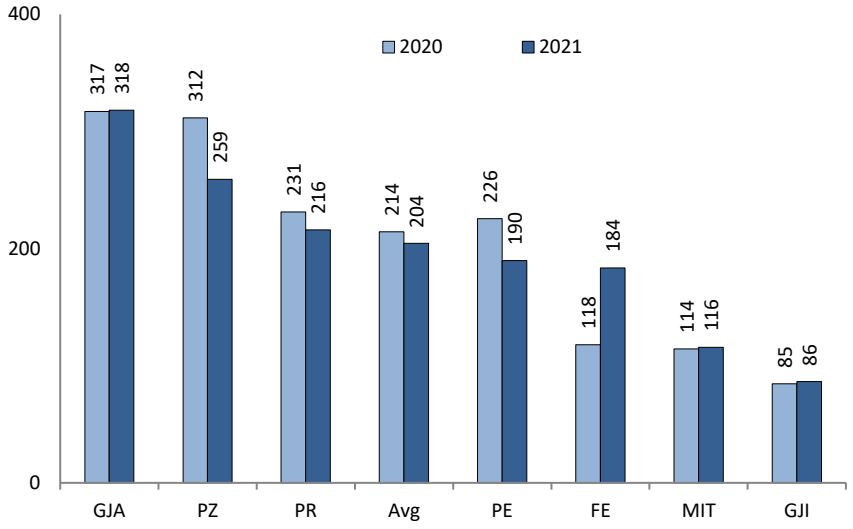


Figure 9. Rate (%) of NRW during 2021/2020

In addition to presenting the NRW in %, this report presents the NRW in the unit [l/customers per day] for the sector in general and for individual RWCs for 2020 and 2021, as presented in figure 10.

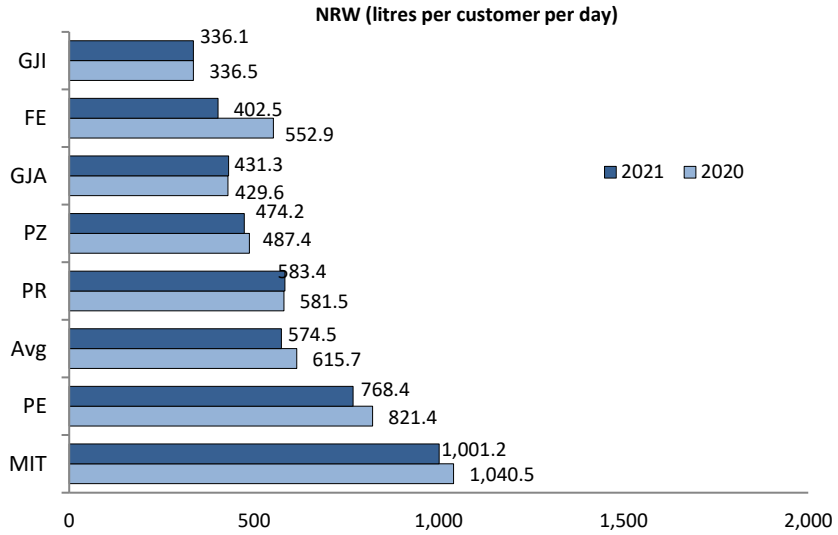


Figure 10. Non-revenue water in liters per customer per day

Non-revenue water expressed in liter units per customer per day is the most appropriate indicator for comparing the performance of the RWCs, where during the calculation, the effect of restricted supply is also taken into account.

During 2021, the sector's average for non-revenue water in liters per customer per day is 575 liters per customer per day, but it should be emphasized that in 2021 there is a slight decrease for the sector in terms of NRW [liter per customer per day] compared to the previous year, the year 2020.

RWC Mitrovica has marked poorer performance with a loss of about 1,000 liters per customer per day, while RWC Hidromorava has the best performance in this indicator with 336 liters of loss per customer per day, the least of all RWCs.

In 2021, all seven RWCs have produced and distributed a total of roughly 156.4 million m3 of drinking water, which, if compared to the previous year, marked a 3% increase in production. At the sector level, the rate of NRW has remained at the same level of 55%, during the year 2021 compared to the previous year, but the NRW as a volumetric value during the year 2021 is higher and reaches the value of about 86.1 million m3. This amount of non-revenue water does not bring income to the companies. Moreover, it creates expenses and deficits in the regular supply of the population. If we compare this amount to the amount in 2020, in 2021 we notice an increase in NRW for about 1.65 million m3.

Table 3 summarizes the data on NRW, as approved and realized for 2020 and 2021.

Table 3. Rate (%) of NRW realised relative to target for 2020-2021

	Realization		Target	
Company	2020	2021	2020	2021
RWC Prishtina	58%	58%	48%	48%
RWC Hidroregjioni Jugor	55%	54%	49%	51%
RWC Hidrodrini	60%	58%	53%	55%
RWC Mitrovica	53%	55%	46%	50%
RWC Gjakova	42%	42%	40%	40%
RWC Bifurkacioni	64%	57%	40%	52%
RWC Hidromorava	47%	48%	39%	46%
Sector average	**55%**	**55%**	**47%**	**49%**

None of the RWCs, have managed to meet the planned objectives with the tariff process. In the best case RWC Gjakova and RWC Hidromorava were closer to achieving the objectives in 2021. The realization was lower than the planning by only 2% in both of these companies.

WSRA has always suggested that in order to succeed in reducing NRW, stable structures must be created within the RWCs with professional staff, tools, technology and necessary training to work to reduce losses and meet the goals. NRW is a very complex problem that requires a systematic approach from all levels and all departments of RWCs. The right approach to addressing NRW means starting from a point where everyone is aware of the root causes and extent of NRW, and thus, setting clear and achievable plans and objectives to address the problem. Staff tasked with NRW reduction tasks must be motivated and committed to work and be very transparent and realistic when planning and performing their duties, and above all, NRW reduction efforts must be understood as a continued process.

2.1.9 Volume of produced, sold (invoiced) and lost water

The summary of the volumetric values of water produced, water sold, water lost, and the comparison of the data realized in 2020 and 2021 are presented in Table 4.

During their tariff process for 2021, the RWCs presented their projections for the volume of water they would sell to supply their customers. For 2021, the projections were for all RWCs to invoice about 69.92 million m3 of water, while they managed to realize about 65.46 million m3, approximately 4.46 million m3 realized less than the target. Expressed as a percentage, the realization amounts to about 94%, without taking into account the bulk water that is supplied to the northern part of Mitrovica (which is 4,824,515 million m3).

The fulfillment of goals for the volume of water sold (invoiced) by the RWCs and the average for the sector is presented in Figure 11.

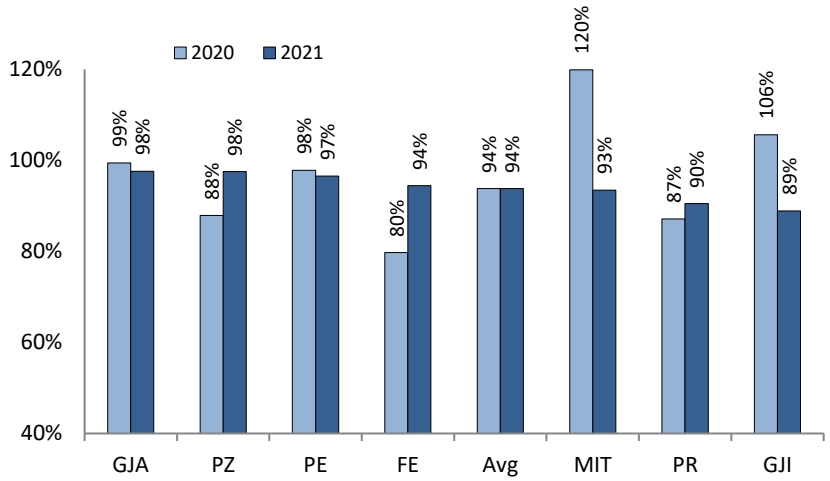


Figure 11. Quantitative rates (%) of water sold by RWCs compared to their respective business plan estimates

Name of RWC	Operative Data	Unit	Historic 2020	Approved 2021	Realized by RWC 2021	Comparative % 2021 / 2020	Comparative % 2021 real/goal
PR	Water produced	m3	52,961,479	49,594,420	55,175,048	104.18%	111.25%
	Water lost	m3	30,662,482	24,000,000	32,013,675	104.41%	133.39%
	Water invoiced	m3	22,298,997	25,594,420	23,161,373	103.87%	90.49%
	Customers	Nr	148,510	151,888	153,630	103.45%	101.15%
PZ	Water produced	m3	16,520,232	16,154,385	16,928,504	102.47%	104.79%
	Water lost	m3	9,137,000	8,238,756	9,209,719	100.80%	111.79%
	Water invoiced	m3	7,383,232	7,915,629	7,718,785	104.54%	97.51%
	Customers	Nr	52,322	53,122	54,162	103.52%	101.96%
PE	Water produced	m3	24,881,387	23,793,333	24,842,768	99.84%	104.41%
	Water lost	m3	15,020,430	13,086,333	14,509,230	96.60%	110.87%
	Water invoiced	m3	9,860,957	10,707,000	10,333,538	104.79%	96.51%
	Customers	Nr	51,154	52,845	53,293	104.18%	100.85%
MIT	Water produced	m3	26,506,027	28,000,000	27,457,562	103.59%	98.06%
	Water lost	m3	14,065,702	14,000,000	15,156,096	107.75%	108.26%
	Water invoiced	m3	12,440,325	14,000,000	12,301,466	98.88%	87.87%
	Invoicing-South	m3	6,954,809	8,000,000	7,476,951	107.51%	93.46%
	Invoicing –Norh	m3	5,485,516	6,000,000	4,824,515	87.95%	80.41%
	Customers	Nr	39,049	43,000	43,935	112.51%	102.17%
GJA	Water produced	m3	15,202,835	15,652,059	15,910,071	104.65%	101.65%
	Water lost	m3	6,346,777	6,260,823	6,742,405	106.23%	107.69%
	Water invoiced	m3	8,856,058	9,391,236	9,167,666	103.52%	97.62%
	Customers	Nr	41,851	45,084	43,816	104.70%	97.19%
FE	Water produced	m3	9,494,874	7,860,654	8,258,735	86.98%	105.06%
	Water lost	m3	6,050,736	4,087,540	4,695,808	77.61%	114.88%
	Water invoiced	m3	3,444,138	3,773,114	3,562,927	103.45%	94.43%
	Customers	Nr	31,199	33,462	33,569	107.60%	100.32%
GJI	Water produced	m3	6,704,295	8,360,238	7,801,252	116.36%	93.31%
	Water lost	m3	3,161,125	3,817,787	3,762,981	119.04%	98.56%
	Water invoiced	m3	3,543,170	4,542,451	4,038,271	113.97%	88.90%
	Customers	Nr	33,553	33,440	34,742	103.54%	103.89%
SECTOR	**Water produced**	**m3**	**152,271,129**	**149,415,090**	**156,373,940**	**102.69%**	**104.66%**
	Water lost	**m3**	**84,444,252**	**73,491,240**	**86,089,914**	**101.95%**	**117.14%**
	Water invoiced	**m3**	**67,826,877**	**75,923,850**	**70,284,026**	**103.62%**	**92.57%**
	Customers	**Nr**	**397,638**	**412,841**	**417,147**	**104.91%**	**101.04%**

Table 4. Comparison between the approved and the realized data for 2020-2021

At the sector level, the volumetric sales realized in relation to those planned have recorded almost the same performance, from 93.8%, as they were in 2020, to 93.6% in 2021. RWC Mitrovica and RWC Gjakova have managed to fulfill sales at 99% and 98 % respectively, while RWC Hidromorava has realized the plan at 89%.

2.2 FINANCIAL PERFORMANCE – WATER SUPPLY

In order for the 2021 financial data to be on the same level of comparison with the 2020 data, they have been adjusted having into consideration the rate of inflation. T

hus, the realized data for 2020 are adjusted with the inflation index coefficient of 1.03347, whereas the projected data are adjusted with the coefficient of 1.07435, which represents the adjusted rate of inflation for the period of the 2017-2021 tariff process..

2.2.1 Monetary value of sales (Invoicing) (EUR)

Also in this year, the value of sales in euros for each of the RWCs individually, was lower than the projected, mainly due to poor projections of sales, as presented in Figure 11 (above).

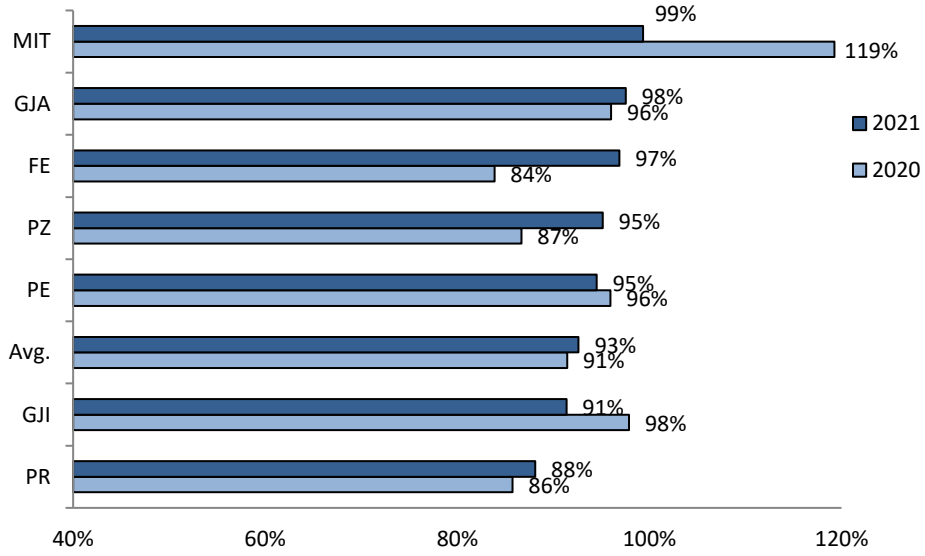


Figure 12. Water supply sales value relative to plan estimates

The failure to meet the plan in relation to the water sold has penalized RWCs in terms of generating the financial resources necessary to fulfill their investment plans in the infrastructure they manage. Despite this failure to meet sales targets, the absolute value of sales has increased, this is mainly attributed to the increase in sales tariffs in 2021 and 2020.

Table 5. Value of realised and planned sales 2020-2021

Value of sales (Euro)							
	2020			2021			Ratio:
RWC	Planned	Realized	Ratio: real./plan.	Planned	Realized	Ratio: real./plan.	Realization 2021/Realization 2020
PR	15,140,109	12,980,170	86%	14,670,957	12,926,586	88%	-0.41%
PZ	4,544,793	3,939,293	87%	4,167,400	3,964,962	95%	0.65%
PE	3,658,966	3,510,499	96%	3,721,959	3,517,253	95%	0.19%
MIT	2,738,222	3,265,736	119%	3,347,663	3,325,071	99%	1.82%
GJA	4,226,645	4,057,953	96%	4,300,408	4,194,101	98%	3.36%
FE	2,087,177	1,750,566	84%	1,836,891	1,779,260	97%	1.64%
GJI	1,807,144	1,768,531	98%	2,106,189	1,9`24,245	91%	8.80%
Sector	**34,203,055**	**31,272,749**	**91%**	**34,151,467**	**31,631,479**	**93%**	**1.15%**

The value of water sales realized in 2021 at the sector level was €31.6 million, while the budgeted sales were around €34.15 million, which means that the target has been met to the extent of 93%. Regarding this indicator, an increase of only 1.15% compared to 2020 has been identified, an almost negligible increase.

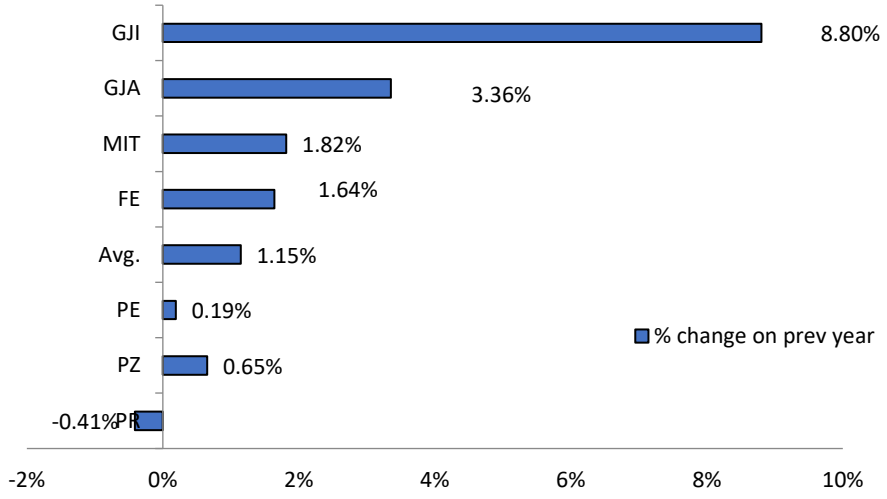


Figure 13. Water supply sales value in 2021 relative to 2020

Of the seven RWCs, six of them have marked a progress in sales during 2021 compared to 2020. Nonetheless, RWC Prishtina had marked a decrease of 0.4% compared to 2020.

In 2021, RWC Hidromorava marked the biggest decine in water sales compared to its plan. Namely, it had managed to meet the target to the extent of 89%. On the other hand, RWC Hidromorava had managed to exceed sales compared to 2020 by 8.8%. This is mainly the result of the increase in the volume of water produced by 16% compared to the previous year (due to the 2020 drought period), which was then reflected by the increase in water sales by 14% compared to 2020.

2.2.2 Costs per unit

Unit costs include: operating cost per unit of water produced, total operating cost per unit of water produced and total cost per unit of water sold as presented in Table 6.

Table 6. Costs per unit for 2020 and 2021

	2020			2021		
RWC	Operating costs per unit of water produced	Total operating costs per unit of water produced	Costs per unit of water sold	Operating costs per unit of water produced	Total operating costs per unit of water produced	Costs per unit of water sold
PR	0.049	0.059	0.484	0.046	0.055	0.453
PZ	0.099	0.102	0.416	0.105	0.108	0.414
PE	0.005	0.006	0.233	0.014	0.015	0.264
MIT	0.068	0.069	0.384	0.055	0.056	0.317
GJA	0.026	0.034	0.461	0.024	0.032	0.412
FE	0.041	0.042	0.398	0.043	0.045	0.367
GJI	0.093	0.097	0.423	0.074	0.078	0.414
Sector	**0.050**	**0.055**	**0.414**	**0.048**	**0.053**	**0.390**

2.2.3 Operating costs per unit of water produced

The cost per unit of water produced is an important financial indicator based on which we understand the expenses for one (1) m3 of produced water and represents the total cost of water production in the reporting period divided by the amount of produced water for the same period.

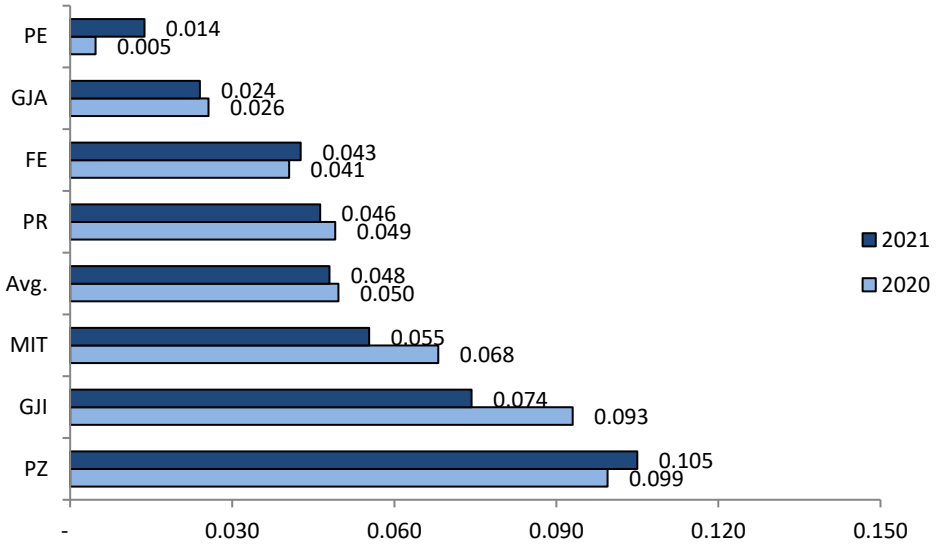


Figure 14. Water unit production costs during 2021 and 2020

At the sector level, the average cost of a unit of produced water, in real financial terms, has marked a slight decreased from €0.05/ m3 in 2020 to €0.048/ m3 in 2021.

Water production costs vary from €0.014/m3 in the case of RWC Hidrodrini, to the highest at €0.11/m3 in the case of RWC Hidroregjioni Jugor. This is due to the type of water supply systems that RWCs manage

with. RWC Hidrodrini has lower costs of water treatment and of energy, smaller number of water sources in use, and water is mainly transported to customers through gravity.

The high cost of the water produced at RWC Hidroregjioni Jugor, this year as in previous years, has been influenced by high costs for water treatment, and in particular by high energy costs, given that it operates with over 40 sources (different systems), and the vast majority of them are based on water pumping; energy and fuel costs account for 40% of the total costs of produced water.

Although the operating costs per unit at first glance seem low compared to the water service charges applied by individual RWCs, one must take into account the high level of losses that, together with the poor efficiency in revenue collection, significantly increase the cost of water sold. Namely, it takes approximately 2.3 m^3 of produced water to generate 1 m^3 of water sold and paid for.

2.2.4 Cost per unit of water sold

The total unit cost for water supply activities (operating costs plus capital maintenance, but excluding return on capital and bad debts[2]), adjusted having in mind the inflation rate, is shown in Figure 15.

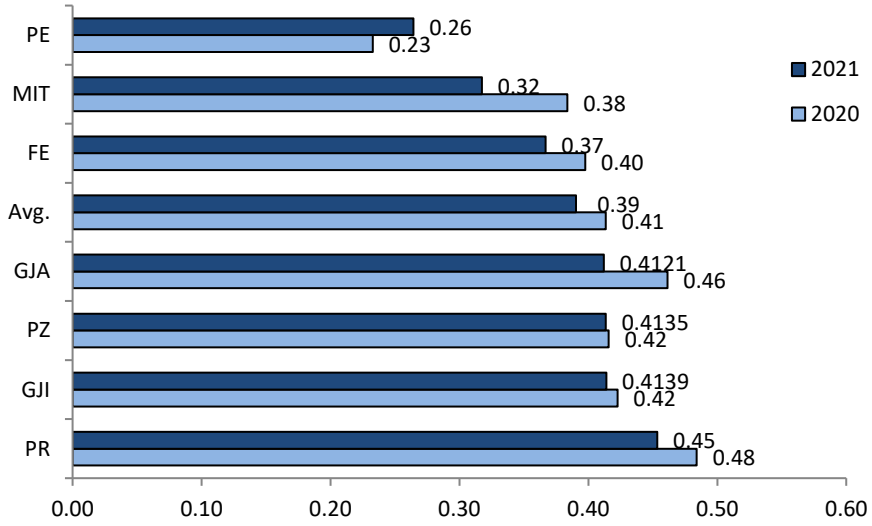


Figure 15. Cost per unit of water supply (€ per m3 of water sold)

In 2021, at the sector level, the unit cost of water supply was €0.39 per m3, which is €0.02 per m3 lower than in 2020.

As can be seen from figure 15, there is a wide diversity in terms of the cost per unit of water sold, from RWC Hidrodrini which has a significantly lower cost compared to all other water companies at 0.26 €/m3 to the highest in the case of RWC Prishtina at 0.45 €/m3 of sold water.

A reduction in the cost per unit of water sold is observed in the case of RWC Mitrovica from 0.38 €/m3 in 2020 to 0.32 €/m3 in 2021, which is a a result of the reduction of operating expenses for water supply services and the increase in volumetric sales of the water.

[2] Pursuant to the Accounting Regulatory Guidelines, bad debts in this report are defined as the amount of uncollected revenues for the previous year.

2.2.5 Cost per unit of water sold - realized relative to planned

The unit cost of water sold is a financial indicator that ranks in the group of main indicators based on which the performance of water supply is measured.

Figure 16 shows the realized cost (operating costs including capital maintenance divided by invoincing in m3) versus the planned costs (operating including capital maintenance divided by invoicing in m3).

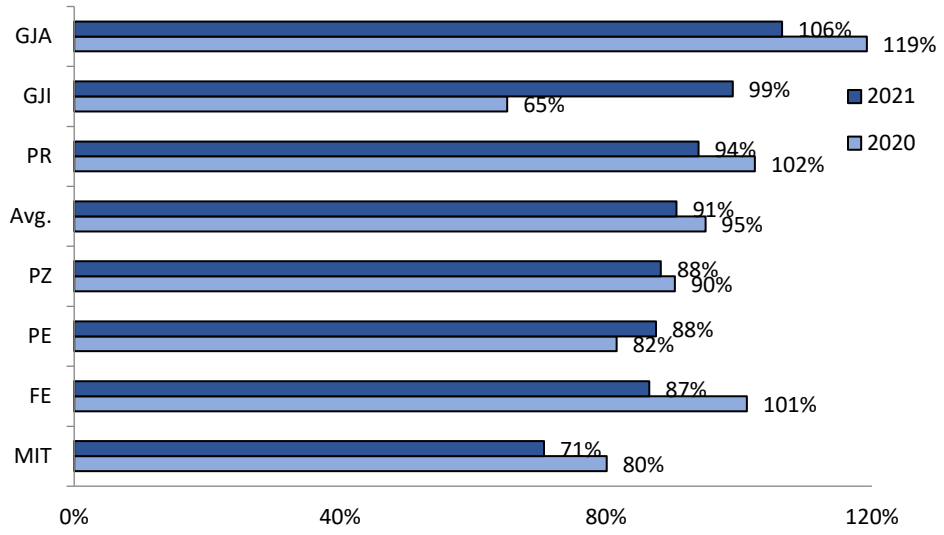


Figure 16. Cost per unit of water supplied relative to unit planned cost

At the sector level, the fulfillment of the plan for the unit cost of water sales in 2021 is close to 90% and compared to the previous year it has improved by 4%, from 95% it has fallen to 91%.

The fulfillment of the planned cost per unit in most of the RWCs was below 90%. Nevertheless, even this does not indicate a very good performance, because the planned unit costs have included significant expenses for infrastructural refurbishment and depreciation according to the actual cost for the new assets and that these companies have not managed to implement not even 50% of them.

What this means is that although unit costs were generally lower than planned, this resulted in deteriorating asset conditions and declining service levels.

2.2.6 Capital investment in water supply

The 2018 – 2021 tariff process (specifically that of 2021) included provisions for capital expenditures for capital maintenance as well as for capital growth/refurbishment. Most of these expenses, especially those for capital maintenance, were expected to be financed from the own financial resources of RWCs, but as can be seen, the implementation is low. WSRA is very concerned with the level of implementation of capital projects, which have already been included in the tariffs. WSRA estimates that the RWCs still do not differentiate between capital maintenance expenditures and capital growth/refurbishment expenditures. From WSRA observations, almost all capital expenditures have been dedicated to capital expansion, with little or no capital maintenance expenditures, a fact that results in a deterioration of the assets' condition and a decrease in the level of service.

Table 7 presents the planned and implemented values of capital investments from the RWCs own sources and grants.

Table 7. Investments planned and implemented from own source revenues during 2020 and 2021

Own investment resources					
	2020	2021			
RWC	Capital investments (implemented)	Capital investments (planned)	Capital investments (implemented)	comparative % 2021: implemented/ planned	comparative %: 2021/2020 (implemented)
PR	104,013	1,213,475	497,374	41.0%	378%
PZ	362,961	617,509	181,310	29.4%	-50%
PE	379,290	633,865	242,803	38.3%	-36%
MIT	-	376,258	227,145	60.4%	/
GJA	1,548,951	420,186	296,833	70.6%	-81%
FE	13,474	317,867	7,464	2.3%	-45%
GJI	62,864	342,287	25,559	7.5%	-59%
Sector	**2,471,553**	**3,921,446**	**1,478,488**	**37.7%**	**-40%**

At the sector level, for 2021, the companies have planned to spend about 3.92 million Euros from their own revenues, which are included in the approved tariffs, and this target has been realized at the level of 37.7%. As for the amount of own investments, RWC Prishtina leads with 41.2% of the target, while RWC Bifurkacioni has fulfilled the target only at 2.3%.

Table 8. Planned and implemented investments from grants during 2020 and 2021

Investments from grants					
	2020	2021			
RWC	Capital investments (implemented	Capital investments (planned)	Capital investments (implemented	Comparative % 2021: iimplemented/ planned	Comparative %: 2021/2020 (implemented)
PR	84,521	1,289,216	30,210	2.3%	-64%
PZ	2,300,583	24,297,171	135,902	0.6%	-94%
PE	0	0	0	/	/
MIT	250,320	689,495	161,178	23.4%	-36%
GJA	1,340,079	13,653,382	22,778	0.2%	-98%
FE	1,364	1,912,338	0	0.0%	-100%
GJI	200,704	0	0	/	-100%
Sector	**4,177,571**	**41,841,602**	**350,068**	**0.8%**	**-92%**

Planned investments from donations/grants have been implemented at the level of 0.8%, despite the fact that the expectations were very high. In this category of investments, it can be seen that only RWC Mitrovica has been a little more objective in planning - the target has been achieved at 23.4%. RWCs Hidrodrini and Hidromorava have not planned investments from grants, while four other RWCs have remained far from expectations for investments from grants.

Table 9 Planned and implemented investments from own source revenues and grants for 2020 and 2021

	Own source revenue investments + grants				
	2020	2021			
	Capital investments (implemented)	Capital investments (planned)	Capital investments (implemented)	Comparison % 2021: impelmented/ planned	Comparison %: 2021/2020
Sector-own source inv.	2,471,553	3,921,446	1,478,488	37.70%	-40%
Sector-Grants	4,177,571	41,841,602	350,068	0.8%	-92%
Sector	**6,649,124**	**45,763,048**	**1,828,556**	**4.00%**	**-72%**

The combined value of investments in water infrastructure from own financing and from grants in 2021 amounts to 1.82 million Euros, which is an insufficient amount to maintain in good operational condition the infrastructure they manage, while the fulfillment of the target reaches only 4%.

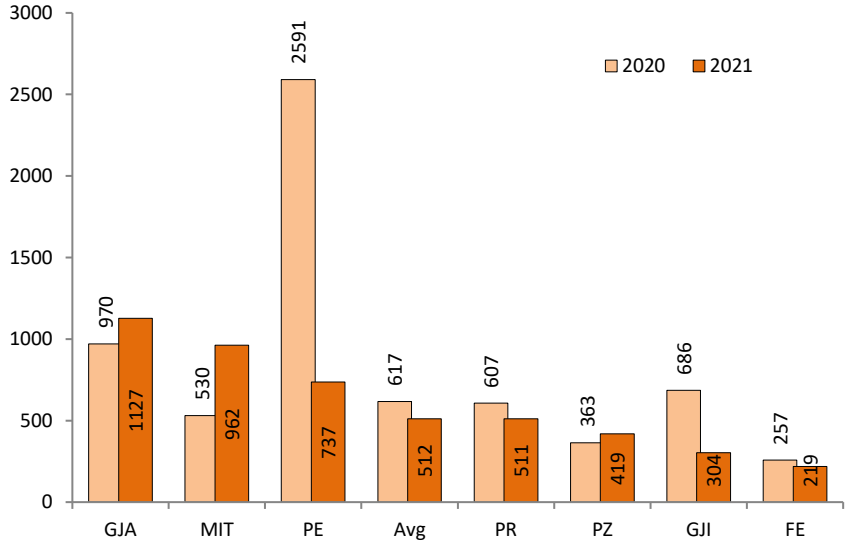


Figure 17. Capital expenditures implemented from own source revenues and grants for water supply relative to planning

Capital investments implemented in all RWCs were lower than expected; the fulfillment of the investments was the lowest in RWC Bifurkacioni with only 0.3%, while it was the highest in RWC Hidrodrini with a level of fulfillment of the target of 38.3%, while the average for the sector is 4.0%.

This percentage is according to the balance of the accounting statements as of 31.12.2021. It should be emphasized that a number of capital projects included in the tariffs have been in the process of execution during 2022, and they have not been included in these figures. For some other projects, there has been a postponement in their implementation or they have been fully canceled due to the absence of the Procurement Review Body (PRB) Board for more than two (2) years.

RWC Prishtina leads in terms of the implementation of capital expenditures (own source revenue investments and grants) in the amount of 527,584 thousand euros, the majority of which have been implemented in production and in infrastructure growth, mainly in land expropriation and in the opening of wells.

RWC Mitrovica, in comparison to other companies, has made investments in the amount of 388 thousand euros, 99% of which have been invested in the growth of non-infrastructure in business activity, namely in the construction of new facilities and furniture.

RWC Hidroregjioni Jugor had some expectations for significant investments to be made in construction projects and rehabilitation of the water supply network, but these investments have not been implemented and this failure is attributed to the non-realization of the donations planned in their Business Plan for 2021.

Company Bifurkacioni is the company which for many years now has implemented the least of the investments and in relation to the planned projects it has met the objective with only 0.3%.

2.3 OPERATIONAL PERFORMANCE – WASTEWATER SERVICES

2.3.1 Quality of discharged wastewater

Currently, the coverage with the wastewater treatment service in the country is very low. In 2021, WTP in Prizren and Peja has entered into operation, while WTP in Gjakova is expected to be put into operation in the near future. These three plants, including the plant in Skenderaj that was already in operation, in total treat the wastewater discharged by 3.5% of the population that has access to public sewage system managed by licenced RWCs, and 11% of the entire amount of wastewater invoiced to customers. As reported by the companies, wastewater treatment and discharge is within permitted national standards. It is worth mentioning that WTPs are equipped with modern laboratories and good equipment. Given that the WTPs have just been put into operation, the reporting on the quality of wastewater discharged into the surrounding environment (effluent) has not yet been established.

2.3.2 Frequency of sewer blockage

This indicator represents the number of sewer blockage cases reported by RWCs (or identified by RWC's personnel) in the course of the reporting period for 100 km of sewer network length. This category does not include blockages in the infrastructure within the customer's property.

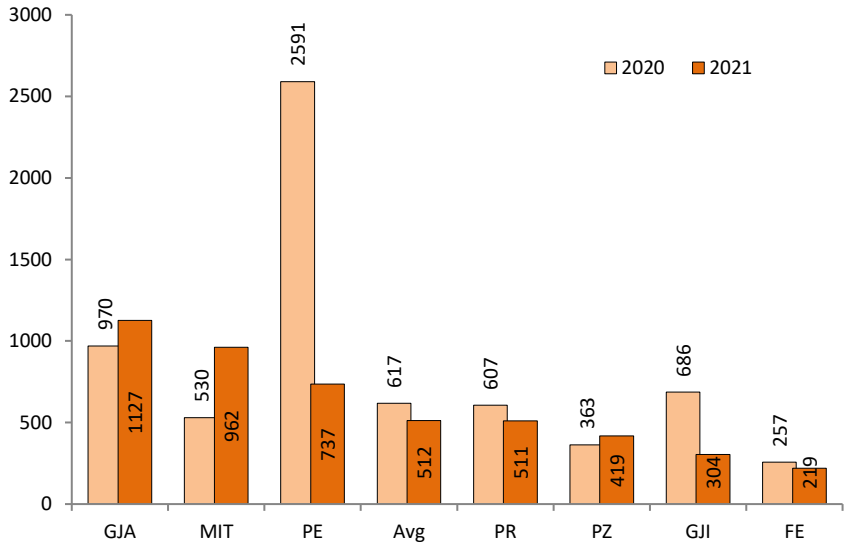


Figure 18. Number of sewer blockages per 100 km of sewer network length

In the course of 2021, RWC Gjakova, RWC Mitrovica, and RWC Hidroregjioni Jugor have recorded an increase in the number of cases of blockages for 100 kilometers of the sewerage network. At the sector level, the number of blockages per 100 kilometers has marked a significant decrease from 617 cases in 2020 to 512 cases in 2021. The company that has reported the most sewage blockages in 2021 is RWC Gjakova with 1,127 cases of blockages, which if compared to the previous year 2020 has marked an increase in reported cases by 16%.

This high number of blockages is also an indicator of the condition of the sewage network. RWCs should pay attention to investments in sewerage infrastructure, as it seems that this sector has been neglected, giving higher priority to drinking water supply infrastructure.

2.3.3 Coverage with wastewater services (sewerage)

Coverage with wastewater services is defined as the percentage of the population within the service area that has wastewater service (sewerage) during the reporting period. The coverage of the wastewater collection service in 2021 is about 65% of the population and if compared to the previous year, it has remained at the same level. It should be emphasized that the percentage refers only to systems managed by RWCs. There are other wastewater collection systems that are not included in this percentage and that are operated by the respective community or municipalities.

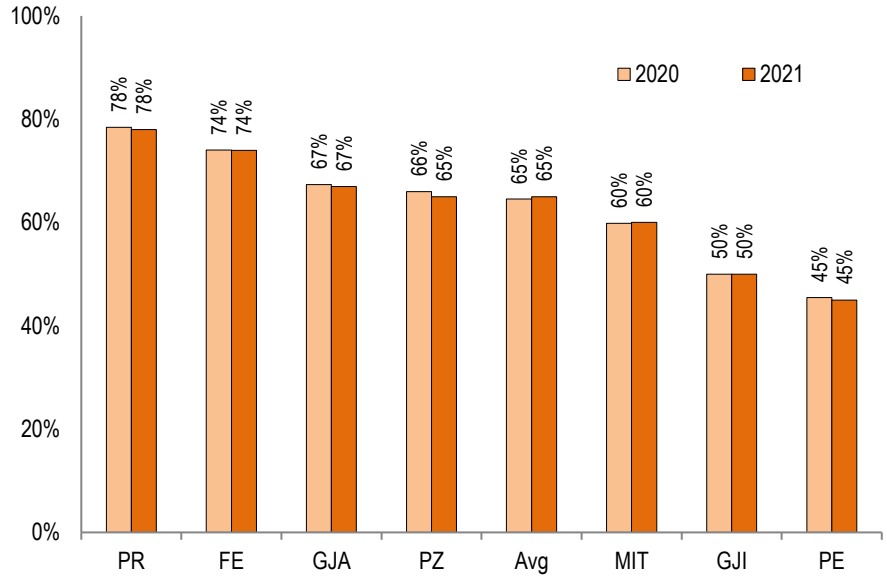


Figure 19. Coverage of the population with wastewater services (%)

During the inspection at the RWCs, a phenomenon of management of a number of sewerage systems, which receive maintenance services but are not invoiced thereto, was identified. In order to eliminate this phenomenon, WSRA recommends that RWCs negotiate and enter service agreements with the relevant municipalities for taking over the management of these systems.

In the course of 2021, according to the information provided by the RWCs and other stakeholders in the water sector, there are a number of sewage systems which are still not managed by the RWCs.

2.3.4 Complaints

Number of complaints is an important indicator for assessing how satisfied customers are with the quality of the wastewater services provided by RWCs. In table xxx, customer complaints about wastewater services are presented.

In total, during 2021, the number of complaints about wastewater services amounted to 7,762, and all these complaints were of technical nature. The number of complaints in 2021 represents a 24% increase compared to 2020.

Table 10. Customer complaints about wastewater services

	Technical complaints		Commercial complaints		
RWC	2020	2021	2020	2021	Ratio: 2021/2020
PR	2,670	4,047	0	0	52%
MIT	1,623	2,972	0	0	83%
PE	1,342	52	0	0	-96%
PZ	576	658	0	0	14%
GJA	39	0	0	0	-100%
GJI	18	33	0	0	83%
FE	3	0	0	0	-100%
Sector	**6,271**	**7,762**	**0**	**0**	**24%**

The largest number of complaints during 2021 for the wastewater service was reported by RWC Prishtina with a total of 4,047 complaints, while the companies that have not reported any complaints in the wastewater services are RWC Bifurkacioni and RWC Gjakova.

Complaints have mainly been related to sewer blockages, flooding cases, and thare have also been requests for sewer cleaning.

2.4 FINANCIAL PERFORMANCE – WASTEWATER SERVICES

2.4.1 Planned value of wastewater services sales (Euro)

The value of sales of wastewater services is directly related to water sales volume. Due to the weak performance of relized sales compared to planned sales of water, the same weak performance is also reflected in realized sales of wastewater services, as presented in figure 20.

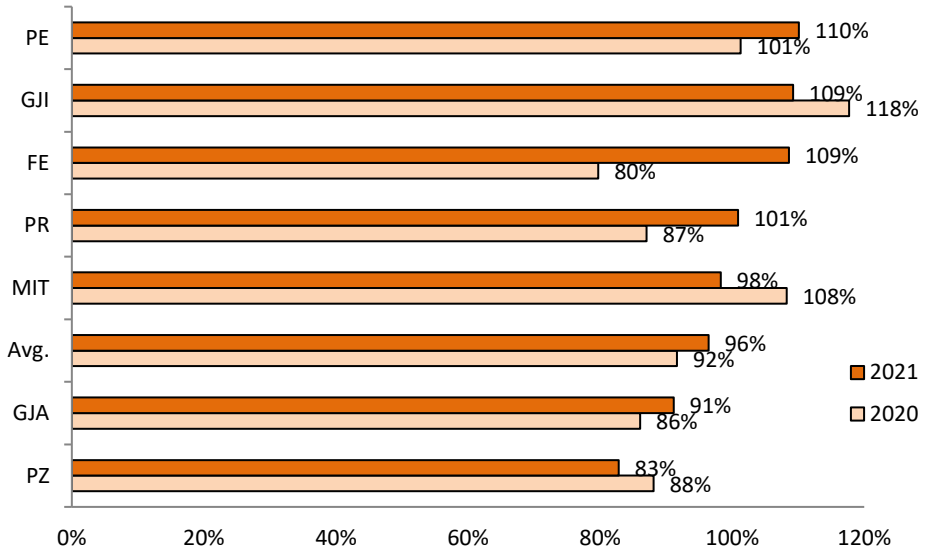


Figure 20. Wastewater services sales relative to planned

Despite the fact that a number of companies did not achieve sales targets, sales revenue for wastewater services in real terms have increased by 4%, which can be attributed to tariff increases rather than to improved commercial performance due to any specific activity undertaken by RWCs.

RWC Hidrodrini, RWC Hidromorava, RWC Bifurkacioni and RWC Prishtina have all exceeded the planned objectives; Hidrodrini by 10%, Hidromorava by 9%, Bifurkacioni by 9% and Prishtina by 1%. Other RWC have not managed to fulfill their objectives in terms of the sale of wastewater services, and RWC Hidroregjioni Jugor has performed the worst in this aspect as it has fulfilled the planning at the level of 83%, which was for 5% lower than in 2020.

2.4.2 Realized value of wastewater service sales (Euro)

The trend of the value of sales realized for wastewater services during the 2021 reporting period compared to 2020 at the sector level has increased by 12%. As presented in figure 21, RWC Hidroregjioni Jugor has achieved the biggest increase in sales compared to the sales of 2020 for 60.4%, RWC Hidromorava for 12.7% and RWC Prishtina for 6.9%. The increase in sales for wastewater services in RWC Hidroregjioni Jugor is mainly attributed to the increase in fees for this service, but also the increase in the customer base.

In the case of RWC Mitrovica, sales in 2021 were lower than in 2020 by 0.3%, and at RWC Bifurkacioni by 13.6%. This decrease, for RWC Bifurkacioni in particular, comes as a result of the reduction of the fee for the collection of wastewater.

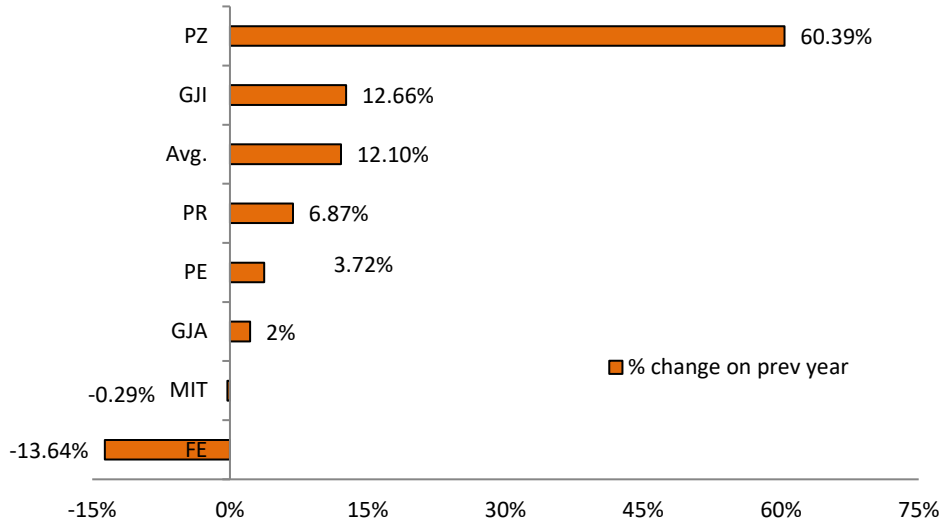
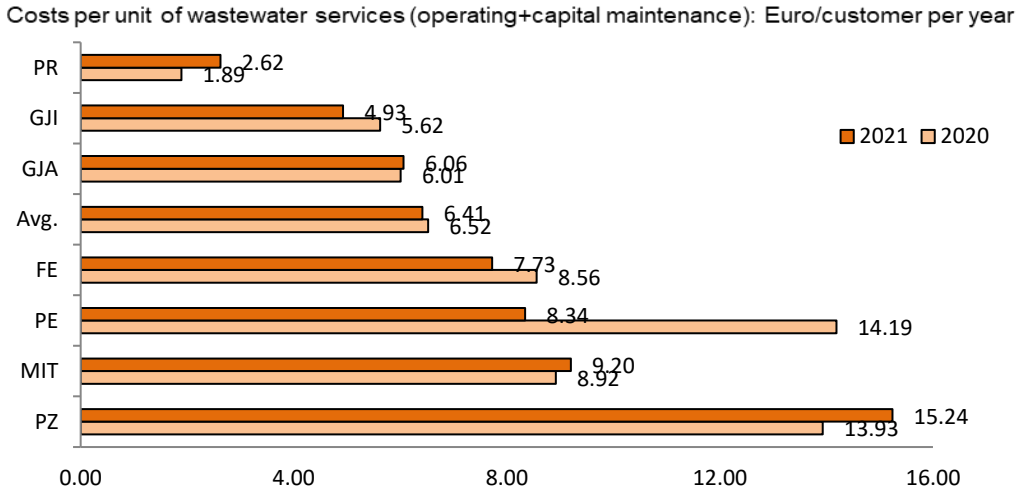


Figure 21. Value of wastewater service sales in 2021 compared to 2020

2.4.3 Total unit cost for wastewater services

Costs per unit of wastewater services are defined as annual costs. Total cost (provisioning of the operating costs + capital maintenance) for the collection of wastewater during the reporting period divided by the average number of households and household equivalents for the same period, including capital maintenance for domestic customers served[3].

The unit costs for 2020 and 2021 are shown in figure 22. Unit costs are very low, mainly due to the fact that there are no treatment costs, except for RWC Hidroregjioni Jugor, which has started with this service. Furthermore, because there has been no investments in network capital maintenance during the reporting period, these expenses are lower than expected.



3 Domestic customers served mean the actual number of domestic customers plus the number of non-domestic customers converted to the equivalent of domestic customers based on the proportional distribution of consumed water.customers

Figure 22. Costs per unit of wastewater services

The average cost per unit for wastewater service in 2021 has shown a slight decrease compared to 2020, from 6.52 euros/customer*year to 6.41 euros/customer*year.

RWC Prishtina has the lowest cost, at 2.62 Euro/customer per year, due to the very low fee on wastewater. On the other hand, RWC Hidroregjioni marked the highest cost due to the commissioning of the wastewater plant. In 2021 the annual cost of wastewater services charged to a domestic customer is approximately 1/10 of the cost of drinking water supply.

2.4.4 Total cost per unit of wastewater services realized relative to planned

It is another financial indicator, which ranks in the group of key indicators, and as such has an impact on the performance of wastewater services.

This indicator presents the ratio between the costs per unit of wastewater services performed (operating cost including capital maintenance / equivalent to household customers) and the costs per unit of planned wastewater services (operating costs including capital maintenance / household customer equivalents).

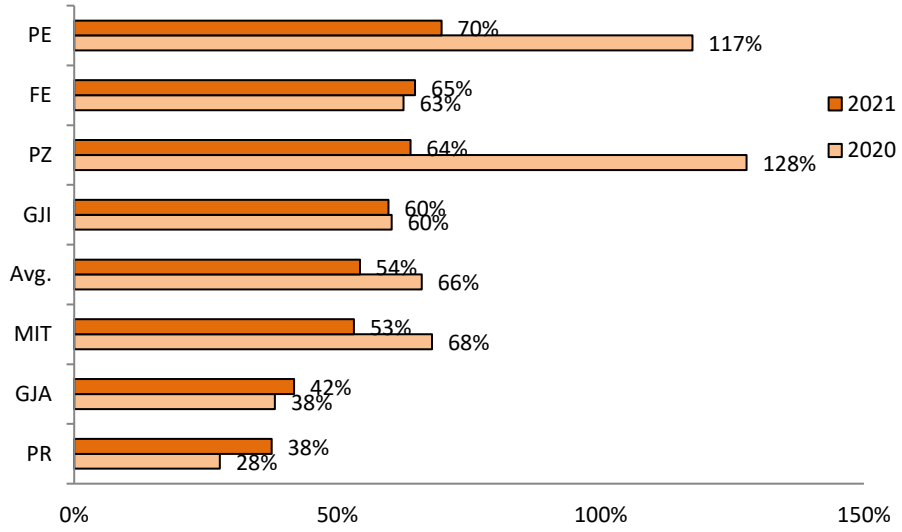


Figure 23. Unit cost of wastewater services relative to planned unit costs (%)

The unit costs resulting from tariff review 4 (2018-2021) for the year 2021 (adjusted according to price levels in 2017) in particular, in all companies were lower than planned.

Although companies have almost reached the desired level of less than 90%, this is still not a good performance, because the planned unit costs included significant expenditure on infrastructural refurbishment and depreciation at current cost for new assets, and that companies have not managed to realize even 6% of them.

2.4.5 Wastewater capital expenditures

The same as for the water infrastructure during the 2018-2021 tariff process (for 2021 in particular), investments from the own source resources of RWCs were also approved for the wastewater infrastructure, and were introduced in the tariffs. On the other hand, RWCs have also presented their projections-planning for investments from grants. As presented in tables 11, 12 and 13, the investments in the wastewater infrastructure are very small, both from own sources and from grants. This can lead very quickly to the degradation of the wastewater infrastructure, which is already in poor condition.

Table 11. Planned and implemented investments from own source revenues in 2020 and 2021

Own source investments					
	2020	2021			
RWC	Capital investments (implemented)	Capital investments (planned)	Capital investments (implemented)	Comparative % 2021: implemented/ planned	Comparative %: 2021/2020
PR	574	532,201	21,754	4.1%	3690%
PZ	9,551	199,829	2,275	1.1%	-76%
PE	4,761	107,435	11,859	11.0%	149%
MIT	-	117,671	22,139	18.8%	
GJA	14,384	124,048	3,885	3.1%	-73%
FE	3,102	123,550	1,415	1.1%	-54%
GJI	112	115,823	414	0.4%	270%
Sector	**32,485**	**1,320,557**	**63,741**	**4.8%**	**96%**

Table 11 shows that the planned investments from own resources in 2021 have been implemented to the extent of 4.8%. The entire monetary value of capital investments (growth and capital maintenance) in the wastewater infrastructure is 63,741 Euros.

Table 12. Planned and implemented investments from grants in 2020 and 2021

Investments from grants					
	2020	2021			
RWC	Capital investments (implemented)	Capital investments (planned)	Capital investments (implemented)	Comparative % 2021: implemented/ planned	Comparative %: 2021/2020
PR	0	0	979,931	/	/
PZ	270,300	19,579,974	0	0.0%	-100%
PE	414,265	20,412,593	0	0.0%	-100%
MIT	0	0	15,941	/	/
GJA	0	5,525,700	529	0.0%	/
FE	341	322,304	0	0.0%	-100%
GJI	0	0	0	/	/
Sector	**684,907**	**45,840,571**	**996,401**	**2.2%**	**45%**

Similarly, investments from grants in 2021 are not high compared to the plan: the target was achieved at 2.2%. It is worth mentioning a substantial investment made by RWC Prishtina in the amount of 979,931 Euros and RWC Mitrovica in the amount of 15,941 Euros, which were not planned. Other RWCs have not implemented any projects from grants.

Table 13. Planned and implemented investments from own source revenues and grants during 2020 and 2021

Own source investments + grants					
	2020	2021			
	Capital investments (implemented)	Capital investments (planned)	Capital investments (implemented)	Comparative % 2021: implemented/ planned	Comparative %: 2021/2020
Sector-OwnSo.Inv	32,485	1,320,557	63,741	4.8%	96%
Sector-Grant	684,907	45,840,571	996,401	2.2%	45%
Total Sector	**717,392**	**47,161,128**	**1,060,142**	**2.2%**	**48%**

WSRA expects from the RWCs to draft more realistic plans in the future. The same as regarding water supply, in the future we expect plans that will ensure adequate investments in the wastewater sector in

order to ensure satisfactory levels of service, and in particular the improvement of coverage with services, given that the coverage is very low.

RWC Hidroregjioni Jugor, RWC Hidrodrini, and RWC Gjakova are among the companies that have planned significant capital expenditures in the wastewater service: rehabilitation of the network, construction of wastewater treatment plants, assembly and provision of covers for sewage wells faecal, etc., and so far these companies have not managed to implement even 1% of them.

Figure 24 shows implementation of investments from own source revenues and grants in wastewater infrastructure.

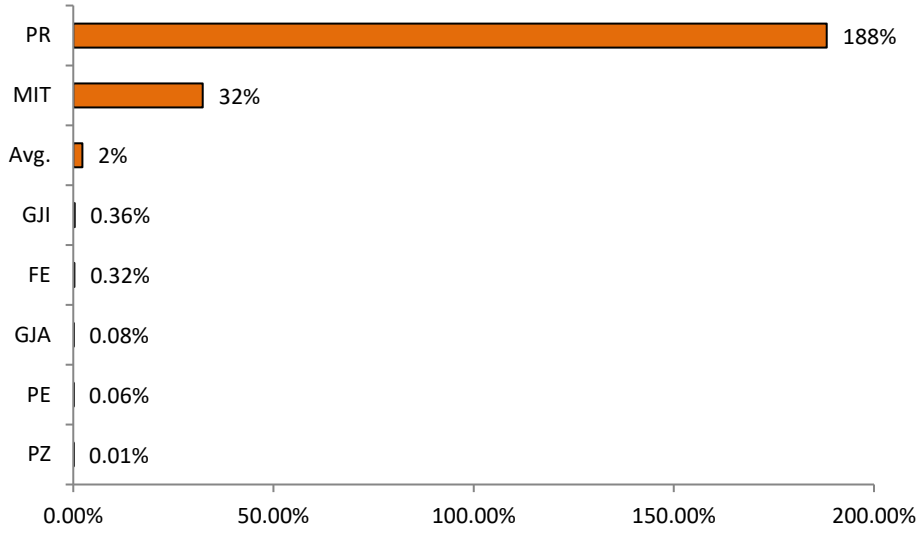


Figure 24. Capital investments relative to planned investments in the wastewater service

2.5 OVERALL FINANCIAL PERFORMANCE OF RWCs

2.5.1 Revenue collection for water services (drinking water and wastewater)

In the following chapter, the performance of companies in a number of general financial indicators for water and wastewater services for 2021 is presented and compared to 2020. The data is presented as a ratio of cash receipts to regular invoicing for provided water supply and wastewater services, excluding connection taxes and other operating revenues. This is one of the most significant indicators which, in addition to invoicing efficiency and water loss reduction, has a direct impact on the company's financial stability.

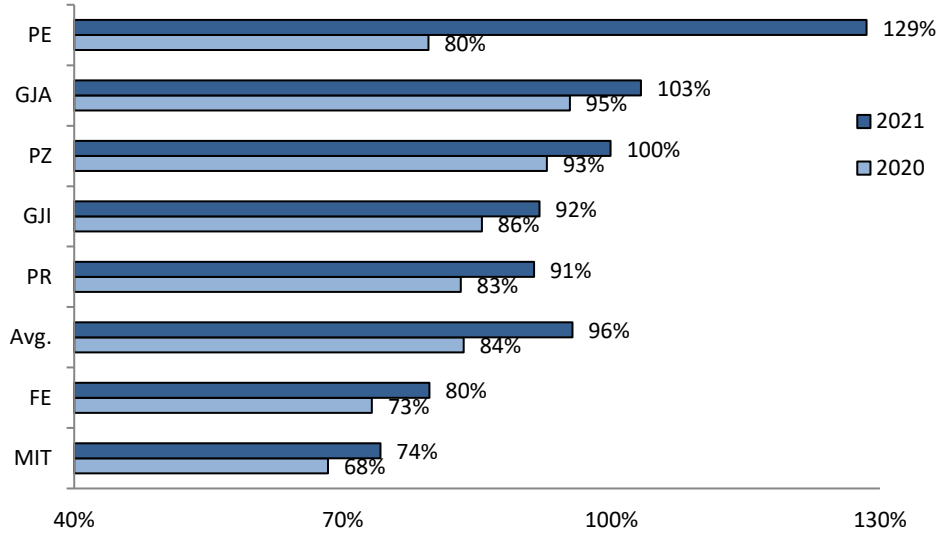


Figure 25. Cash collection

In 2021, the efficiency of cash collection from utility bills has improved significantly; at the sector level, the collection rate has been realized to the extent of 96%, which is 12% higher than in 2020. The increase in the collection rate is evident in all RWCs. RWC Hidrodrini leads with the highest collection rate compared to other companies with the percentage of 129%, and with the highest improvement. This growth is mainly as a result of collection of unpaid invoices (from previous years) from commercial customers at 267%.

RWC Mitrovica still has the lowest collection rate compared to other companies, while compared to the previous year it showed an improvement by 6%.

The planned collection target with the tariff process for 2021 at the sector level was 92%, and this target was exceeded by 4%. The targets approved by WSRA at the individual level have been achieved by most companies, with the exception of RWC Prishtina, RWC Mitrovica and RWC Bifurkacioni which still remain far from the planned objectives.

Table 14. Planned and realised collection rate for 2020 and 2021

Collection rate	Realised		Target	
RWC	2020	2021	2020	2021
PR	83%	91%	95%	94%
PZ	93%	100%	94%	94%
PE	80%	129%	90%	94%
MIT	68%	74%	80%	79%
GJA	95%	103%	93%	93%
FE	73%	80%	90%	93%
GJI	86%	92%	92%	93%
Sector	**84%**	**96%**	**92%**	**92%**

Table 14 presents the collection by individual RWCs. Table 15 presents the collection rate data according to individual RWCs for all categories of customers.

Table 15. Collection rate by customer category and total for 2020-2021

Customers category	Prishtina		Hidroregji-oni Jugor		Hidrodrini		Mitrovica		Gjakova		Bifurkacioni		Hidromorava	
	2020	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020	2021
Households	81%	87%	89%	100%	77%	93%	63%	74%	93%	107%	70%	80%	81%	91%
commercial-industrial customers	85%	104%	97%	96%	80%	267%	84%	81%	93%	101%	82%	93%	111%	92%
Institutions	95%	97%	119%	108%	98%	107%	109%	66%	113%	84%	99%	42%	87%	100%
Average	83%	91%	93%	100%	80%	129%	68%	74%	95%	103%	73%	80%	86%	92%

As can be seen from table 15, RWCs have collection problems in the category of household and commercial-industrial customers, but in general there is an improvement compared to the previous year. The most regular category of customers for payment are the institutions, except in the case of RWC Bifurkacioni, which has a problem with collecting debts from institutions. RWC Bifurkacioni should communicate with this category of customers to find a solution for their payment.

2.5.2 Return on capital

Return on capital is a comparative indicator of financial management performance and allowances for return value on capital during the tariff review. This indicator presents the total net income from operating activities before interest, dividend and corporate tax divided by the regulatory aset base (RAB) during the reporting period. Pursuant to tariff methodology, WSRA in the 2018-2021 tariff process has approved a rate of return on capital in the value of mininimum 4% of the regulatory aset base, i.e. a real rate of return on capital which is based on the best practices of European countries.

If comparing the data for this indicator, the return on capital at the sector level has shown a negative trend compared to the previous year from 4.64% in 2020 to 2.36% in 2021.

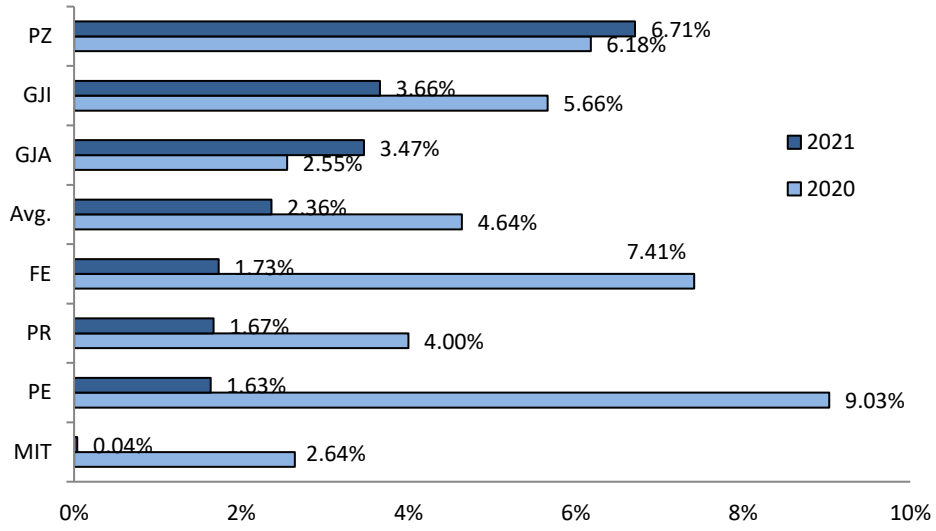


Figure 26. Return to regulatory asset base (RAB)

In 2021, only one of the seven RWCs has achieved a positive trend of return on capital compared to 2020, and even exceeded the planned level of 4%. RWC Hidroregjioni has managed not only to cover its operating expenses, including depreciation according to the current cost and infrastructure maintenance in RAB, within the limits of their revenues, but it was also able to make capital investments from its own revenues.

The weakest performance in terms of the rate of return on capital for 2021 compared to other companies has been marked by RWC Mitrovica with 0.04%, while the highest decline in 2021 in comparison to 2020 has been marked by RWC Hidrodrini and RWC Bifurkacioni.

2.5.3 Operating costs

A) Operating costs at the sector level

General operating costs (for drinking water and wastewater) presented in table 15 reflect the planned and realized costs for 2020 and 2021.

Table 16. The amount of planned and realized operating costs

Operating costs	Realised			Planned	
RWC	2020 without inflation.[4]	2020 with inflation[5]	2021	2020	2021
PR	10,099,460	10,437,540	10,254,011	11,315,023	11,414,297
PZ	3,886,757	4,016,867	3,872,999	4,014,712	4,600,203
PE	2,561,795	2,647,551	2,903,742	2,827,663	3,035,030
MIT	3,535,423	3,653,772	3,363,490	2,708,147	3,576,403
GJA	3,697,304	3,821,071	3,642,510	3,347,488	3,815,598
FE	1,535,549	1,586,952	1,517,169	1,994,011	1,690,353
GJI	1,848,835	1,910,725	1,784,596	2,222,125	1,940,286
Sector	**27,165,1226**	**28,074,478 7**	**27,338,517**	**28,429,170**	**30,072,171**

[4] Operating costs without including inflation
[5] Operating costs including inflation

As presented in Table 16, in 2021, for 7 (seven) RWCs, about 30.1 million euros of operating costs were approved by WSRA, and from this amount, 27.3 million euros were realized. This means that these companies have achieved to keep the realized costs compared to the planned costs below the level of 100% (from 84% in the case of RWC Hidroregjioni Jugor up to RWC Hidrodrini with 96%).

B) Structure of operating costs

Controlling operating costs is very critical in service delivery. The large expenses for staff and energy which in 2020 for the RWCs were at 79%, (of the total expenses) and 80% in 2021, are expenses that have essentially affected the efficiency of the RWCs.

The highest percentage in the structure of operating costs of water companies make staff expenses with 61% in 2021, which has remained at the same level as in 2020, but has exceeded the planned expenses by 1%.

If compared to other companies, RWC Bifurkacioni and Hidromorava account for the companies with the highest expenses for staf. Namely, in the case of Bifurkacioni in 2021 staff expenses make 77% of all expenses, whereas 70% in the case of Hidromorava. The lowest share in this category is marked by the RWC Prishtina with 54%, with a decrease of 3% compared to 2020.

The second main category of expenses is energy. The 2021 sector average participates with 19% and has shown an upward trend of 1% compared to 2020.

In terms of energy costs, RWC Hidroregjioni Jugor has for several years led with the highest percentage of expenditues in this category, participating with 23% in total expenditure. This is as a result of the operation of 43 different water supply systems, which are mainly based on water pumping. Whereas, in the case of RWC Gjakova, only 8% is the share of energy expenses in the total operating expenses.

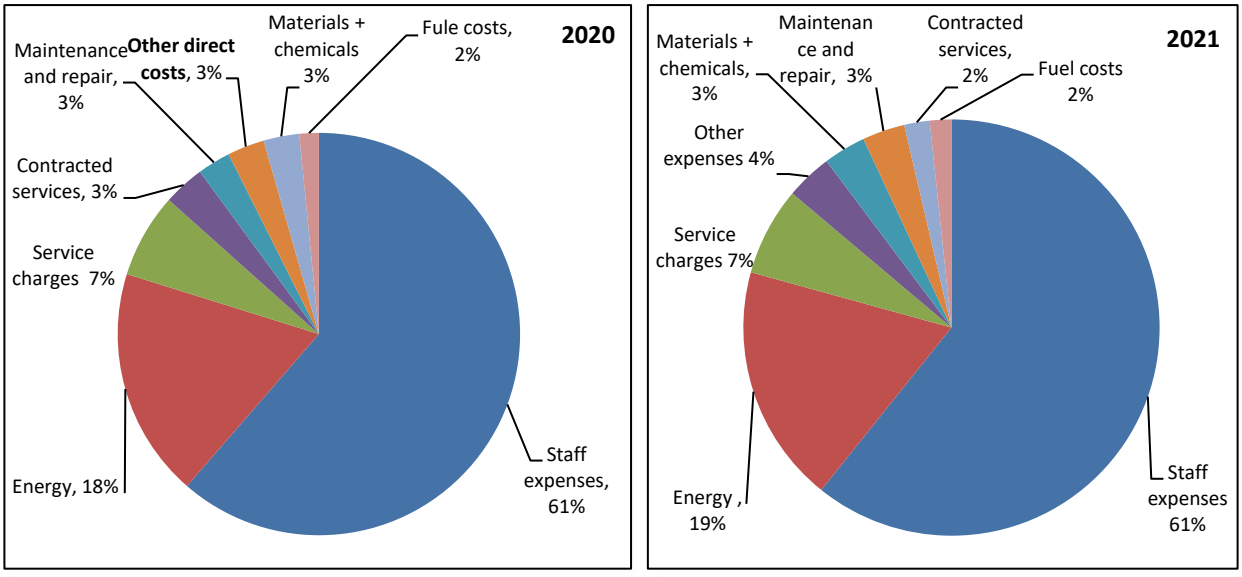


Figure 27. Share of operating expense categories for the sector in 2020 and 2021

RWCs must design and implement an internal plan with measures to reduce current costs, first by identifying the lack of operational financial efficiency in all cost centers.

2.5.4 Staff efficiency

RWCs staff efficiency during 2021 has been presented through the following indicator, which shows the number of regular employees (staff) engaged in water supply and wastewater services per 1000 customers.

It is very important to know how efficiently each company uses its human resources. For clarifying purposes in reading the following graph, lower values indicate greater staff efficiency.

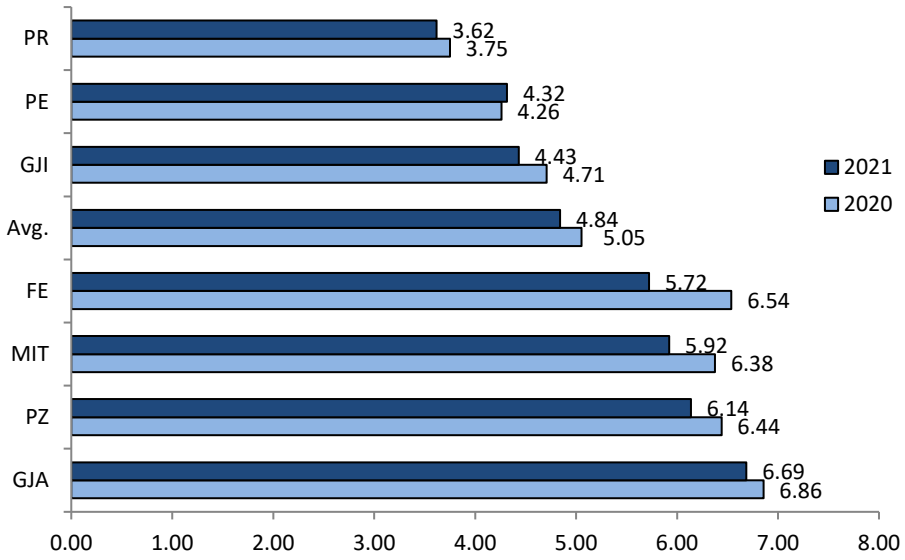


Figura 28. Staff efficiency

In 2021 compared to 2020, staff efficiency at the sector level has shown a positive trend, the result of which is the increase in the number of customers within the existing service areas.

Although there is no set standard for the number of employees per 1000 customers, based on international best practices it is recommended to have less than 5 employees per 1000 customers to have good staff efficiency.

RWC Prishtina, RWC Hidrodrini and RWC Hidromorava have managed even to exceed these practices. Nevertheless, very low staff efficiency during 2021 has been identified at RWC Gjakova, although there is a positive trend compared to 2020.

The planned target with the tariff process for 2021 at the sector level was 5.03, this target at the sector level is 4.84, which is a very good result. The achieved efficiency of staff at individual level was lower than planned in almost all RWCs, with the exception of RWC Gjakova.

Table 17. Realized and planned efficiency for 2020 and 2021

Staff eficiency	Realized	Planned
RWC	2021	2021
PR	3.62	3.88
PZ	6.14	6.53
PE	4.32	4.54
MIT	5.92	6.00
GJA	6.69	6.08
FE	5.72	6.01
GJI	4.43	4.93
Sektori	4.84	5.03

3. PERFORMANCE OF BULK WATER SUPPLIER

WSRA is responsible for regulating the business aspect of HEE Ibër Lepenci, which relates to the bulk water supply for RWC Mitrovica and RWC Prishtina.

Some statistical data and performance indicators that display the performance development trends in 2021 compared to 2020 are given below.

Table 18. Statistical data for HEE Ibër-Lepenc

Statistical data for 2021 / 2020	2020	2021
Bulk water volume billed (m3)	51,200,467	48,708,395
Billing for bulk water (€)	1,293,828	1,199,496
Collection for bulk water (€)	1,255,533	1,074,248
The cost of operation for bulk water supply (€)	1,465,915	1,627,610
Number of emplyees engaged in bulk water supply	81	79

In 2021, volume sales have decreased by 5% compared to 2020. The lowest sales were realized by RWC Prishtina, from 22.8 million m3 to 20.1 million m3 or 12% less, while RWC Mitrovica's volume sales have increased by 1%, influencing the increase in water sales in monetary value.

Bulk water supply costs have increased by 11%, from 1.5 million in 2020 to 1.6 million for the year 2021.

Table 15 presents an overview of the financial indicators on the basis of which the performance of HEE Ibër-Lepenci during 2021/2020 period can be evaluated.

Table 19. HEE Ibër-Lepenci performance indicators

Performance indicator	2020	2021
Collection rate	97%	90%
Working rate	0.88	0.74
Labor cost per unit	0.86	0.66
Operating cost per unit (€/m3)	0.029	0.033

In 2021, HEE Ibër-Lepenci achieved a collection rate of 90%, which is a deviation from the target of 100%, mainly due to the non-payment of invoices for bulk water by RWC Mitrovica.

The increase in expenditues by 11% and the decrease in water sales by 7% has affected the labor rate to be lower compared to 2020. The labor cost per unit has decreased by 23% compared to 2020 and still remains below the desired level to cover the costs incurred during 2021 for the services provided, and this is the result of none collection at the level of 100%.

Operating costs per unit in 2021 have increased compared to 2020 from 0.029 euro/m3 to 0.033 euro/m3, as a result of increased staff expenses.

APPENDIX 1: STATEMENT OF COMPREHENSIVE INCOME

RWC Prishtina (Prishtine)

	2020	2021
Turnover	13,932,7102	14,389,147
Operating costs	**10,099,459**	**10,254,012**
Net operating income (excluding capital maintenance)	3,833,243	4,135,138
Capital maintenance (infrastructure renewals + cc depreciation)	634,113	678,841
Net operating income (including capital maintenance)	**3,199,130**	**3,456,294**
Provision for bad debts	773,506	2,401,692
Net operating income (after bad debts)	**2,425,623**	**3,456,294**
Interest on long term loans	0	0
Pre-tax profit	**2,425,623**	**1,054,605**
Taxation on profits		
Net post-tax profit	**2,425,623**	**1,054,605**

RWC Hidroregjioni Jugor (Prizren)

	2020	2021
Turnover	4,898,130	5,119,987
Operating costs	**3,886,757**	**3,872,999**
Net operating income (excluding capital maintenance)	1,011,373	1,246,988
Capital maintenance (infrastructure renewals + cc depreciation)	74,548	131,097
Net operating income (including capital maintenance)	**936,825**	**1,115,891**
Provision for bad debts	250,032	332,707
Net operating income (after bad debts)	**686,793**	**783,184**
Interest on long term loans	0	0
Pre-tax profit	**686,793**	**783,184**
Taxation on profits	0	0
Net post-tax profit	**686,793**	**783,184**

RWC Hidrodrini (Peja)

	2020	2021
Turnover	3,871,781	4,022,313
Operating costs	2,561,795	2,903,741
Net operating income (excluding capital maintenance)	**1,309,986**	**1,118,572**
Capital maintenance (infrastructure renewals + cc depreciation)	131,101	133,622
Net operating income (including capital maintenance)	**1,178,885**	**984,950**
Provision for bad debts	234,722	805,181
Net operating income (after bad debts)	**944,163**	**179,768**
Interest on long term loans	0	0
Pre-tax profit	**944,163**	**179,768**
Taxation on profits	0	0
Net post-tax profit	**944,163**	**179,768**

RWC Mitrovica (Mitrovice)

	2020	2021
Turnover	4,466,254	4,604,978
Operating costs	3,535,423	3,363,491
Net operating income (excluding capital maintenance)	**930,831**	**1,241,487**
Capital maintenance (infrastructure renewals + cc depreciation)	21,183	24,819
Net operating income (including capital maintenance)	**909,648**	**1,216,668**
Provision for bad debts	754,022	1,213,853
Net operating income (after bad debts)	**155,626**	**2,833**
Interest on long term loans	0	0
Pre-tax profit	**155,626**	**2,833**
Taxation on profits	0	0
Net post-tax profit	**155,626**	**2,833**

RWC Gjakova (Gjakove)

	2020	2021
Turnover	4,576,868	4,687,018
Operating costs	3,697,304	3,642,510
Net operating income (excluding capital maintenance)	**879,564**	**1,044,508**
Capital maintenance (infrastructure renewals + cc depreciation)	474,353	366,332
Net operating income (including capital maintenance)	**405,211**	**678,176**
Provision for bad debts	72,451	209,196
Net operating income (after bad debts)	**332,760**	**468,980**
Interest on long term loans	0	0
Pre-tax profit	**332,760**	**468,980**
Taxation on profits	0	0
Net post-tax profit	**332,760**	**468,980**

RWC Bifurkacioni (Ferizaj)

	2020	2021
Turnover	2,144,491	2,213,838
Operating costs	1,535,549	1,517,168
Net operating income (excluding capital maintenance)	**608,942**	**696,670**
Capital maintenance (infrastructure renewals + cc depreciation)	27,788	31,454
Net operating income (including capital maintenance)	**581,154**	**665,216**
Provision for bad debts	260,000	586,234
Net operating income (after bad debts)	**321,154**	**78,983**
Interest on long term loans	0	0
Pre-tax profit	**321,154**	**78,983**
Taxation on profits	0	0
Net post-tax profit	**321,154**	**78,983**

RWC Hidromorava (Gjilan)

	2020	2021
Turnover	2,316,101	2,284,171
Operating costs	1,848,835	1,784,596
Net operating income (excluding capital maintenance)	**467,266**	**499,575**
Capital maintenance (infrastructure renewals + cc depreciation)	42,127	42,751
Net operating income (including capital maintenance)	**425,139**	**456,824**
Provision for bad debts	193,514	297,726
Net operating income (after bad debts)	**231,625**	**159,098**
Interest on long term loans	0	0
Pre-tax profit	**231,625**	**159,098**
Taxation on profits	0	0
Net post-tax profit	**231,625**	**159,098**

APPENDIX 2: SUMMARY OF INDICATORS 2021

Indicators	PR	PZ	PE	MIT	GJA	FE	GJI	Sector
Water service coverage (%)	83	66	85	80	99	81	61	79
Coverage with sewerage services (%)	78	65	45	60	67	74	50	65
Water production (l/p/d)	348	212	346	385	252	182	185	292
Water sale (l/p/d)	146	97	144	209	145	78	96	135
Water invoiced for domestic custmers (l/d)	117	83	111	106	113	68	82	102
Water invoiced for domestic customers (%)	80	86	77	83	77	87	86	81
Water invoiced for industrial-commercial customers (%)	12	9	12	10	8	9	9	10
Water invoiced for institutional customers (%)	8	5	11	7	15	5	5	9
Water not invoiced (%)	58	54	58	55	42	57	48	55
Total failed Tests (%)	0.7	4.3	11.8	0.0	0.0	4.6	3.9	1.9
Percentage of consumption read (%)	100	100	95	89	99	100	100	97
Total staff efficiency ('000 cust.)	3.62	6.14	4.32	5.92	6.69	5.72	4.43	4.84
Operating expenses (€/m3/produced)	0.05	0.10	0.01	0.06	0.02	0.04	0.07	0.05
Operating expenses (€/cust) - water supply	64	57	49	69	78	38	47	60
Operating expenses (€/cust) – wastewater	3	16	11	10	7	8	5	7
Capital expenditure (€/cust.) - water supply	3	6	5	9	7	0	1	4
Capital expenditure (€/cust.) – wastewater	7	0	0	1	0	0	0	3
Revenue from the sale (€/cust.) - water supply	84	73	66	76	96	53	55	76
Revenue from the sale (€/cust.) – wastewater	9	21	16	18	15	13	11	13
No. of complaints to services ('000 cust.)	34	50	44	157	8	6	17	44
Collection rate (%)	91	100	129	74	103	80	92	96
Collection rate for domestic customer (%)	87	100	93	74	107	80	91	91
Collection rate for commercial-industrial customers	104	96	267	81	101	93	92	120
Collection rate for institutional customers	97	108	107	66	84	42	100	93
Labor cost per unit	1.28	1.32	1.77	1.08	1.33	1.17	1.18	1.31

APPENDIX 3: STATISTICAL DATA 2021

Data	PR	PZ	PE	MIT	GJA	FE	GJI	Totali
Water produced (m3)	55,175,048	16,928,504	24,842,768	27,457,562	15,910,071	8,258,735	7,801,252	156,373,940
No. of total customers- water supply provider	153,509	54,104	53,205	43,897	43,737	33,551	34,703	416,706
Total customers with water meters	151,818	54,100	53,044	39,824	43,625	33,551	34,520	410,482
Complaints – water supply provider	5,293	2,691	2,339	6,870	341	191	583	18,308
Operating costs- Water supply provider	9,842,212	3,063,889	2,606,115	3,040,126	3,425,181	1,282,580	1,638,731	24,898,834
Capital expenditure by RWC - water supply provider	497,374	181,310	242,803	227,145	296,833	7,464	25,559	1,478,488
Capital expenditure from Don.- water supply provider	30,210	135,902	-	161,178	22,778		-	350,068
Amount of invoiced water m3	23,161,373	7,718,785	10,333,538	7,476,951 4,824,515	9,167,666	3,562,927	4,038,271	65,459,511[8] 70,284,026[9]
Water invoiced with water meters	23,142,402	7,718,785	9,838,249	6,180,459	9,109,407	3,562,927	4,028,125	63,580,354
Revenues from Fixed fee	2,023,317	716,122	689,905	549,891	568,489	436,426	442,165	5,426,315
Total revenue for water supply	10,903,269	3,248,840	2,827,348	2,775,180	3,625,612	1,342,834	1,482,080	26,205,163
Other operating revenues - Water supply provider	39,265	39,486	36,471	12,065	23,408	50,781	22,850	224,326
No. of customers- wastewater	148,686	52,074	27,354	30,822	30,915	29,954	29,540	349,345
No. of Complaints – wastewater	4,090	658	52	2,972	-	-	33	7,805
Operating costs for Wastewater services	411,799	809,109	297,627	323,364	217,329	234,589	145,865	2,439,683
Capital expenditure from RWC – Wastewater	21,754	2,275	11,859	22,139	3,885	1,415	414	63,742
Capital expenditure from Don. - wastewater	979,931	-	-	15,941	529	-	-	996,401
m3 invoicing for Wastewater services	22,634,510	7,341,333	5,374,929	5,216,605	5,572,286	3,184,695	3,506,439	52,830,798
Proceeds from the sale - wastewater.	1,385,546	1,102,144	444,275	568,769	468,277	381,694	326,269	4,676,974
Other operating revenues – Wastewater	37,750	13,395	24,314	30,541	1,232	2,103	10,807	120,142
Subsidies				691,030				
Total amount of cash collected	13,074,944	5,063,171	5,090,905	2,889,570	4,817,042	1,721,950	2,069,864	34,727,445
Total staff employed	556	332	230	260	293	192	154	2,017
Total population	524,027	331,895	231,476	201,424	174,874	154,225	189,367	1,807,288
The population covered by water supply services	434,270	218,371	196,654	161,161	172,632	124,531	115,613	1,423,232
Population covered by Wastewater services	408,621	216,280	104,871	121,341	117,428	113,818	94,386	1,176,746
The length of the water supply network	2,218	1,068	1,104	1,335	1,213	538	740	8,216
The length of the Sewerage network	1,100	270	182	277	81	504	245	2,659

[8] The amount of bulk water is not included in the amount of 65,459,511 m3

[9] The amount of the bulk water invoiced for the northern part of Mitrovica is included in the value of 70,284,026 m3,

APPENDIX 4: TARIFF STATEMENTS (2020-2021)

Current tariff statement for 2020

	Unit	RWC Prishtina	RWC Hidroregjioni	RWC Hidrodrini	RWC Mitrovica	RWC Gjakova	RWC Bifurkacioni	RWC Hidromorava
Domestic customers								
Fixed tariff for Water Supply	EUR/month	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Volumetric Tariff for Water Supply	EUR/m3	0.43	0.38	0.25	0.36	0.37	0.35	0.34
Tariff for Wastewater (based on the volume of water consumed)	EUR/m3	0.05	0.13	0.07	0.09	0.07	0.12	0.08
Commercial and Institutional Customers								
Fixed tariff for Water Supply	EUR/ month	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Volumetric Tariff for Water Supply	EUR/m3	0.69	0.67	0.44	0.57	0.67	0.55	0.54
Tariff for Wastewater (based on the volume of water consumed)	EUR/m3	0.11	0.17	0.15	0.20	0.16	0.26	0.17

Fees applicable for 2021 (January 1 - December 31, 2021)

	Unit	RWC Prishtina	RWC Hidroregjioni	RWC Hidrodrini	RWC Mitrovica	RWC Gjakova	RWC Bifurkacioni	RWC Hidromorava
Domestic customers								
Fixed tariff for Water Supply	EUR/ month	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Volumetric Tariff for Water Supply	EUR/m3	0.43	0.38	0.25	0.34	0.37	0.35	0.34
Tariff for wastewater (based on the volume of water consumed)	EUR/m3	0.05	0.14	0.07	0.09	0.07	0.10	0.08
Commercial and Institutional Customers								
Fixed rate for Water Supply	EUR/ month	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Volumetric Tariff for Water Supply	EUR/m3	0.69	0.67	0.44	0.55	0.67	0.55	0.54
Tariff for wastewater (based on the volume of water consumed)	EUR/m3	0.11	0.32	0.15	0.20	0.16	0.23	0.17

Untreated water tariffs for 2020

RWC	Tariff Unit	Year 2020
Mitrovica	€/m3	0.0163
Prishtina	€/m3	0.0364

Untreated water tariffs for 2021

RWC	Tariff Unit	Year 2021
Mitrovica	€/m3	0.0163
Prishtina	€/m3	0.0364

Volumetric tariff for basic activities of providing bulk water services

RWC	Tariff Unit	Year 2020	Year 2021
Mitrovica	€/m3	0.17	0.17

Water Services Rregulatory Authority

Ali pashë Tepelena St. No. 1

Prishtina