

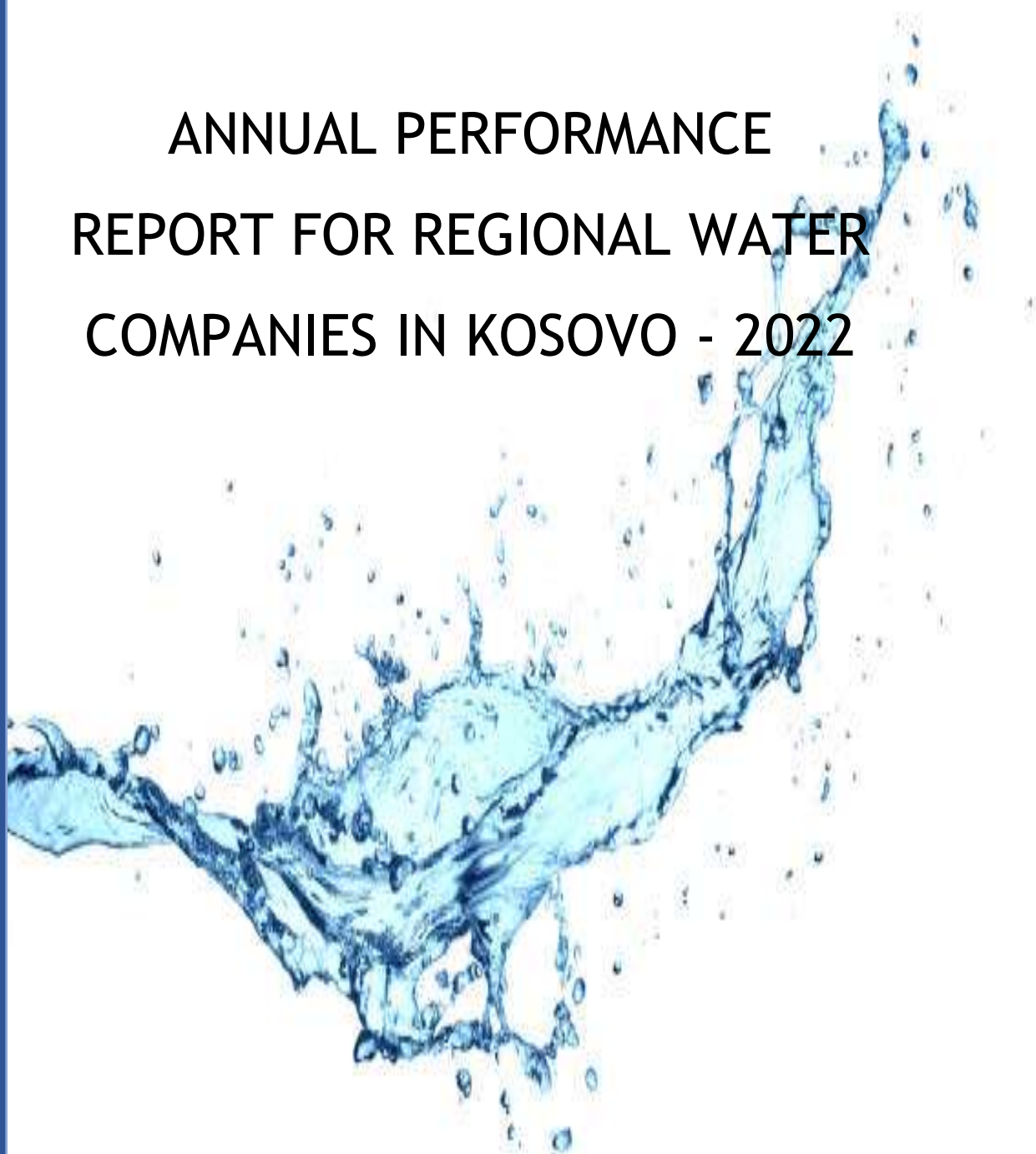


Republika e Kosovës - Republika Kosova - Republic of Kosovo

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



# ANNUAL PERFORMANCE REPORT FOR REGIONAL WATER COMPANIES IN KOSOVO - 2022



September  
2023

## **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”

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## Acronyms and abbreviations

|         |  |
|---------|--|
| WSRA    | Water Services Regulatory Authority                          |
| ASK     | Kosovo Agency of Statistics                                  |
| BRP     | Business Regulatory Plans                                    |
| RAB     | Regulatory Asset Base  |
| KNIPH   | Kosovo National Institute of Public Health                   |
| CPIK    | Customer Price Index in Kosovo                               |
| IMCW    | Inter-Ministerial Council on Waters                          |
| RWC     | Regional Water Company                                       |
| PMU-POE | Policy and Monitoring Unit of Public Owned Enterprises       |
| WC      | Water Centre   |
| NRW     | Non- Revenue Water   |
| AI      | Administrative Instruction                                   |
| RAG     | Regulatory Accounting Guidelines                             |
| SP      | Service Providers  |
| IGS     | Informative Geographic System                                |
| KPI     | Key Performance Indicators                                   |
| PR      | RKV ‘Prishtina’, Prishtinë                                   |
| PZ      | RKV “Hidroregjioni Jugor”, Prizren                           |
| PE      | RKV “Hidrodrini”, Pejë                                       |
| MIT     | RKV “Mitrovica”, Mitrovicë                                   |
| MESPI   | Ministry of Environment, Spatial Planning and Infrastructure |
| GJA     | RKV “Gjakova”, Gjakovë                                       |
| FE      | RKV “Bifurkacioni”, Ferizaj                                  |
| GJI     | RKV “Hidromorava”, Gjilan                                    |

## 1. FOREWORD

One of the functional responsibilities of the Water Services Regulatory Authority (WSRA) is to monitor and report on the performance of drinking water providers and wastewater treatment services, in general and in particular in relation to the performance and efficiency goals that we have established within the framework of regulatory process. In this way, WSRA ensures that customers receive services with value for money and the quality of services guaranteed by the legal framework.

The report presents a detailed analysis of the state and level of water services in the country and an evaluation of operational and financial performance of seven (7) Regional Water Companies (RWC) and Hydro - Economic Enterprises (HEE) 'Ibër Lepenci'. The analysis presented in this report is based on the data reported by the water service providers, which have been verified by the WSRA.

Moreover, the prepared report is also an information instrument for the public and all stakeholders involved in the water sector.

The RWC performance assessment, for the reporting year 2022, shows that these companies continue to offer a relatively satisfactory level in terms of the quality of services provided to customers, but do not perform well in relation to their financial and operational efficiency. The operational and commercial efficiency of RWC is still much lower than it should be, especially in sales performance and revenue collection. We believe that RWC can / should do more to collect this source of income, e.g. by applying firm but fair policies, we also believe that customers themselves can and should be more supportive.

We regret to note that the companies have not managed to fulfil the objectives planned by WSRA, in some of the key financial indicators such as: water sales, cash collection, operating capital expenses. On the other hand, during this annual assessment compared to the previous year, we also identified positive trends in these indicators of meeting service standards.

Indicators of meeting service standards are mostly stable, most RWCs have managed to have stable supply, the metering ratio has improved from 98% in 2021 to 99% in 2022, this means that only 1% of domestic customers are billed without a water meter, the efficiency of the staff has also been improved. Nevertheless, all RWCs still face some common challenges such as: high rate of water losses in distribution networks and misuse, poor quality of water meters, weak water supply networks and inadequate sewerage and lack of systems treatment of wastewater, in some of them the supply is intermittent and the quality of water in the customer's taps is poor.

In Kosovo, the development of the necessary infrastructure for the expansion of the sewerage system and the proper treatment of wastewater also remains the main challenge for the environment. The infrastructure of sewerage infrastructure is still not satisfactory, 35% of population is still not connected to the sewerage system. Out of 156.8 mil.m<sup>3</sup>, water distributed in the water supply system this year by the RWC, about 75 % of it was discharged untreated into the rivers, greatly endangering the environment and the health of the population.

RWCs have been able to ensure sufficient revenues to cover operating costs from the cash flow (except RWC 'Mitrovica'), with a small surplus to realize limited capital in investments in the water and wastewater distribution network. So during this period the RWCs have not shown satisfactory /expected performance in operational and commercial / financial efficiency.

Therefore, the information presented in this report is in the interest of customers, RWC managers, investors, the Government and the Assembly of the Republic of Kosovo, to know how service providers and water sector in general are performing.

Finally, we would like to thank the staff of the RWCs for their contribution to the data reporting, as well as the staff of the WSRA for compiling this report and engagement in their daily work.

**Note:**

In the 2022 Annual Performance report, WSRA has decided not to publish some of the standard performance indicators, due to significant differences between the data reported in 2023 and the data reported in 2022.

Indeed, WSRA during 2022 has requested from all RWCs to install functional water meters at all water production / treatment points. After installing the water meters, it has been proven that the difference between the water measured with the water meter is much greater than the volume of water reported without measurement for the same sources.

Produced water, as the key indicator, has an impact on a number of other performance indicator. For the reason, in order to be transparent with the public and other stakeholders, WSRA has decided to publish in the report only the indicators that are correct and verified.

## 2. PERFORMANCE OF SERVICE PROVIDERS

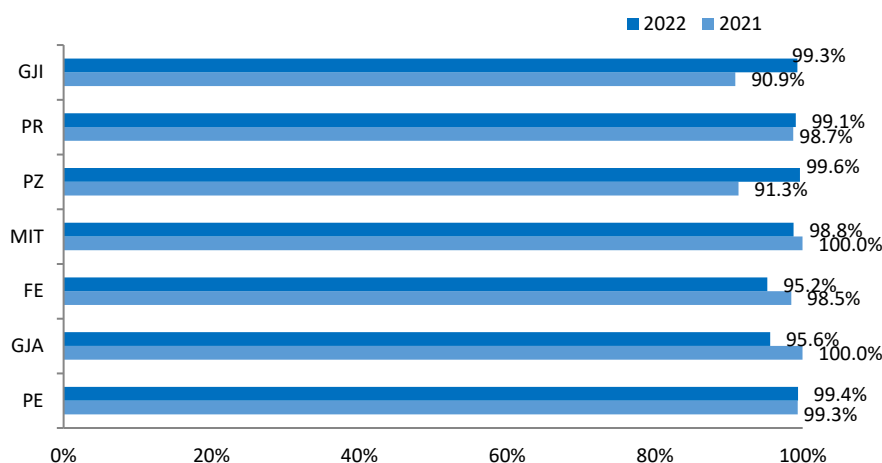
### 2.1 OPERATIONAL PERFORMANCE - WATER SUPPLY

#### 2.1.1 Water quality

The quality of water offered to customers is a key element of the water supply service given its importance to public health. The quality of drinking water offered to customers by water service providers must be according to the standards in force in Kosovo defined in Administrative Instruction (QRK) No. 10/2021 for 'Quality of Water Intended for Human Consumption'.

Even in this report, the analysis and evaluation of the quality in relation to the water quality standards in force, was made on the basis of the data reported by KNIPHK to WSRA<sup>1</sup>.

The level of compliance takes into account the number of samples performed and the percentage of results that meet the water quality standard, in two aspects: physical – chemical and bacteriological.

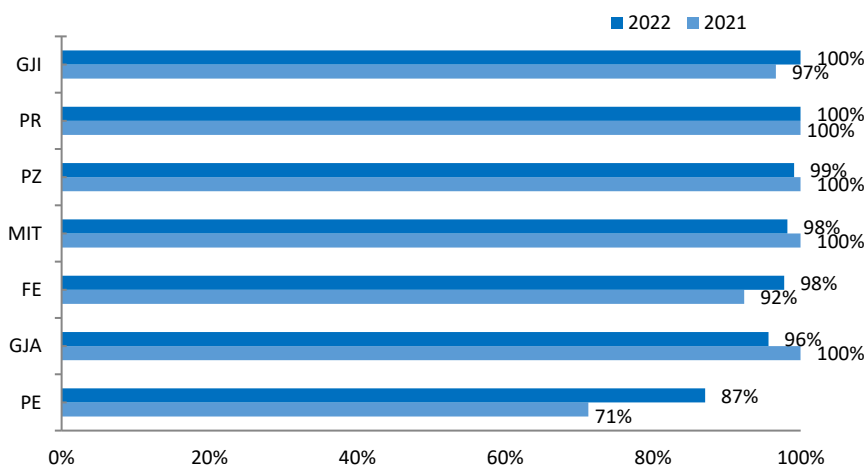


**Figure - 1 Quality rate of bacteriological tests, in accordance with local standards**

In terms of bacteriology, 98.8% of the total of 12,440, analysed samples were in accordance with bacteriological standards. In relation to 2021, there is a small progress at the sector level.

The highest percentage of failed bacteriological tests in 2022, were reported by RWC 'Bifurkacioni' (4.8%) followed by RWC 'Gjakova' (4.4%). On the other, the best performance in terms of bacteriological quality was reported by RWC 'Hidroregjioni jugor' and 'Hidrodrini'.

<sup>1</sup> Water quality for RWC 'Prishtina' was based on the basis of data reported by the company



**Figure - 2 The quality rate of physical – chemical tests in accordance with local standards**

In 2022 compared to 2021, the degree of fulfilment of the quality of treated water defined by standards (chemical and bacteriological) at the sector level 98%.

From a physical – chemical point of view, the water supplied by public companies, during the year 2022 compared to 2021, is at a lower level of compliance with the parameters allowed by the total number of 12,121 samples tested, 97.2% of them, were in compliance with local standards.

As can be seen from figure 2, the biggest problems are currently in RWC ‘Hidrodrini’ with 87% of the tests in accordance with the standards, this rate has an impact after the failure to ensure the presence of residual chlorine<sup>2</sup>, as well as higher failures of water quality in this regard, this year were also reported for RWC ‘Gjakova’.

Water reduction in some companies, as well as frequent water interruptions due to cracks in the water pipes, as well as the meteorological situation (the heavy rains that characterized the year) were factors that affected the quality of the water offered in 2022.

Considering that among the key requirements of the administrative instruction (QRK) no. 10/2021 for the quality of water intended for human consumption is also the operational monitoring which must be done by the RWC and for this they must have laboratories accredited by the responsible local institution<sup>3</sup>, therefore in this regard we suggest the RWCs to engage for the accreditation of their laboratories, raising the professional and technical capacities for monitoring and testing the quality of the water supplied by them.

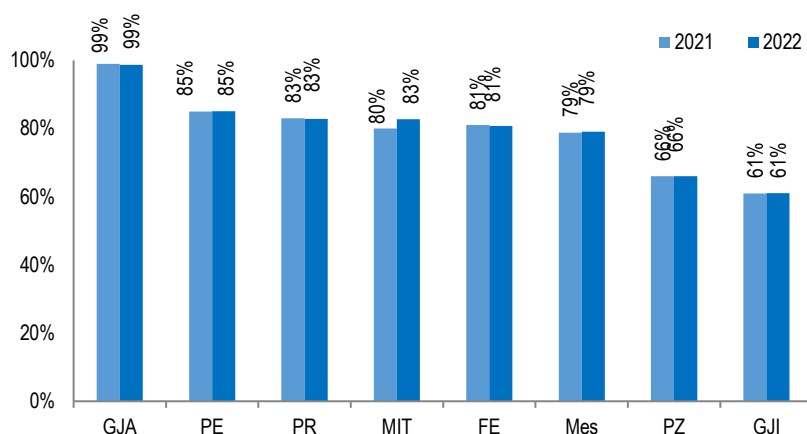
### 2.1.2 Coverage with water supply services

Figure 3 shows the percentage of the population within each defined area of the supply service provider that has access to public water services from RWC. As can be seen, about 21% of the population (especially rural areas) are currently not served by public service providers, some of them have limited water supply, e.g. wells or sources outside the responsibilities of the RWC.

<sup>2</sup> Administrative Instruction (QRK) no 10/2021, considers the lack of residual chlorine in the required rate as a failure in water quality,

<sup>3</sup>RWC ‘Gjakova’, ‘Hidroregjioni Jugor’ and ‘Hidromorava’ have accredited laboratories from the Accreditation Directorate of Kosovo





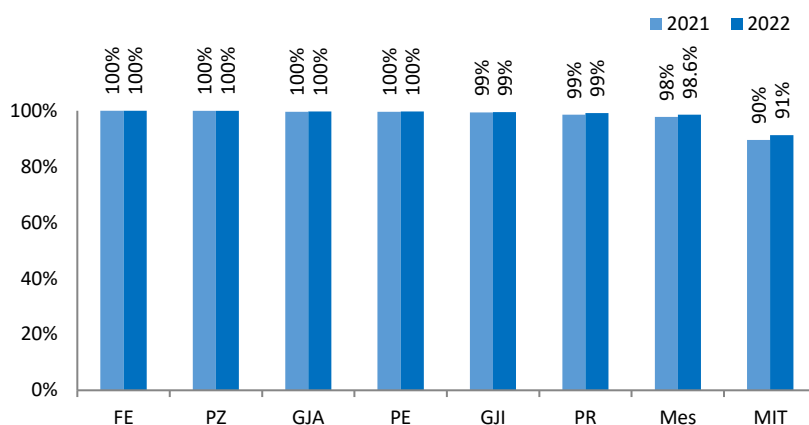
**Figure - 3 Percentage of coverage of the population with water supply services by RWCs**

Apart from 'Mitrovica', other service providers have not reported changes in the figures for extension of services during 2022 in relation to 2021. RWC 'Gjakova' has the highest degree of extension of water supply services with 99% coverage of the area of it, while RWC 'Hidromorava' 61% and 'Hidroregjioni Jugor' 66%, report lower rates of coverage with water supply services within their respective areas. The number of customers served by RWC is currently about 436,621, which value if compared to the previous year 2021 is higher by about 20,000 or expressed as a percentage of 5%.

In Kosovo, there are government policies for the extension and integration of water services, in this direction, the government of Kosovo has drawn up strategic documents which were identified with a considered number of the population and villages of Kosovo with special water supply systems which were not administered by the RWC, they set objectives which had modest results, as it seems they encountered difficulties in their implementation, due to the lack of will of the RWC for the integration of these systems, the resistance of the community to give "their" system to the water supply system, as well as the lack of good coordination between all relevant Government institutions, WSRA, KNIPH, Municipalities, etc. In any case, the majority of RWC, especially RWCs (Hidromorava, Hidroregjioni Jugor, Prishtina and Mitrovica) have greater potential to increase their customers base. Therefore WSRA suggests to RWCs to integrate the municipalities and rural water supply schemes as soon as possible, since we see this as important for the RWC as an opportunity for the population since they will receive more stable and secure services.

### 2.1.3 Water measurement

It is the fundamental right of the customers and at the same time the legal obligation for the Regional Water Companies (RWC) in Kosovo, that for their customers, ensure billing: accurate, fair, legal and transparent for water services through the water meter, for rather, the measurement of water billed to customers is also an important tool for controlling water customers and losses.



**Figure - 4 Percentage of domestic customers with water meters**

The analysis of the results shows that the coverage of domestic customers with water meters at the general level during 2022 is 98.6% and has increased by 0.6% from 2021.

RWC 'Gjakova', 'Bifurkacioni', 'Hidrodrini', and 'Hidroregjioni Jugor', are the companies with the full rate of billing to domestic customers with water meters. While in RWC 'Mitrovica', this indicator remains at the rate of 91%, although it has marked an improvement, it still remains at a very low level of water metering for their customers. Otherwise, the equipment of customers with water meters, commercial – industrial as well as institutional ones is almost complete.

WSRA, being informed that many customer complaints are related to irregularities in the billing of customers and in order to fulfil the legal obligation in this aspect, has continuously requested that RWCs equip all their customers with water meters and do their billing exclusively through the regular reading of water meters.

Water measurement is also a necessary tool to efficiently manage the reduction of water losses as well as incentives for saving water, this gains greater weight especially in RWC which face the challenge of meeting the needs of the population with drinking water.

It is a reality at the moment that the vast majority of water meters in the country have been in service for about 10-15 years or more where their functionality has been largely compromised. It is the responsibility of the service providers that the water meters are maintained and replaced according to a program implemented by them. WSRA has discussed this issue with service providers and responsible institutions in the organized workshop, in which case important issues related to water meters and billing accuracy have been addressed.

#### 2.1.4 Complaints

It is the guaranteed right of customers to complain when they do not receive adequate service from their service provider. Complaints are critical in measuring customer satisfaction. This indicator represents the total number of complaints received by RWC from their customers for water supply service and represents the expression of dissatisfaction processed in written or verbal form.

Table - 1 Customers complaints about water services

| RWC          | Technical complaints |               |                               | Commercial complaints |              |                               |
|--------------|----------------------|---------------|-------------------------------|-----------------------|--------------|-------------------------------|
|              | 2021                 | 2022          | Comparative Report: 2022/2021 | 2021                  | 2022         | Comparative Report: 2022/2021 |
| PR           | 3,905                | 2,912         | -25%                          | 1388                  | 1,658        | 19%                           |
| PZ           | 2,021                | 1,988         | -2%                           | 670                   | 681          | 2%                            |
| PE           | 2,296                | 2,431         | 6%                            | 43                    | 247          | 474%                          |
| MIT          | 6,785                | 4,440         | -35%                          | 85                    | 141          | 66%                           |
| GJA          | 3                    | 0             | -100%                         | 338                   | 264          | -22%                          |
| FE           | 54                   | 64            | 19%                           | 137                   | 303          | 121%                          |
| GJI          | 244                  | 273           | 12%                           | 339                   | 518          | 53%                           |
| <b>Total</b> | <b>15,308</b>        | <b>12,108</b> | <b>-21%</b>                   | <b>3,000</b>          | <b>3,812</b> | <b>27%</b>                    |

The total number of complaints for 2022 has generally decreased compared to 2021. This is evident in the lower number of technical complaints addressed in all RWCs except for the RWC 'Bifurkacioni', 'Hidrodrini' and 'Hidromorava', in total the number of technical complaints is 21% less than in 2021. On the other hand, the number of commercial complaints is increasing. From the total of 3000 complaints in 2021, their number has increased by 27% or about 800 more, this shows a general dissatisfaction of customers with the performance of RWC in handling their commercial aspects.

Most of the technical complaints in water supply reported by the RWCs were related to the operational aspect (water interruption, lack of pressure and water flow), while regarding the financial (commercial) aspect, customers mostly complained in the aspects related to debts (debt dispute, discount, debt settlement), as well as invoicing (flat-rate billing). In 2022, we have an increase in the number of customers complaints due to overcharging on their bills, not reading the water meter regularly, etc.

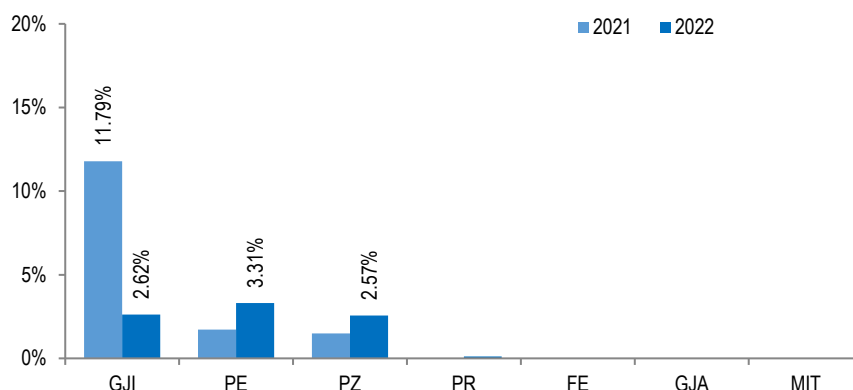
RWC 'Prishtina', as a company with the largest number of complaints, has reported a significant reduction in complaints of a technical nature throughout 2022 compared to 2021, whereas the number of commercial complaints in RWC 'Prishtina' has increased by 19%. The highest increase in the number of complaints in both aspects, was recorded by RWC 'Hidromorava', 'Bifurkacioni' and 'Hidrodrini'.

Updating, classifying and analysing customer complaint data are important elements of monitoring and improving performance, complaints provide information about weak points in service delivery. For this reasons, WSRA has constantly paid attention to the issue of updating customer complaints. Recently, data on complaints are more reliable due to the fact that all RWCs have advanced modules for registration and handling of customer complaints.

#### 2.1.5 Customers affected by low pressure

This indicator defines the number of properties that are regularly affected by low pressure, excluding occasional accidental cases of pressure drop. It is evident that proper pressure management, in addition to the direct impact it has on customer satisfaction with the service

provided, is also one of the important elements in the management of physical water losses as well as maintaining the lifespan of the water supply network. It is a legal obligation for local suppliers to ensure a supply at a 'reference level' above 1.5 to 7.0 bars, at the customer's connection.



**Figure - 5 % of properties with low pressure in the water supply network**

During the year 2022, RWC 'Bifurkacioni', 'Hidrodrini', 'Hidroregjioni Jugor' and RWC 'Prishtina', have reported having difficulties in ensuring the minimum pressure for a number of their customers. From the other WRCs, it has not been possible to obtain data. In general, the data on water pressure should still be considered as not reliable since none of the companies has any real program about pressure management and monitoring as well as record keeping. It is possible that the situation is even worse than figure 5 shows.

It is obvious that none of the RWCs have developed programs for the management of pressures in their service areas. The management and bringing the pressures to the permitted levels is important for maintaining the infrastructure, and at the same time it is very necessary during the physical loss management activities as well as ensuring the water quality. It is known that with an adequate pressure and within the adopted legal parametric values, it will keep contaminated water away from entering the water supply network.

#### 2.1.6 Continuity of water supply

This indicator reflects the number of properties affected by availability, divided into three categories of properties: (i) with 24 hours of service per day, (ii) with 18-23 hours of service per day and (iii) those with less than 18 hours of service per day.

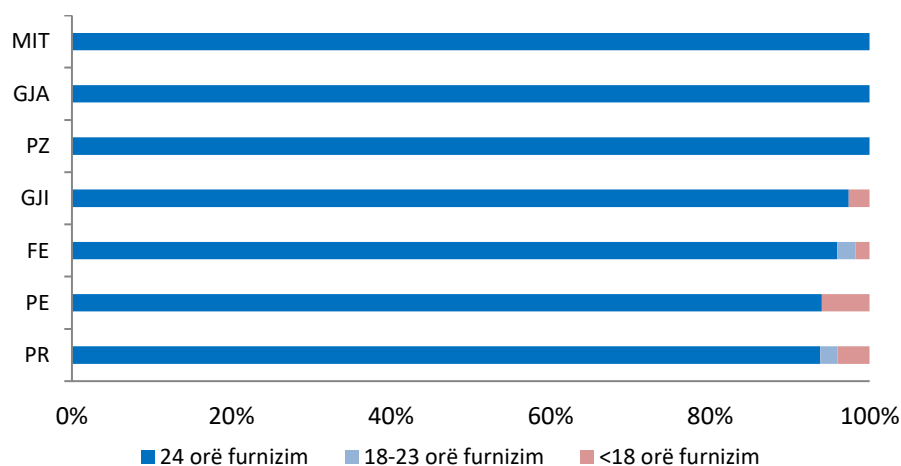
In general, the water supply in Kosovo was continuously improved as a result of investments in increasing production capacities in all RWCs, however continuous supply for 24 hours a day is still current in some of them.

**Table - 2 Percentage of customers with water supply <18 hours, 18-23 hours and 24 hours during 2021 and 2022**

|     | <18 h supply % |      | 18-23 h supply % |      | 24 h supply % |       |
|-----|----------------|------|------------------|------|---------------|-------|
| RWC | 2021           | 2022 | 2021             | 2022 | 2021          | 2022  |
| PR  | 0.8%           | 4.0% | 2.2%             | 2.2% | 97%           | 93.8% |
| PZ  | 0.0%           | 0.0% | 0.0%             | 0.0% | 100%          | 100%  |
| PE  | 3.8%           | 6.0% | 0.0%             | 0.0% | 96%           | 94%   |
| MIT | 0.0%           | 0.0% | 0.0%             | 0.0% | 100%          | 100%  |
| GJA | 0.0%           | 0.0% | 0.0%             | 0.0% | 100%          | 100%  |
| FE  | 3.8%           | 1.8% | 2.5%             | 2.3% | 93.7%         | 95.9% |
| GJI | 40.7%          | 2.6% | 0.0%             | 0.0% | 59%           | 97.4% |

Only RWC 'Gjakova', 'Mitrovica' and 'Hidroregjioni Jugor' have reported that they supply customers with drinking water 24 hours a day.

RWCs, which continue to have great difficulties even in 2022, with water supply still remain RWC 'Prishtina', 'Hidrodrini', 'Bifurkacioni' and 'Hidromorava'. This year RWC 'Hidromorava' and RWC 'Bifurkacioni', have reported that there is an improvement in this regard as a result of more stable resources in water sources.

**Figure - 6 Continuity of water supply**

In RWC 'Bifurkacioni', the continuity of water supply has been improved for some villages which in the past had reductions in water, mainly during the summer months, and in the RWC 'Hidrodrini' problems continue in regular water supply for 2,300 customers in two areas of the city of Peja and Vitomerica, during the summer months due to the drop pressure.

The situation in RWC 'Hidromorava' has also significantly improved in 2022, compared to 2021, where about 40% of customers had water reductions due to the lack of water resources as a result of the drought that reigned in this region in 2021, and partially also in 2022.

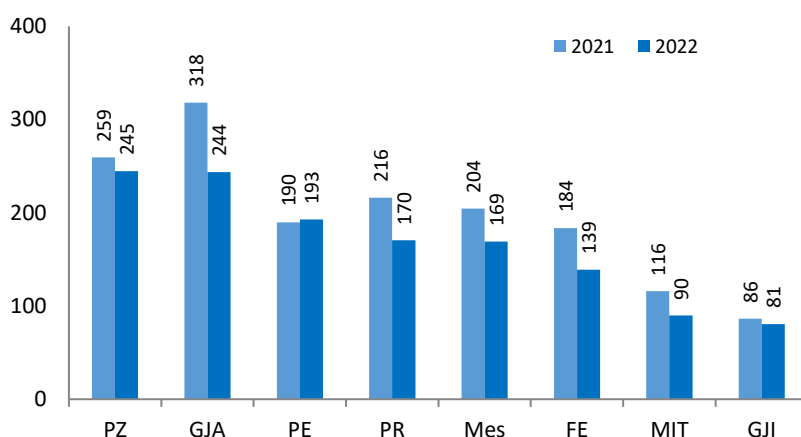
RWC 'Prishtina', even during the year 2022, has continued to have difficulties in regular supply for about 6% of customers in some localities such as: Bardhi i madh, Slatine, the municipality of Fushe Kosova, some villages of Podujeva and Lipjan, mainly the reductions were applied during the summer season.

The situation reflected in figure 6, has been far from what can be called ideal and can generally be addressed to the following reasons: in some RWCs there is a lack of resources and limited capacities for water treatment, the existing water supply networks are in poor condition, resulting in huge losses, as well as illegal connections which are a source of enormous misuse of drinking water.

Regarding the continuity of supply, we have expressed concern about the reliability of the data, since the companies do not have a reliable data update system (the SCADA system in the distribution network is missing, as well as the data update on the regions and customers affected by the reductions in any stable on the regions and customers affected by the reductions in any stable application such as GIS.

### 2.1.7 Cracking of pipes in the water supply network

The indicator represents the number of water pipe bursts within a year in relation to 100 km of network pipe length, and reflects the conditions and performance of water supply distribution network.



**Figure- 7 Defects in the water supply system**

Pipe cracks / defects faced by RWC (measured as the number of cracks per 100 km of pipe per year) are generally high at over 169 cracks per 100 km pipe, with the sector average ranging from less than 81 for RWC 'Hidromorava' deri RWC 'Hidroregjioni Jugor' me 245, i.e. with the weakest performance of the water supply network. The condition of the number of cracks / defects of the network per 100 km, show us the poor condition of the water supply network and the higher this rate is, the more it affects the loss of water and its quality.

The higher number of cracks is justified by the fact that RWCs, in general, are spending very little on the capital maintenance of the water supply network. The poor performance of the main supply network is mainly influenced by a number of factors, including the type (material) of the pipes, the age of the network, the standard of maintenance carried out by the service provider, etc. According

to some international standards (also accepted by WSRA)<sup>4</sup> for a value higher than 50 defects (cracks) for 100 km of the pipe network, urgent intervention is necessary for the rehabilitation of the pipe system. Undoubtedly, this fact, and without exception such a high rate in all RWC, affects the necessity for urgent investments in the renewal and maintenance of the water supply network.

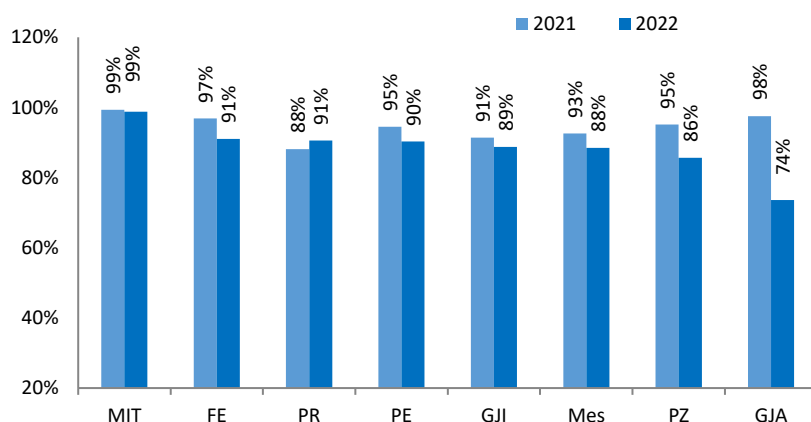
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<sup>4</sup>Guide to asset management planning – WSRA - 2011

## 2.2 FINANCIAL PERFORMANCE - WATER SUPPLY

### 2.2.1 Monetary value of sales

In this part of the report, the financial performance of the companies is analysed, which is essential for the financial stability of the companies.



**Figure – 8 Percentage of sales (invoicing in Euros) in relation to the plan**

It was expected that the sales value for each RWC would be lower than the planned sales values due to the failure to realize the sales volume as predicted.

The sector average in 2022 was 12% lower than planned, moreover this is a 5% weaker performance than in 2021.

Apart from RWC 'Prishtina' which has a better performance in the value of planned sales in 2022 compared to 2021, all other RWCs have shown weaker performance in achieving the sales objective in 2022 compared to in 2021, in particular this is very visible in the RWC 'Gjakova' with 24% and RWC 'Hidroregjioni Jugor' with 9%.

Table 3, below presents the statistical figures of the performance shown for water sales compared to the planned estimates as defined in the RWC tariff applications for the tariff review process for the years 2022 and 2021.



Table - 3 Value of realized and planned sales 2021-2022

| Sales value (Euro) |                   |                   |                     |                   |                   |                     |                             |
|--------------------|-------------------|-------------------|---------------------|-------------------|-------------------|---------------------|-----------------------------|
| 2021               |                   |                   |                     | 2022              |                   |                     | Report:                     |
| RWC                | Planned           | Realized          | Report: real./plan. | Planned           | Realized          | report: real./plan. | Realized 2022/realized 2021 |
| PR                 | 14,670,957        | 12,926,586        | 88%                 | 15,395,857        | 13,939,314        | 91%                 | 7.83%                       |
| PZ                 | 4,167,400         | 3,964,962         | 95%                 | 4,583,183         | 3,924,934         | 86%                 | -1.01%                      |
| PE                 | 3,721,959         | 3,517,253         | 95%                 | 3,692,971         | 3,336,180         | 90%                 | -5.15%                      |
| MIT                | 3,347,663         | 3,325,071         | 99%                 | 3,771,479         | 3,726,858         | 99%                 | 12.08%                      |
| GJA                | 4,300,408         | 4,194,101         | 98%                 | 4,767,563         | 3,508,704         | 74%                 | -16.34%                     |
| FE                 | 1,836,891         | 1,779,260         | 97%                 | 2,170,279         | 1,975,991         | 91%                 | 11.06%                      |
| GJI                | 2,106,189         | 1,924,245         | 91%                 | 2,205,954         | 1,957,050         | 89%                 | 1.70%                       |
| <b>Sector</b>      | <b>34,151,467</b> | <b>31,631,479</b> | <b>93%</b>          | <b>36,587,285</b> | <b>32,369,031</b> | <b>88%</b>          | <b>2.33%</b>                |

The value of sales realized for the year 2022 at the level of the water supply sector 32.4 mil.€, while the planned 36.6 mil.€, means that it is lower by 4.2 mil. €, or as mentioned above for 12 % less than the plan.

This consequently results in insufficient sales revenue to meet the financial need of RWC, in particular for financing maintenance and capital growth.

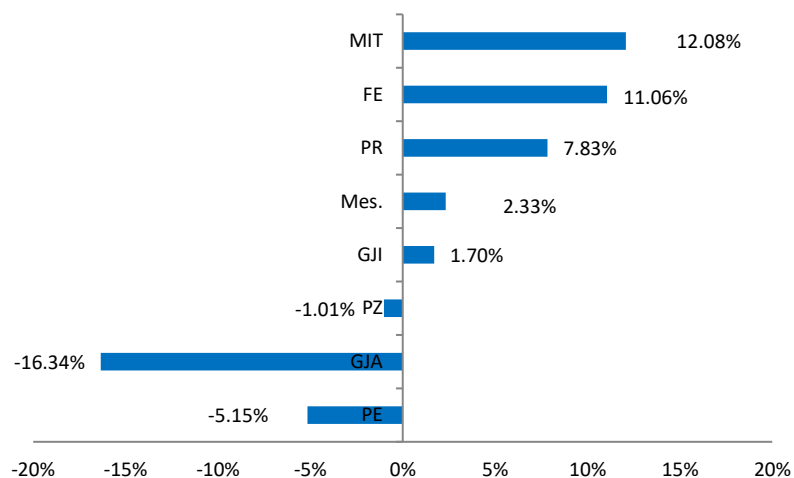


Figure - 9 Percentage of water supply sales in 2022, compared to 2021

Despite the failure to meet sales targets, the absolute value of sales in 2022 compared to 2021 at the sector level is 2.3% higher. It is worth noting that the sales rates were higher for RWC 'Mitrovica' and 'Bifurkacioni', 'Prishtina' and to a lesser extent also at RWC 'Hidromorava'.

In RWC 'Hidroregjioni Jugor' 1%, 'Hidrodrini' 5.15% and 'Gjakova' 16.34% sales rates are negative compared to 2021.

### 2.2.2 Capital expenditures for water supply

Through the tariff process, WSRA on an annual basis allows a significant amount of financial resources for RWC dedicated to capital expenditures for maintenance and advancement of the asset base necessary to provide sustainable water supply services.

**Table - 4 Realized planned investments from own revenues for the years 2021 and 2022**

|               | Own sources of investment     |                               |                               |   |  |
|---------------|-------------------------------|-------------------------------|-------------------------------|---|--|
|               | 2021                          |                               | 2022                          |   |  |
| RWC           | Capital investment (realized) | Capital investment (planning) | Capital investment (realized) | % comparative 2022: realization/ planning | % comparative: 2022/2021 (realization) |
| PR            | 497,374                       | 1,563,100                     | 525,526                       | 33.6%                                     | 6%                                     |
| PZ            | 181,310                       | 581,200                       | 594,062                       | 102.2%                                    | 228%                                   |
| PE            | 242,803                       | 855,000                       | 381,219                       | 44.6%                                     | 57%                                    |
| MIT           | 227,145                       | 390,000                       | 5,246                         | 1.3%                                      | /                                      |
| GJA           | 296,833                       | 988,039                       | 600,850                       | 60.8%                                     | 102%                                   |
| FE            | 7,464                         | 311,990                       | 83,255                        | 26.7%                                     | 1015%                                  |
| GJI           | 25,559                        | 335,530                       | 133,123                       | 39.7%                                     | 421%                                   |
| <b>Sector</b> | <b>1,478,488</b>              | <b>5,024,859</b>              | <b>2,323,281</b>              | <b>46.2%</b>                              | <b>57%</b>                             |

In 2022, total of about 5.0 mil. € were allowed through the tariff process to cover the capital projections in the water supply service. We are disappointed to see the capital expenditures realized by RWC in 2022 were less than half of those planned.

The highest rate of capital investments in relation to the plan in 2022 was realized by RWC 'Hidroregjioni Jugor' with 102%, there were about 0.6 mil.€ of own funds realized in the maintenance and replacement of the water supply network, otherwise in relation with the previous year 2021, private investments in this company are more than twice as high. On the other hand, only 1.3 %, of the planned investments were realized by RWC 'Mitrovica'.

The investment value in 2022 at the sector level was 57% higher than in 2021, this had a slight impact on the performance of the water supply network.

The failure or non-realization of the planned expenses, especially those dedicated to capital maintenance, undoubtedly results in the deterioration of the asset base and a decrease in the service levels, where the current rate of defects in the network as well as the high level of water losses is evidence for the failure.

Table- 5 Realized and planned investments from grants for the years 2021 end 2022

| Investments from grants |                               |                               |                               |   |  |
|-------------------------|-------------------------------|-------------------------------|-------------------------------|---|--|
|                         | 2021                          |                               | 2022                          |   |  |
| RWC                     | Capital investment (realized) | Capital investment (planning) | Capital investment (realized) | % comparative 2022: realization/ planning | % comparative: 2022/2021 (realization) |
| PR                      | 30,210                        | 1,980,000                     | 147,266                       | 7.4%                                      | 387%                                   |
| PZ                      | 135,902                       | 26,199,715                    | 136,918                       | 0.5%                                      | 1%                                     |
| PE                      | 0                             | 0                             | 0                             | 0.0%                                      | /                                      |
| MIT                     | 161,178                       | 0                             | 410                           | /   | -100%                                  |
| GJA                     | 22,778                        | 9,535,693                     | 104,996                       | 1.1%                                      | 361%                                   |
| FE                      | 0                             | 4,010,000                     | 360                           | 0.0%                                      | /                                      |
| GJI                     | 0                             | 2600000                       | 76847                         | 3.0%                                      | /                                      |
| <b>Sector</b>           | <b>350,068</b>                | <b>44,325,408</b>             | <b>466,797</b>                | <b>1.1%</b>                               | <b>33%</b>                             |

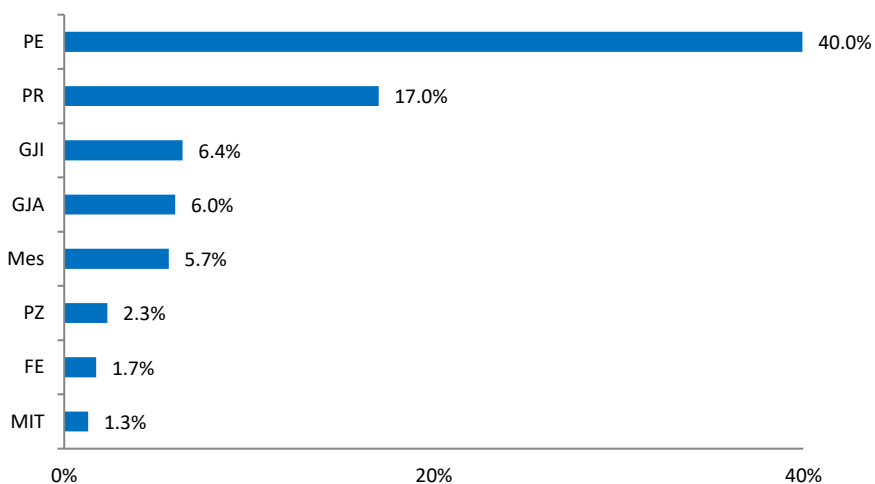
An amount of capital expenses was planned to be realized from donations, from the value of 44.3 mil. €, were realized only 1.1% or 0.46 mil. €.

An amount of 26.2 mil.€, investment value dedicated to maintenance and capital growth in water treatment and distribution was planned by RWC 'Hidroregjioni Jugor', throughout its service area, but their realization was very low 0.5%. Otherwise, RWC 'Hidrodrini' and RWC 'Mitrovica' had not planned but did not make any donation in 2022.

Table - 6 Realized and planned investments from own revenues and grants for the years 2021 and 2022

| Own sources of investments + grants     |                               |                               |                               |   |  |
|---|-------------------------------|-------------------------------|-------------------------------|---|--|
|   | 2021                          |                               | 2022                          |   |  |
|   | Capital investment (realized) | Capital investment (planning) | Capital investment (realized) | % comparative 2022: realization/ planning | % comparative: 2022/2021 (realization) |
| <b>Sector – Own sources Investments</b> | 1,478,488                     | 5,024,859                     | 2,323,281                     | 46.24%                                    | 57%                                    |
| <b>Sector-Grants</b>                    | 350,068                       | 44,325,408                    | 466,797                       | 1.05%                                     | 33%                                    |
| <b>Sector</b>                           | <b>1,828,556</b>              | <b>49,350,267</b>             | <b>2,790,078</b>              | <b>5.65%</b>                              | <b>53%</b>                             |

From the above table, it can be seen that the realization of capital investments at the sector level from own funds was 46.2%, whereas 1.05% was realized from donations.



**Figure - 10 Capital expenditures realized from own revenue and grants for water supply in relation to the plan**

Out of the total capital investments (own and grants) in water supply, on average 5,7%, were realized, more investments were realized by RWC 'Hidrodrini', although the plans were very modest.

## 2.3 OPERATING PERFORMANCE - WASTEWATER SERVICE

### 2.3.1 The quality of discharged wastewater

The companies that deal with the treatment of wastewater, RWC 'Hidrodrini', 'Gjakova' and RWC 'Mitrovica' have reported that the treatment of wastewater and its discharge is within the allowed standards, while from RWC 'Hidroregjioni Jugor', out of 167 tests, 17 of them were reported as failed. It is worth mentioning that within ITUN, laboratories equipped with modern equipment have been built.

The legal aspects and parametric value allowed for the treatment and discharge of wastewater are determined by Administrative Instruction no. 30/2014, which is under institutional supervision of the MESP.

We are hoping that in the following years, the annual reports on the quality of the water discharged from the RWC, will be provided by the ministry, to the officials from the relevant department.

### 2.3.2 The frequency of blockage of the sewage network

The number of blockages per 100 km of network length indicates the reliability of the wastewater collection system, this measurement is made through the number of floods or blockages of the sewage network per 100 km during a year.

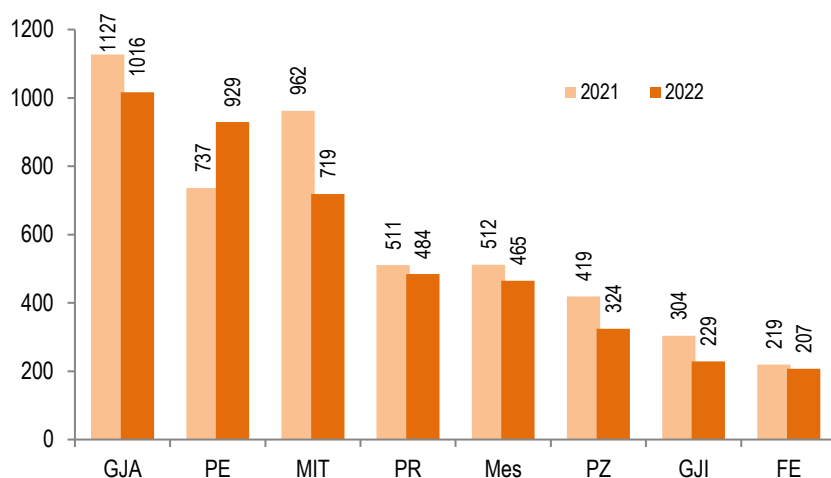


Figure - 11 Number of blockages per 100 km of network length

At the sector level, the trend of sewage blockages is improving, however, the level of 512 blockages per 100 km of the network is extremely high.

The results reported in 2022, show a wide range of changes in RWCs performance out of 207 blockages per 100 km of RWC 'Bifurkacioni' pipes to 1,016 blockages of RWC 'Gjakova', this indicates a poor performance.

Apparently, the causes for such a high level of blockages are neglect and inadequate maintenance of the sewage system. Likewise, the year 2022, has been characterized by rainy weather which has also caused occasional early floods in different parts of country. RWC should have more proactive approach to cleaning and repairing the network. They must, in accordance with legal obligations, inspect and clean entire sewage system.

### 2.3.3 Coverage with wastewater services (sewerage)

Coverage with sewerage service is defined as the percentage of the population within the service area that has sewerage services from RWC.

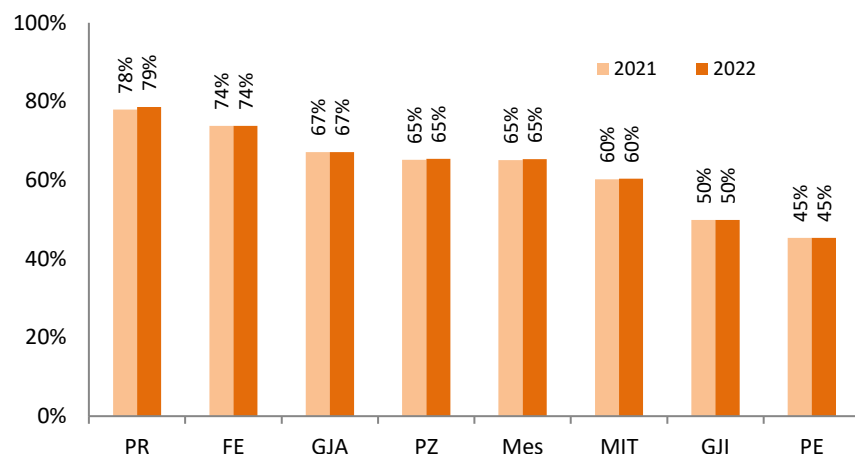


Figure - 12 Coverage of population with wastewater services

The coverage of the population with wastewater services (sewerage) at the sector level has not marked any progress, it still remains at the level of 65%.

The situation has remained the same at the RWCs level, excluding RWC 'Prishtina', in these two years.

RWC 'Hidrodrini' but also RWC 'Hidromorava' have a low level of service extension with this service, so they are two companies that have considerable room for improvement.

RWC 'Prishtina' and 'Bifurkacioni' are companies which, unlike other local companies, have a more acceptable level of coverage with wastewater services, the first with over 79%, the second with 74%.

Wastewater treatment by RWCs still remains low with only 25% of the total amount of wastewater billed customers by all RWCs, or about 8.1 % population mainly in the service area of WRC 'Hidroregjioni Jugor' with 15%, 'Gjakova' 17.9% and 'Hidrodrini' 22.9%. Some ITUNs with small capacities are under the management of RWC 'Mitrovica' and 'Prishtina'.

These levels are much lower than the coverage rates for European environmental standards and if Kosovo wants to fulfil aspirations in accordance with EU standards, significant investments in the expansion of the wastewater network and their treatment are necessary. However, we appreciate that such investments are costly and the level of investment required cannot be undertaken without the support of international development community. We hope that in coming years the service will be more improved, since we have entered a phase of intensive planning, investment and construction of wastewater treatment plants in other areas managed by RWCs.

### 2.3.4 Complaints

The following indicator presents the number of complaints that customers address to their companies, regarding the service of wastewater (sewerage) and reflects the level of satisfaction of customers regarding the service received from their service provider.

This chapter includes complaints of technical nature, while for commercial complaints addressed to RWC, refer to the complaints chapter and Table 1. Customer complaints about water services.

Table – 7 Customer complaints about wastewater services

**Table - 7 Customer complaints about wastewater services**

| Technical complaints |              |              |
|----------------------|--------------|--------------|
| RWC                  | 2021         | 2022         |
| PR                   | 4,047        | 3,815        |
| MIT                  | 2,972        | 1,479        |
| PE                   | 52           | 241          |
| PZ                   | 658          | 620          |
| GJA                  | 0            | 0            |
| GJI                  | 33           | 28           |
| FE                   | 0            | 2            |
| <b>Sector</b>        | <b>7,762</b> | <b>6,185</b> |

All RWCs have reported 6,185 complaints, and all of them were related to technical aspects, especially flooding and collapses of the sewerage network.

The high number of complaints about the technical aspects make us understand that the problems in this service are enormous in the RWC 'Prishtina', 'Mitrovica', 'Hidroregjioni Jugor' and 'Hidrodrini', from the operational aspect, few complaints about this service have been addressed to 'Bifurkacioni' and 'Hidromorava', otherwise no complaints have been reported by RWC 'Gjakova'.

We suggest RWCs to be as responsible as possible in handling complaints, especially RWC 'Hidrodrini' and 'Mitrovica', to make the software application functional (CRM), so that customer complaints regarding the service of wastewater to be updated constantly.

## 2.4 FINANCIAL PERFORMANCE -WASTEWATER SERVICES

### 2.4.1 Planned value of sales of wastewater services (Euro)

Considering that water sales volumes were below the planned amount, therefore the actual sales value of wastewater services is also below the planned sales values.

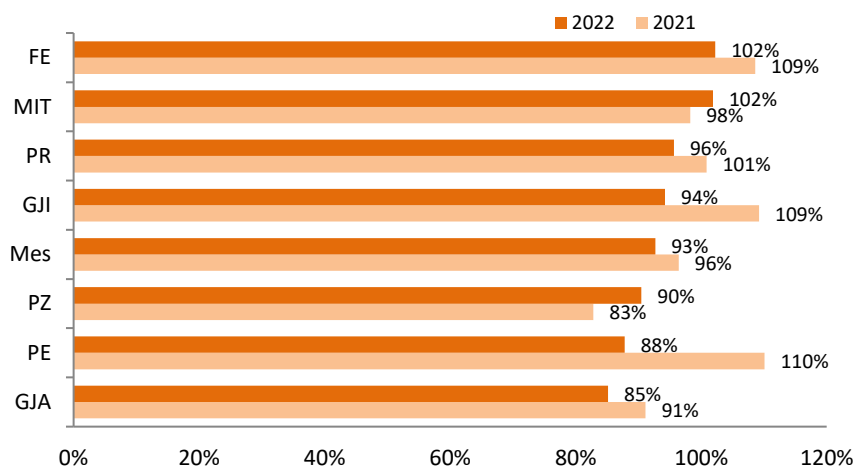


Figure – 13 Sales of wastewater in relation to planning

With the exception of RWC 'Bifurkacioni' and 'Mitrovica', none of the other RWCs have been able to achieve the objectives of sales of wastewater in 2022. WRC 'Hidroregjioni Jugor' and RWC 'Mitrovica', unlike the other RWCs, have marked a positive trend in 2022 in relation to 2021, although the RWC 'Hidroregjioni Jugor' in this year were below the target.

### 2.4.2 Realized value of wastewater service sales (Euro)

Despite sales targets not being met, sales revenue for wastewater service in real terms has currently increased by 34.07% although this was mainly due to tariff increases rather than improved commercial performance especially to RWC 'Gjakova' and 'Hidrodrini'.

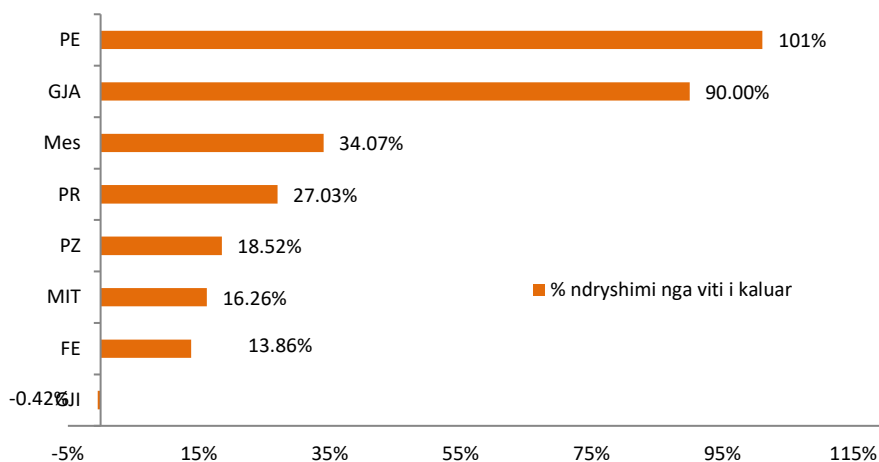


Figure - 14 Value of wastewater service sales in 2022 compared to 2021



### 2.4.3 Total cost per unit for wastewater service

Means the total operating expenses for wastewater, included capital maintenance of wastewater in relation to the equivalents of domestic customers per year.

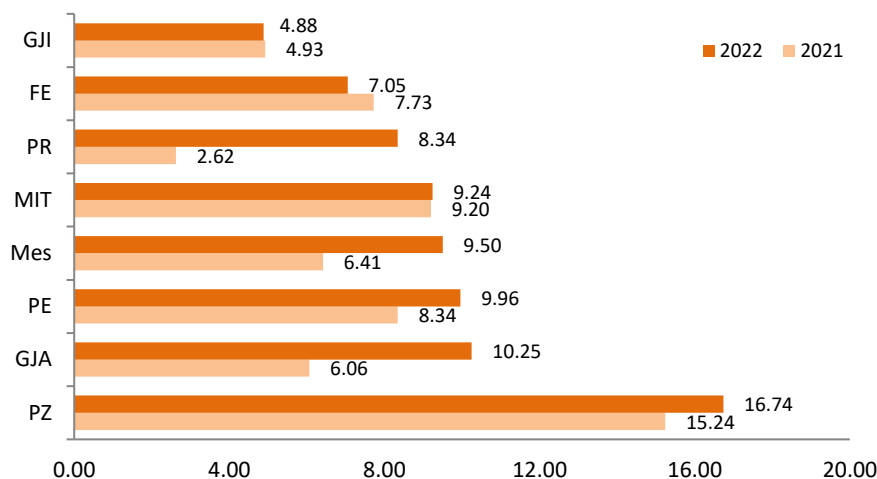


Figure - 15 Total cost per unit wastewater service

The cost per unit of wastewater services at the level of the sector in 2022, has marked a significant increase from 6.41 €/m<sup>3</sup>, to 9.50€/m<sup>3</sup> in 2021.

RWC 'Gjakova', 'Prishtina' and RWC 'Hidrodrini', have marked a significant increase in the unit costs of wastewater services.

This cost is partly due to the fact that wastewater treatment plants have been put into use in several RWCs.

### 2.4.4 Total cost per unit of wastewater services realized in relation to the planned one

This indicator represents the ratio between the cost per unit of wastewater services realized (operating expenses including capital maintenance /with domestic customer equivalents) and the unit cost of planned wastewater services (operating expenses including capital maintenance / domestic customer equivalents).

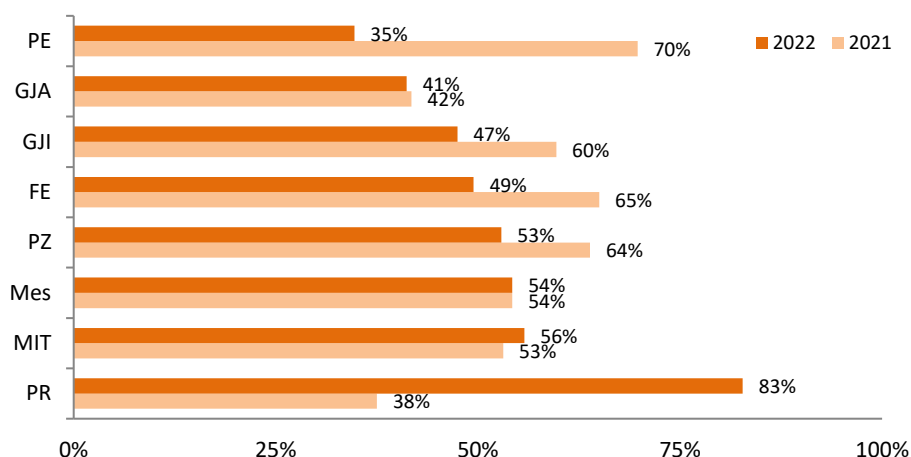


Figure - 16 Unit cost of wastewater services in relation to planned unit costs (%)

Planned unit costs resulting from the 2022 tariff review (adjusted to price levels in 2022), were lower than planned in most RWCs.

At the sector level, fulfilment of costs per unit of wastewater services in 2022 is at the level of 54%, as it was in 2021.

#### 2.4.5 Capital expenditures for wastewater

With the tariff process for 2022 WSRA has allowed significant capital provisions (capital maintenance and capital increase) from own funds, for which we have been expecting that the same will be realized towards the goal of ensuring more satisfactory levels of wastewater service.

Table - 8 Realized and planned investments from own revenues for 2021 and 2022

| Own sources of investment |                               |                               |                               |   |  |
|---------------------------|-------------------------------|-------------------------------|-------------------------------|---|--|
| RWC                       | 2021                          | 2022                          |                               | % comparative 2022: realization/ planning | % comparative: 2022/2021 (realization) |
|                           | Capital investment (realized) | Capital investment (planning) | Capital investment (realized) |   |  |
| PR                        | 21,754                        | 290,500                       | 190,957                       | 65.7%                                     | 778%                                   |
| PZ                        | 2,275                         | 197,000                       | 7,857                         | 4.0%                                      | 245%                                   |
| PE                        | 11,859                        | 50,000                        | 13,494                        | 27.0%                                     | 14%                                    |
| MIT                       | 22,139                        | 150,000                       | 119                           | 0.1%                                      | -99%                                   |
| GJA                       | 3,885                         | 199,389                       | 2,806                         | 1.4%                                      | -28%                                   |
| FE                        | 1,415                         | 113,000                       | 14,461                        | 12.8%                                     | 922%                                   |
| GJI                       | 414                           | 114,112                       | 8,797                         | 7.7%                                      | 2025%                                  |
| <b>Sector</b>             | <b>63,741</b>                 | <b>1,114,001</b>              | <b>238,491</b>                | <b>21.4%</b>                              | <b>274%</b>                            |

Of the approved total of 1.1 mil.€ for all seven RWCs, we regret to note that only about 21.4%. More investments were allowed for RWC 'Prishtina', from which 65.7% of them were realized. Other RWCs have had very minor investments in the wastewater service for the two-year period (2022-2021), however the rate of realized investments was %, higher than it was in 2021.

Table - 9, Realized planned and investment from grants for 2021 and 2022

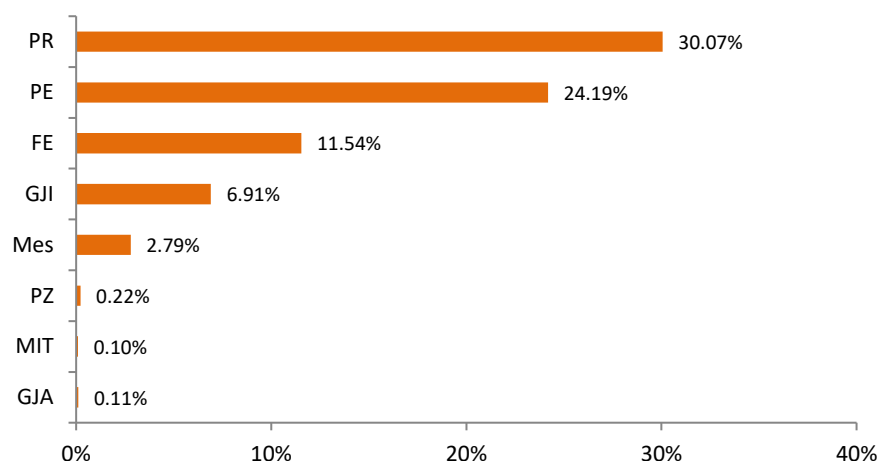
| Investment from grants |                               |                               |                               |   |  |
|------------------------|-------------------------------|-------------------------------|-------------------------------|---|--|
| RWC                    | 2021                          |                               | 2022                          |   |  |
|                        | Capital investment (realized) | Capital investment (planning) | Capital investment (realized) | % comparative 2022: realization/ planning | % comparative: 2022/2021 (realization) |
| PR                     | 979,931                       | 1,800,000                     | 510,405                       | 28%                                       | -48%                                   |
| PZ                     | 0                             | 20,392,000                    | 43,713                        | 0.2%                                      | /                                      |
| PE                     | 0                             | -                             | 0                             | /   | /                                      |
| MIT                    | 15,941                        | -                             | 41                            | /   | -99.7%                                 |
| GJA                    | 529                           | 2,130,000                     | 90                            | 0.004%                                    | -83.0%                                 |
| FE                     | 0                             | -                             | 23                            | /   | /                                      |
| GJI                    | 0                             | -                             | 0                             | /   | /                                      |
| <b>Sector</b>          | <b>996,401</b>                | <b>24,322,000</b>             | <b>554,272</b>                | <b>2.3%</b>                               | <b>-44.4%</b>                          |

For 2022, RWCs have foreseen significant capital investments in the amount of around 24,3 mil.€, which are expected to be provided by donations. In reality, the actual expenses were very low, e.g. only 2.3%. More investment funds are expected from donors to be realized in RWC 'Hidroregjioni Jugor' in the maintenance and especially in the capital increase in the cost of the wastewater collection and treatment centre, and from the value 20.4. mil. €, only 0.2% were realized. From 1.8 mil.€. funds planned by RWC 'Prishtina', the donors had realized 0.5 mil. € or 28%.

Table - 10 Realized and planned investment from own revenues and grants for 2021 and 2022

| Own source investment + grants |                               |                               |                               |   |  |
|--------------------------------|-------------------------------|-------------------------------|-------------------------------|---|--|
|                                | 2021                          |                               | 2022                          |   |  |
|                                | Capital investment (realized) | Capital investment (planning) | Capital investment (realized) | % comparative 2022: realization/ planning | % comparative: 2022/2021 (realization) |
| Sector – Own sources           | 63,741                        | 1,114,001                     | 238,491                       | 21%                                       |  |
| Investments                    |                               |                               |                               |   | 274%                                   |
| Sector-Grants                  | 996,401                       | 24,322,000                    | 554,272                       | 2%  | -44%                                   |
| <b>Total sector</b>            | <b>1,060,142</b>              | <b>25,436,001</b>             | <b>792,763</b>                | <b>2.79%</b>                              | <b>-25%</b>                            |

In total, in the wastewater services sector, a very small percentage of 3% was realized from the funds planned to be invested by RWC and also from grants.



**Figure - 17 Capital expenditures in the wastewater service in relation to the plans**

The main impact for the non-fulfilment of the planned investments at the approved level can be attributed to the non-realization of the billing and collection objectives, as well as the increase in operating expenses and engagement with donors. In this absence of the necessary funds for investment, this has resulted in not achieving the goal of providing more satisfactory levels of wastewater service.

We expect that in the following years, this service will see significant investments, a part of which is already planned to be made both in the construction of ITUN and in the improvement of the sewerage system.

## 2.5 OVERALL FINANCIAL PERFORMANCE OF RWC

### 2.5.1 Revenue collection

Collection efficiency represents the ratio of revenue collection during the year. This is one of the most significant indicators which, in addition to the efficiency of billing and reduction of water losses, has a direct impact on the financial stability of the company.

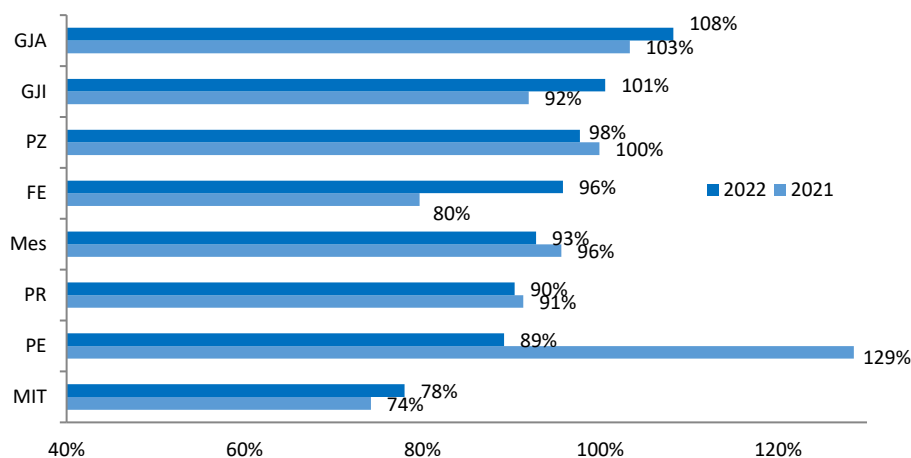


Figure - 18 Collection rate

In 2021, at the sector level, the collection rate was 96%, while in 2022 this value has decreased to 93%. This negative trend can mainly be due to the fact that in RWC 'Hidrodrini', there is a decrease in the collection rate among 'commercial-industrial' customers from 267% to 92%. Nevertheless, the value of the collection rate is observed to be stagnant in some RWCs such as RWC 'Mitrovica', 'Hidrodrini' and 'Prishtina'.

RWC 'Gjakova' and 'Hidromorava' were the best performers in 2022, as they achieved a high efficiency in the collection rate of 108% 'Gjakova', respectively 101% 'Hidromorava'.

In RWC 'Mitrovica', the increase in the rate of collection is evident, although in this indicator its performance is very low, the level of the rate of collection of 78% in 2022, is still not enough for a positive business from this company.

Table - 11 Realized and planned collection rate for 2021 and 2022

| Collection rate | Realized   |            | Objectives |            |
|-----------------|------------|------------|------------|------------|
|                 | 2021       | 2022       | 2021       | 2022       |
| RWC             |            |            |            |            |
| PR              | 91%        | 90%        | 94%        | 94%        |
| PZ              | 100%       | 98%        | 94%        | 94%        |
| PE              | 129%       | 89%        | 94%        | 94%        |
| MIT             | 74%        | 78%        | 79%        | 86%        |
| GJA             | 103%       | 108%       | 93%        | 95%        |
| FE              | 80%        | 96%        | 93%        | 93%        |
| GJI             | 92%        | 101%       | 93%        | 94%        |
| <b>Sector</b>   | <b>96%</b> | <b>93%</b> | <b>92%</b> | <b>93%</b> |

The objectives planned by RWC 'Hidroregjioni Jugor', 'Gjakova', 'Bifurkacioni' and 'Hidromorava' in 2022 were fulfilled.

**Table - 12 Collection rate by customer categories and total for the years 2021-2022**

| Customer category      | Prishtina |      | Hidroregjioni Jugor |      | Hidrodrini |      | Mitrovica |      | Gjakova |      | Bifurkacioni |      | Hidromorava |      |
|------------------------|-----------|------|---------------------|------|------------|------|-----------|------|---------|------|--------------|------|-------------|------|
|                        | 2021      | 2022 | 2021                | 2022 | 2021       | 2022 | 2021      | 2022 | 2021    | 2022 | 2021         | 2022 | 2021        | 2022 |
| <b>Household</b>       | 87%       | 87%  | 100%                | 95%  | 93%        | 87%  | 74%       | 74%  | 107%    | 113% | 80%          | 84%  | 91%         | 100% |
| <b>com.-industrial</b> | 104%      | 97%  | 96%                 | 105% | 267%       | 92%  | 81%       | 100% | 101%    | 127% | 93%          | 149% | 92%         | 101% |
| <b>Institution</b>     | 97%       | 104% | 108%                | 107% | 107%       | 94%  | 66%       | 85%  | 84%     | 51%  | 42%          | 119% | 100%        | 102% |
| <b>Average</b>         | 91%       | 90%  | 100%                | 98%  | 129%       | 89%  | 74%       | 78%  | 103%    | 108% | 80%          | 96%  | 92%         | 101% |

While the highest collection rate is among institutional customers, collection from the category of household customers in most companies still remains a challenge to improve.

Domestic customers served by RWC 'Gjakova' are the best payers of water services, while customers of RWC 'Mitrovica' have fulfilled their financial obligations towards their company the least.

All RWCs should be more proactive in collecting revenues, especially towards large debtors, businesses as well as institutional customers, addressing the debts from a legal point of view and applying operational disconnection measures, but always applying strict legal procedures.

### 2.5.2 Return on capital

Return on capital is an important financial component with an impact on the tariff burden, as an indicator it represents the difference between annual income, operating expenses, capital maintenance and repaid income which are in relation to the regulatory base of assets (BRRA)<sup>5</sup>, for the current tariff process 2022-2024, the value of return to the regulatory base of assets approved by WSRA 4%.

<sup>5</sup>For more details on the regulatory basis of assets you can find in the 'WSRA Accounting Regulatory Guidelines.

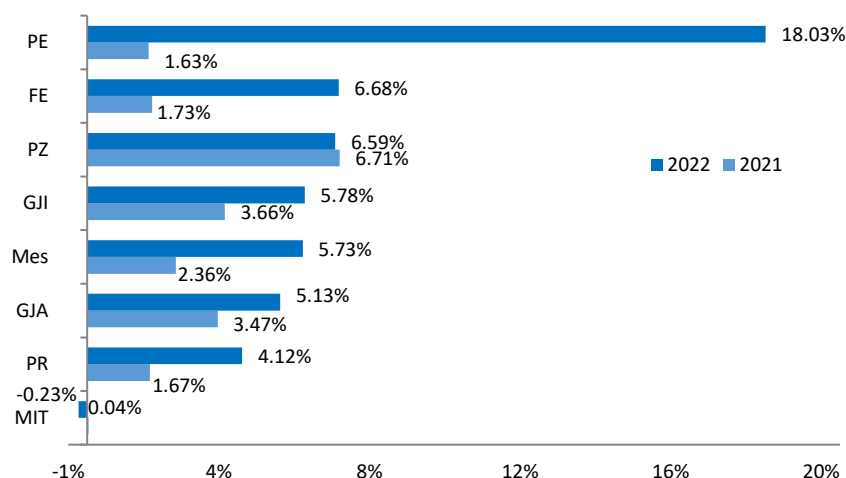


Figure - 19 Return on the regulatory basis of assets (BRRA)

In the average of the sector, the return on capital has marked a positive trend, currently in 2022 it is at the rate of 5.78% excluding RWC 'Mitrovica', all other RWC have achieved positive returns in 2022, this means that these companies have achieved cover their expenses (including renewal and depreciation according to the current cost on the regulatory basis of the assets within the limits of their income.

As can be seen in the figure above, the values of the rates for RWC, are brought from 4.12% in RWC 'Prishtina' to 18.03% in RWC 'Hidrodrini'. The high rate of return on capital at RWC 'Hidrodrini', is due to the fact that in 2021 this company had shown a good performance in the collection rate, as a result of which growth was mainly the collection of unpaid invoices (from the previous years) from the commercial – industrial customers.

With the increase in collection efficiency as well as with a program to reduce operating expenses, RWC would create opportunities for significant investment in infrastructure assets.

### 2.5.3 Operating expenses

In this report, the operating costs of seven (7) providers of water supply and wastewater services in Kosovo, for the two-year period 2022 compared to 2021, have been analysed.

Operating expenses refer to the costs of RWC necessary for the operation and maintenance of water supply and wastewater services, such as personnel costs, electricity, derivatives, chemicals together with other administrative costs related to the provision of these services.

In table 13, we have provided summarized statistics of the general expenses for water services planned as well as those realized for the year 2022 and 2021, at the sector level and specifically for each RWC, in nominal values but also adjusted respective degree of inflation.

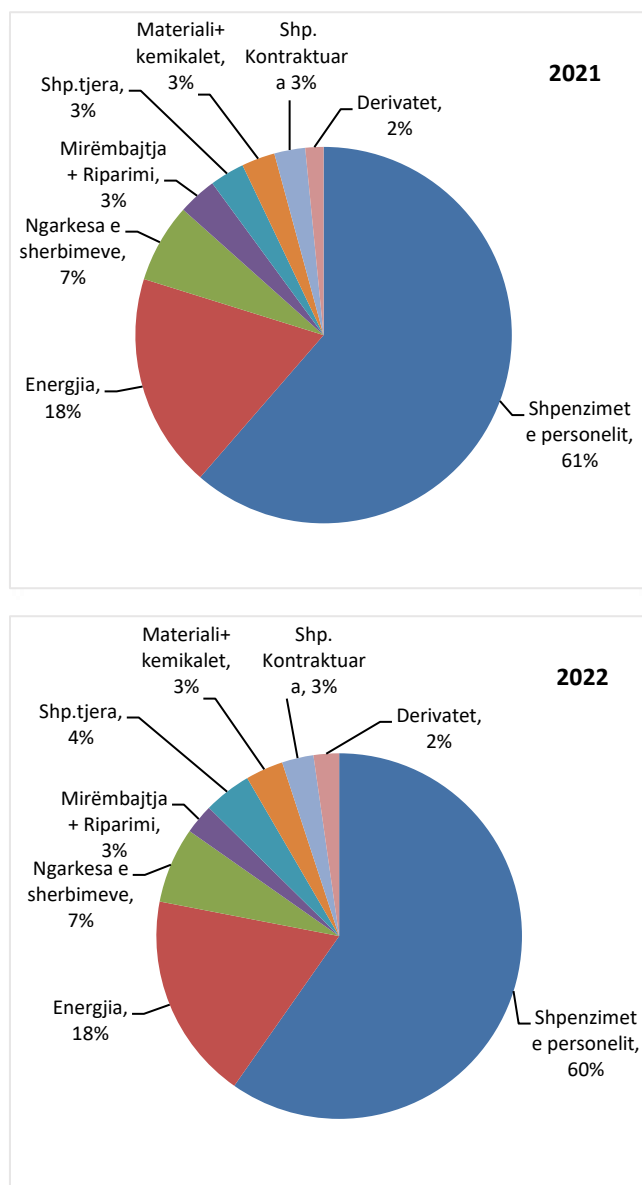
Table - 13 Value of realized and planned operating expenses

| Operating expenses | Realization       |                               |                   | Planning          |                   |                   |
|--------------------|-------------------|-------------------------------|-------------------|-------------------|-------------------|-------------------|
|                    | 2021 no inf.      | 2021 with inf.                | 2022 no inf.      | 2021 with inf.    | 2022 with inf.    | 2022 no inf.      |
| RWC                |                   |                               |                   |                   |                   |                   |
| PR                 | 10,254,011        | 11,016,366                    | 10,784,853        | 11,414,297        | 12,320,321        | 11,041,249        |
| PZ                 | 3,872,999         | 4,160,945                     | 4,081,717         | 4,600,203         | 5,157,039         | 4,621,645         |
| PE                 | 2,903,742         | 3,119,627                     | 3,104,474         | 3,035,030         | 3,519,642         | 3,154,239         |
| MIT                | 3,363,490         | 3,613,555                     | 3,635,502         | 3,576,403         | 3,927,452         | 3,5197,12         |
| GJA                | 3,642,510         | 3,913,320                     | 3,901,794         | 3,815,598         | 4,732,337         | 4,241,035         |
| FE                 | 1,517,169         | 1,629,966                     | 1,579,546         | 1,690,353         | 2,173,339         | 1,947,706         |
| GJI                | 1,784,596         | 1,917,275                     | 1,785,009         | 1,940,286         | 2,081,966         | 1,865,820         |
| <b>Sector</b>      | <b>27,338,517</b> | <b>29,371,054<sup>6</sup></b> | <b>28,872,895</b> | <b>30,072,171</b> | <b>33,912,096</b> | <b>30,391,408</b> |

The expenditure plans for the year 2022 were 30.4 mil.€, while the operating expenses realized by the water service providers in Kosovo were 28.9 mil.€, which means that the realized expenses were below the planned objectives by around 1.5 mil.€, otherwise operating expenses were about 1.5 mil.€, higher compared to 2021. In the water supply service, operating expenses had increased less, 0.5% while the highest increase in operating expenses in 2022 compared to 2021 occurred in the wastewater service. Around 1.4 mil.€, there were more operating expenses in the treatment of wastewater mainly in the RWC 'Gjakova', 'Hidroregjioni Jugor', 'Hidrodrini' and in the RWC 'Prishtina'. In the water supply service RWC 'Mitrovica' in 2022, there were higher operating expenses for 0.25mil.€ than in the previous year 2021.

<sup>6</sup>Operating expense including inflation.





**Figure - 20 Proportion of operating expenditure categories for the sector 2021 and 2022**

During 2022, personnel costs alone combined with energy costs account for about 78% of operating costs for the operation of water services. Labour costs make up 60%, and compared to 2021, it is 1 % lower, while energy costs remained stable at 18%, as well as other categories of operating costs, as norm, remained at the same level excluding the category of other expenses<sup>7</sup> which as a norm in 2022 have increased by 1%.

Based on the analysis, high expenses were identified in almost all categories (especially derivatives and chemicals). Reducing and managing them effectively is essential and has a direct impact on the

<sup>7</sup>**Other direct expenses:** Represent all expenses related to municipal services, representation, telecommunication, postal services, advertising, public relations, recreation, etc.

company's financial profitability. First of all, RWC should take into account the rationalization of personnel costs: increasing staff efficiency, reducing NRW, improving energy efficiency, etc. Therefore, the management must evaluate and undertake various measures to increase income and decrease expenses where possible to improve the overall financial situation. We estimate that the opportunity to make some cost reductions lies in all cost centres of both services (water supply and wastewater system).

#### 2.5.4 Staff efficiency

Staff efficiency of the staff of RWCs during 2022 is reflected through the following indicator, which therefore shows the number of regular employees (staff) engaged in water supply and wastewater services, to serve 1000 customers. This standard indicator of performance or management efficiency. The lower the numbers, the higher the management efficiency.

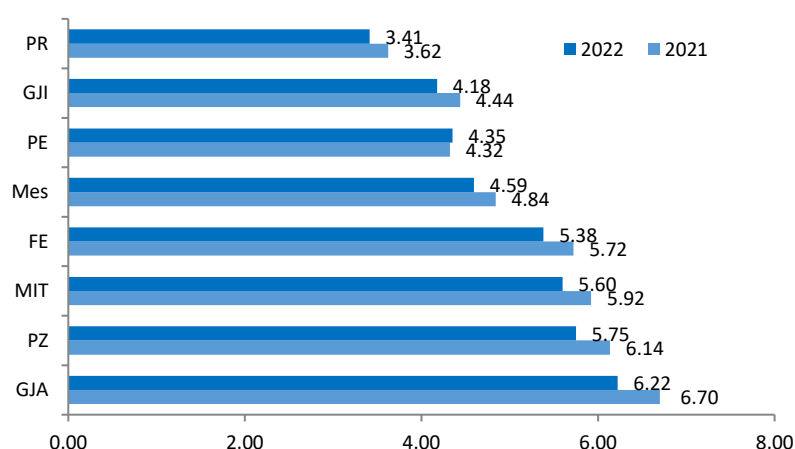


Figure - 21 Staff efficiency

In 2022 compared to 2021, staff efficiency at the sector level has improved slightly, falling to a rate of 4.59 from 4.84 as it was in 2021, the result of which has been the significant increase in the number of customers (mainly within the existing areas of service coverage).

Seven (7) RWC in Kosovo provide an average ratio of 4.59 for staff connection /000', otherwise, the staff efficiency index in RWC 'Gjakova' 6.22, 'Hidroregjioni Jugor' 5.75, 'Mitrovica' 5.60 and 'Bifurkacioni' 5.38, is lower compared to other local providers. This means that they have a large number of employees per 1000 customers. Staff efficiency is higher in RWC 'Prishtina' 3.41, 'Hidromorava' 4.18 and 'Hidrodrini' 4.35 which have managed to exceed these practices.

It is very important to know how efficiently each company uses its human resources, although there is no set standard for the number of employees per 1000 customers, based on international good practices it is recommended to have maximum of 5 employees per 1000 customers to have a good staff efficiency. Otherwise, the Western European countries, namely in the current EBC, staff efficiency varies from 0.29 to 6.41 staff/1000 customers or with average of 0.83 staff/1000 customers.<sup>8</sup>, for water services.

<sup>8</sup>EBC-European Benchmarking Co-operation-Learning from International Best Practices-2021

Table - 14 Realized and planned efficiency for 2021 and 2022

| Staff efficiency | Realization | Planning    |
|------------------|-------------|-------------|
| RWC              | <b>2022</b> | <b>2022</b> |
| PR               | 3.41        | 3.46        |
| PZ               | 5.75        | 6.74        |
| PE               | 4.35        | 4.69        |
| MIT              | 5.60        | 5.66        |
| GJA              | 6.22        | 6.93        |
| FE               | 5.38        | 6.70        |
| GJI              | 4.18        | 4.31        |
| <b>Sector</b>    | <b>4.59</b> | <b>4.96</b> |

The companies also set targets for this indicator, which were met by all RWCs.

### 3. PERFORMANCE OF BULK WATER PROVIDER

WSRA is responsible for the regulation of the business part of HEE 'Ibër Lepenci', which deals with the bulk water supply for RWC 'Mitrovica' and RWC 'Prishtina'.

In the following, in tabular form, statistics and some performance indicators are given for trending and performance development in 2022, in relation to 2021.

**Table - 15 Statistical data for HEE 'Ibër-Lepenci'**

| Statistical data for 2022 / 2021               | 2021       | 2022       |
|--|------------|------------|
| Billed bulk water volume (m3)                  | 48,708,395 | 48,572,799 |
| Billing for bulk water (€)                     | 1,199,496  | 1,451,789  |
| Collection for bulk water (€)                  | 1,074,248  | 1,417,694  |
| Operating cost for bulk water supply (€)       | 1,627,610  | 1,907,045  |
| Number of workers engaged in bulk water supply | 79         | 73         |

In 2022, sales of water in quantitative value have decreased by 0.3% compared to 2021. While in RWC 'Mitrovica', quantitative sales of water have decreased by about 2%, sales for RWC 'Prishtina' have increased with by the same norm. The billing for bulk water has increased by 0.25 mil.€ or by 21%, mainly influenced by the tariff increase in 2022.

Operating expenses for bulk water supply have increased by 0.275 mil.€ or 17% in 2022 compared to 2021.

**Table - 16 Performance indicators HEE 'Ibër-Lepenci'**

| Performance indicators         | 2021  | 2022  |
|--------------------------------|-------|-------|
| Collection rate                | 90%   | 98%   |
| Work rate                      | 0.74  | 0.76  |
| Work coverage rate             | 0.66  | 0.74  |
| Operating cost per unit (€/m3) | 0.033 | 0.039 |

In table 16, an overview of the financial indicators based on which the performance of HEE 'Ibër Lepenci' can be evaluated during the year 2022/2021, was given.

HEE 'Ibër Lepenci' has reached the rate of collection at the level 98%, in monetary value this is for 0.34 mil.€, or 32%, due to the increase in the monetary value of billing.

The increase in revenue collection, despite the increase in water expenses, has influenced the work coverage rate to be higher in 2022 compared to 2021. However, this still remains below the desired level to cover the expenses created in 2022, mainly due to high unit costs 0.039 (€/m3)

## APPENDIX 1: Summary income statements

### RWC Prishtina (Prishtina)

|  | 2021              | 2022              |
|--|-------------------|-------------------|
| Turnover   | 14,389,147        | 15,783,436        |
| Operating expenses   | <b>10,254,012</b> | <b>10,784,853</b> |
| <b>Net operating income (excluding capital maintenance)</b>              | 4,135,138         | 4,998,583         |
| Capital maintenance (infrastructural renewal + current cost devaluation) | 678,841           | 712,559           |
| <b>Net operating income (excluding capital maintenance)</b>              | <b>3,456,294</b>  | <b>4,286,024</b>  |
| Provision for bad debts  | 2,679,913         | 1,380,510         |
| <b>Net operating income (after bad debts)</b>                            | <b>776,381</b>    | <b>2,905,514</b>  |
| Interest on long-term loans  | 0                 | 0                 |
| <b>Profit before tax</b>   | <b>776,381</b>    | <b>2,905,514</b>  |
| Tax on profit  | 0                 | 0                 |
| <b>Net profit after tax</b>  | <b>776,381</b>    | <b>2,905,514</b>  |

### RWC Hidroregjioni Jugor (Prizren)

|  | 2021             | 2022             |
|--|------------------|------------------|
| Turnover   | 5,119,987        | 5,299,963        |
| Operating expenses   | <b>3,872,999</b> | <b>4,081,718</b> |
| <b>Net operating income (excluding capital maintenance)</b>              | 1,246,988        | 1,218,245        |
| Capital maintenance (infrastructural renewal + current cost devaluation) | 131,097          | 317,331          |
| <b>Net operating income (excluding capital maintenance)</b>              | <b>1,115,891</b> | <b>900,914</b>   |
| Provision for bad debts  | 371,249          | 4,391            |
| <b>Net operating income (after bad debts)</b>                            | <b>744,642</b>   | <b>896,523</b>   |
| Interest on long-term loans  | 0                | 0                |
| <b>Profit before tax</b>   | <b>744,642</b>   | <b>896,523</b>   |
| Tax on profit  | 0                | 0                |
| <b>Net profit after tax</b>  | <b>744,642</b>   | <b>896,523</b>   |

### RWC Hidrodrini (Peja)

|  | 2021             | 2022             |
|--|------------------|------------------|
| Turnover   | 4,022,313        | 4,278,198        |
| Operating expenses   | 2,903,741        | 3,104,474        |
| <b>Net operating income (excluding capital maintenance)</b>              | <b>1,118,572</b> | <b>1,173,724</b> |
| Capital maintenance (infrastructural renewal + current cost devaluation) | 133,622          | 180,282          |
| <b>Net operating income (excluding capital maintenance)</b>              | <b>984,950</b>   | <b>993,442</b>   |
| Provision for bad debts  | 898,458          | -1,260,211       |
| <b>Net operating income (after bad debts)</b>                            | <b>86,492</b>    | <b>2,253,653</b> |
| Interest on long-term loans  | 0                | 0                |
| <b>Profit before tax</b>   | <b>86,492</b>    | <b>2,253,653</b> |
| Tax on profit  | 0                | 0                |
| <b>Net profit after tax</b>  | <b>86,492</b>    | <b>2,253,653</b> |

### RWC Mitrovica (Mitrovica)

|  | 2021             | 2022             |
|--|------------------|------------------|
| Turnover   | 4,604,978        | 4,768,640        |
| Operating expenses   | 3,363,491        | 3,635,502        |
| <b>Net operating income (excluding capital maintenance)</b>              | <b>1,241,487</b> | <b>1,133,138</b> |
| Capital maintenance (infrastructural renewal + current cost devaluation) | 24,819           | 30,968           |
| <b>Net operating income (excluding capital maintenance)</b>              | <b>1,216,668</b> | <b>1,102,170</b> |
| Provision for bad debts  | 1,354,452        | 1,120,609        |
| <b>Net operating income (after bad debts)</b>                            | <b>-137,783</b>  | <b>-18,439</b>   |
| Interest on long-term loans  | 0                | 0                |
| <b>Profit before tax</b>   | <b>-137,783</b>  | <b>-18,439</b>   |
| Tax on profit  | 0                | 0                |
| <b>Net profit after tax</b>  | <b>-137,783</b>  | <b>-18,439</b>   |

### RWC Gjakova (Gjakova)

|  | 2021             | 2022           |
|--|------------------|----------------|
| Turnover   | 4,687,018        | 4,427,671      |
| Operating expenses   | 3,642,510        | 3,901,794      |
| <b>Net operating income (excluding capital maintenance)</b>              | <b>1,044,508</b> | <b>525,877</b> |
| Capital maintenance (infrastructural renewal + current cost devaluation) | 366,332          | 391,253        |
| <b>Net operating income (excluding capital maintenance)</b>              | <b>678,176</b>   | <b>134,624</b> |
| Provision for bad debts  | 233,430          | -172,581       |
| <b>Net operating income (after bad debts)</b>                            | <b>444,746</b>   | <b>307,205</b> |
| Interest on long-term loans  | 0                | 0              |
| <b>Profit before tax</b>   | <b>444,746</b>   | <b>307,205</b> |
| Tax on profit  | 0                | 0              |
| <b>Net profit after tax</b>  | <b>444,746</b>   | <b>307,205</b> |

### RWC Bifurkacioni (Ferizaj)

|  | 2021           | 2022           |
|--|----------------|----------------|
| Turnover   | 2,213,838      | 2,449,715      |
| Operating expenses   | 1,517,168      | 1,579,546      |
| <b>Net operating income (excluding capital maintenance)</b>              | <b>696,670</b> | <b>870,169</b> |
| Capital maintenance (infrastructural renewal + current cost devaluation) | 31,454         | 35,497         |
| <b>Net operating income (excluding capital maintenance)</b>              | <b>665,216</b> | <b>834,672</b> |
| Provision for bad debts  | 654,146        | 489,860        |
| <b>Net operating income (after bad debts)</b>                            | <b>11,070</b>  | <b>344,812</b> |
| Interest on long-term loans  | 0              | 0              |
| <b>Profit before tax</b>   | <b>11,070</b>  | <b>344,812</b> |
| Tax on profit  | 0              | 0              |
| <b>Net profit after tax</b>  | <b>11,070</b>  | <b>344,812</b> |

### RWC Hidromorava (Gjilan)

|  | 2021           | 2022           |
|--|----------------|----------------|
| Turnover   | 2,284,171      | 2,323,811      |
| Operating expenses   | 1,784,596      | 1,785,009      |
| <b>Net operating income (excluding capital maintenance)</b>              | <b>499,575</b> | <b>538,802</b> |
| Capital maintenance (infrastructural renewal + current cost devaluation) | 42,751         | 51,533         |
| <b>Net operating income (excluding capital maintenance)</b>              | <b>456,824</b> | <b>487,269</b> |
| Provision for bad debts  | 332,216        | 201,578        |
| <b>Net operating income (after bad debts)</b>                            | <b>124,608</b> | <b>285,691</b> |
| Interest on long-term loans  | 0              | 0              |
| <b>Profit before tax</b>   | <b>124,608</b> | <b>285,691</b> |
| Tax on profit  | 0              | 0              |
| <b>Net profit after tax</b>  | <b>124,608</b> | <b>285,691</b> |

## APPENDIX 2: TARIFF STATEMENTS (2021-2022)

### Current tariff statement 2021

|   | Unit      | RWC Prishtina | RWC Hidroregioni Jugor | RWC Hidrodrini | RWC Mitrovica | RWC Gjakova | RWC Bifurkacioni | RWC Hidromorava |
|---|-----------|---------------|------------------------|----------------|---------------|-------------|------------------|-----------------|
| <b>Domestic customers</b>                                 |           |               |                        |                |               |             |                  |                 |
| Fixed tariff for water supply                             | EUR/month | 1.00          | 1.00                   | 1.00           | 1.00          | 1.00        | 1.00             | 1.00            |
| Water   |           |               |                        |                |               |             |                  |                 |
| 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 volume of water consumed) | EUR/m3    | 0.05          | 0.14                   | 0.07           | 0.09          | 0.07        | 0.10             | 0.08            |
| <b>Commercial and institutional customers</b>             |           |               |                        |                |               |             |                  |                 |
| Fixed tariff for water supply                             | EUR/month | 2.00          | 2.00                   | 2.00           | 2.00          | 2.00        | 2.00             | 2.00            |
| Water   |           |               |                        |                |               |             |                  |                 |
| 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 volume of water consumed) | EUR/m3    | 0.11          | 0.32                   | 0.15           | 0.20          | 0.16        | 0.23             | 0.17            |



## Tariffs applicable for 2022 (1 January - 31 December 2022)

|   | Unit               | RWC Prishtina | RWC Hidroregion i Jugor | RWC Hidrodrini | RWC Mitrovica | RWC Gjakova | RWC Bifurkacioni | RWC Hidromorava |
|---|--------------------|---------------|-------------------------|----------------|---------------|-------------|------------------|-----------------|
| <b>Domestic customers</b>                                 |                    |               |                         |                |               |             |                  |                 |
| Fixed tariff for water supply                             | EUR/month          | 1.00          | 1.00                    | 1.00           | 1.00          | 1.00        | 1.00             | 1.00            |
| Water   |                    |               |                         |                |               |             |                  |                 |
| Volumetric tariff for water supply                        | EUR/m <sup>3</sup> | 0.44          | 0.38                    | 0.25           | 0.36          | 0.37        | 0.37             | 0.35            |
| Tariff for wastewater (based on volume of water consumed) | EUR/m <sup>3</sup> | 0.06          | 0.14                    | 0.14           | 0.09          | 0.14        | 0.10             | 0.08            |
| <b>Commercial and institutional customers</b>             |                    |               |                         |                |               |             |                  |                 |
| Fixed tariff for water supply                             | EUR/month          | 2.00          | 2.00                    | 2.00           | 2.00          | 2.00        | 2.00             | 2.00            |
| Water   |                    |               |                         |                |               |             |                  |                 |
| Volumetric tariff for water supply                        | EUR/m <sup>3</sup> | 0.67          | 0.57                    | 0.37           | 0.54          | 0.56        | 0.55             | 0.52            |
| Tariff for wastewater (based on volume of water consumed) | EUR/m <sup>3</sup> | 0.13          | 0.32                    | 0.31           | 0.20          | 0.30        | 0.22             | 0.17            |

## Untreated water tariffs for 2021

| RWC       | Tariff unit      | 2021   |
|-----------|------------------|--------|
| Mitrovica | €/m <sup>3</sup> | 0.0163 |
| Prishtina | €/m <sup>3</sup> | 0.0364 |

## Untreated water tariffs for 2022

| RWC       | Tariff unit      | 2022   |
|-----------|------------------|--------|
| Mitrovica | €/m <sup>3</sup> | 0.0201 |
| Prishtina | €/m <sup>3</sup> | 0.0433 |

## Volumetric tariff for basic activities of providing bulk water services

| RWC       | Tariff unit      | 2021 | 2022 |
|-----------|------------------|------|------|
| Mitrovica | €/m <sup>3</sup> | 0.17 | 0.17 |