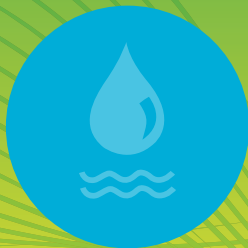


EurEau

# Europe's Water in Figures

An overview of the European  
drinking water and waste  
water sectors



**2026**  
EDITION

# Foreword

Five years have passed since the publication of our previous statistical report. Over these five years, the world has dramatically changed. The Russian attack on Ukraine and the resulting energy crisis, increasingly unpredictable US policy, and volatile global value chains affect even the smallest local water operator. At the same time, our sector increasingly feels the impact of climate change while struggling with traditional and new pollutants such as PFAS.

Water operators are critical entities providing services which are essential to maintain vital societal functions. More than 550 million customers rely on us to provide safe, reliable and affordable water services 24 hours a day, seven days a week. These customers range from private households to hospitals and food producers.

Our sector is sailing increasing stormy waters, we are determined to turn these massive challenges into opportunities. In our paper '**Ambitions of the water sector - Enabling factors**', we set out what policy makers and regulators need to do to develop water operators as societal solution providers.

This Europe's Water in Figures report will help readers understand how far we have progressed as solutions providers and where the bottlenecks lie. To make our story more complete, we have added several new indicators. For other indicators, we show the trend from the 2017 and 2021 reports until today.

Some words of caution. Simply comparing country results may be misleading. Water services are adapted to their specific local circumstances.

These depend on factors such as population density, the type and available quantity of water resources, required treatment levels, local topography and many other elements. Additional factors influencing prices, costs and asset values include the scope of the service, salary levels, taxes and the facility running costs. On top of this, varying local conditions exist within countries. The national average value cannot display the range of individual results. The report should therefore be seen as a testimonial of diversity rather than a benchmarking tool. For this reason, each graph is preceded by a short note explaining the reasons for the differences in national results.

The report was made possible by the willingness of our 38 national member organisations to provide their data sets, and the generous help of our partner Utilitatis in processing these data. Given differences in data availability, not all countries were able to deliver number for each data point. Depending on the indicator, we extrapolate the results to the whole of Europe (and the EU27). Sadly, our colleagues from Ukraine were unable to deliver data due to the massive Russian attacks on the water infrastructure.

We hope you will find the information contained in this unique report useful.



**Pär Dalhielm**  
EurEau President

# Acknowledgements



We would like to give particular thanks to the team at Fondazione Utilitatis who provided us with invaluable help in analysing the data in this report. To Andrea Di Piazza, Andrei Orbu, Isabella Russo and Rita Mileno: grazie mille! Without your expertise and tireless work, this report would not have been possible. Many thanks are due also to Utilitatis Director Francesca Mazzarella for making this team available to us, and to Luigi Del Giacco of Utilitalia for initiating our contacts.

**ISBN**  
978-2-9602226-4-7

**EAN**  
9782960222647

# Contents

<b>Foreword</b>	1
<b>Acknowledgements</b>	2
<b>Methodology</b>	4
<b>Chapters</b>	
<b>1 Sector priorities</b>	6
<b>2 General information</b>	8
2.1 Population connected to a network	8
2.2 Annual billing	9
2.3 Investment and sources of finance	10
2.4 Employment	13
2.5 Water governance and management	15
2.6 Water tariffs	18
<b>3 Drinking Water</b>	21
3.1 Water production and consumption	21
3.2 Drinking water network infrastructure	24
<b>4 Wastewater Services</b>	29
4.1 Wastewater network infrastructure	29
4.2 Wastewater treatment	31
4.3 Water reuse	34
4.4 Sewage sludge management	36
<b>5 Energy and climate</b>	38
5.1 Energy consumption	38
5.2 Renewable energy production	40
5.3 Greenhouse gas emissions	42
<b>6 Sector outlook</b>	43
<b>Annex</b>	
Data tables	45

# Methodology

As in previous editions, the data contained in this report were collected from EurEau members. Our members used either their own information or figures from official statistical services. EurEau is only responsible for assembling, checking for general consistency, extrapolating for missing data and presenting the result. EurEau cannot take responsibility for any inaccuracy in individual data points.

For many indicators, we present total values, or medians and averages, at the European level and at the EU27 level. Because data were not always available for all countries, we have extrapolated missing data when possible to obtain the totals (unless indicated otherwise). This extrapolation was carried out by our partners Utilitatis, typically using regression analysis based on a factor related to the indicator in question (e.g. population connected to the drinking water or to wastewater services), with occasional country-specific adjustments.

Averages and medians are calculated based on the data we received from members, without extrapolation. Unlike previous editions, this report presents weighted averages, with weighting factors chosen based on the nature of the data being presented (by default, the weighting was by population connected).

In order to make meaningful comparisons, the past data shown in trend charts has been recalculated using the same method.

Since our last report, EurEau's membership has expanded to include all EU Member States, alongside new and existing non-EU members. This means we are able to provide extrapolations for the EU27 as well as for a broader European level (noted as EUR\* in charts), comprising EU and EFTA countries, as well as the United Kingdom. Associate EurEau members Serbia and Ukraine were unable to provide data and we have refrained from extrapolating for these countries: extrapolated totals, averages and medians marked as EUR\* in this report therefore exclude them from their scope.

When reading charts displaying the evolution of an indicator between the 2017, 2021 and current editions of this report, it should be borne in mind that these marginal changes in geographical scope may have contributed to some of the differences observed. Some indicators also had a higher response rate from members than in previous reports, with the result of improving the accuracy of related averages, medians and/or extrapolations.

As every country collects data with different frequencies, there is no single reference year for this report. A large majority of the data reflects the 2022-2024 period, however, and as statistics from the water sector typically do not vary as quickly as other sectors, we are confident that this report gives an accurate picture of Europe's water sector today. Many EurEau members produce their own statistical reports at national level, which you can look for **on their websites** for a deeper look at individual countries.

For clarity in the figures, we have used country codes rather than full names. These are summarised in Table 1 below. The data used to create the figures are available in the Annex on pages 45-50. When data were not available for a particular country, this is noted as N/A in the graphs and data tables.

**AT** Austria  
**BE** Belgium  
**BG** Bulgaria  
**CH** Switzerland (non-EU)  
**CY** Cyprus  
**CZ** Czech Republic  
**DE** Germany  
**DK** Denmark  
**EE** Estonia  
**EL** Greece  
**ES** Spain

**FI** Finland  
**FR** France  
**HR** Croatia  
**HU** Hungary  
**IE** Ireland  
**IS** Iceland (non-EU)  
**IT** Italy  
**LT** Lithuania  
**LU** Luxembourg  
**LV** Latvia  
**MT** Malta

**NL** The Netherlands  
**NO** Norway (non-EU)  
**PL** Poland  
**PT** Portugal  
**RO** Romania  
**SE** Sweden  
**SI** Slovenia  
**SK** Slovakia  
**UK** United Kingdom (non-EU)  
**EU27** European Union members  
**EUR\*** EurEau members

**Table 1**  
Country codes



Top pollutants of concern in wastewater

**MICROPLASTICS** **ANTIBIOTIC RESISTANCE** **PESTICIDES & BIOCIDES**  
**MICROPOLUTANTS**  
**DICLOFENAC** **PFAS** **HYDROCARBONS**  
**HEAVY METALS** **WET WIPES**  
**INORGANIC MATERIALS** **NUTRIENTS (P&N)** **NITRATE**  
**SUSPENDED SOLIDS** **ORGANIC MATERIALS**  
**MICROBIAL CONTAMINATION**

Top pollutants of concern in drinking water

**TURBIDITY** **POLYAROMATIC HYDROCARBONS**  
**PESTICIDES** **HEAVY METALS**  
**CHLORATE**  
**EMERGING SUBSTANCES**  
**ORGANIC MATTER** **MICROPOLLUTANTS**  
**NITRATES** **IR** **O** **TFA** **DISINFECTION BY-PRODUCTS**  
**MAGANESE** **LEAD**  
**PFAS** **MICRO-ORGANISMS**  
**ARSENIC** **BISPHENOL-A**

## 2 General information

### 2.1 Population connected to a network

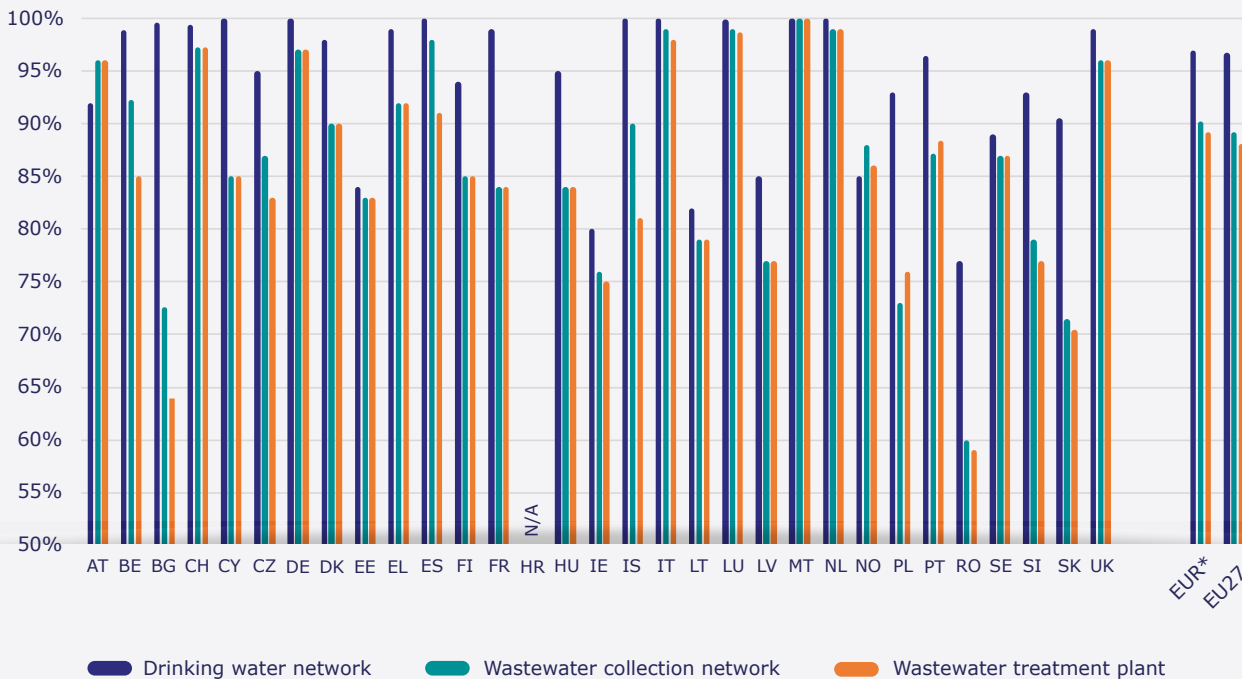
Access to safe and affordable water services is a human right. Europe has one of the highest connection rates in the world. **Figure 1** presents the percentage of people connected to a public drinking water network, a wastewater network and a wastewater treatment plant per country as well as the overall percentages for all of Europe.

The data shows that water operators are taking their mission to provide these services seriously. Connection rates have continuously

increased over the past years with the biggest improvements in wastewater treatment. Today, 97% of the population is connected to public water supply (across EurEau members and the EU27)<sup>1</sup>. 90% of the people in Europe (89% for EU27) are connected to wastewater collection while 89% (88% for EU27) are connected to a wastewater treatment plant.

It should be noted that the connection to a collection system and a wastewater treatment plant presented in Figure 1 does not include the population connected to an individual sanitation system such as a private septic tank. In this instance, the wastewater is still treated before it is returned to the environment.

**Figure 1**  
Population connected to a public system



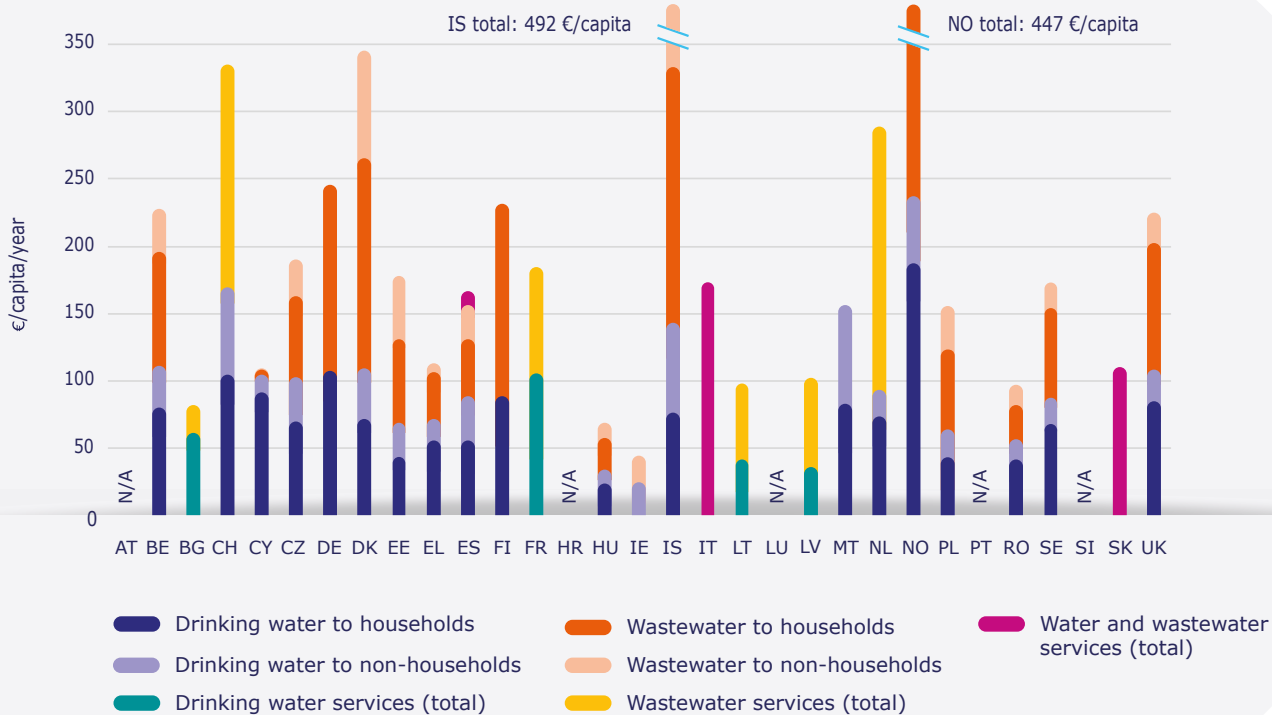
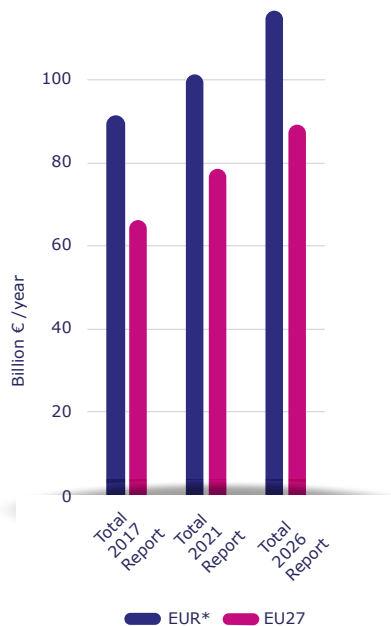
For ease of reading (and because no country reported rates below 50%) this graph displays only the upper half of the percentage scale.

<sup>1</sup> People not connected to water supply may include households with private wells and people with no permanent fixed housing.

## 2.2 Annual billing

Water services are financed through the so-called 3 Ts (tariffs, taxes, transfers), with tariffs usually making up the largest share and least volatile source of income.

**Figure 2** presents the revenue collected through water bills, by type of service and type of customer, per inhabitant. When this information is not available, the total by service or the total billed is displayed. The differences between countries can be explained by the importance of water services offered to non-households, tariff levels, overall water consumption and local circumstances.



**Figure 2**  
Annual billing (VAT excluded), per capita

The extrapolation for missing data to obtain a European total is derived by regression analysis based on the population connected to drinking water services, with some country-specific adjustments. The extrapolation was carried out for the total amount billed and not for each service, as the coverage of each type of service by the bill is different for each country.

The overall billed amount is €109.2 billion. While this represents an increase of 8% compared to the 2021 data, inflation in this five-year period was significantly higher. This is a worrying trend and explains why water operators see infrastructure renewal as their biggest challenge. If overall revenues from billing shrink when adjusted for inflation, available funds are used to ensure regulatory compliance.

The mean value for the billing rate is €206.03/inhabitant (EU27: €196.97) and the median value is €175.35/inhabitant (EU27: €173.20). For these indicators, the increase is 9.4% and 4.2%, respectively.

Figure 2 should not be compared with the annual water bill per household presented in Figure 12 as it encompasses industrial use and the entire population is taken as a basis, instead of households.

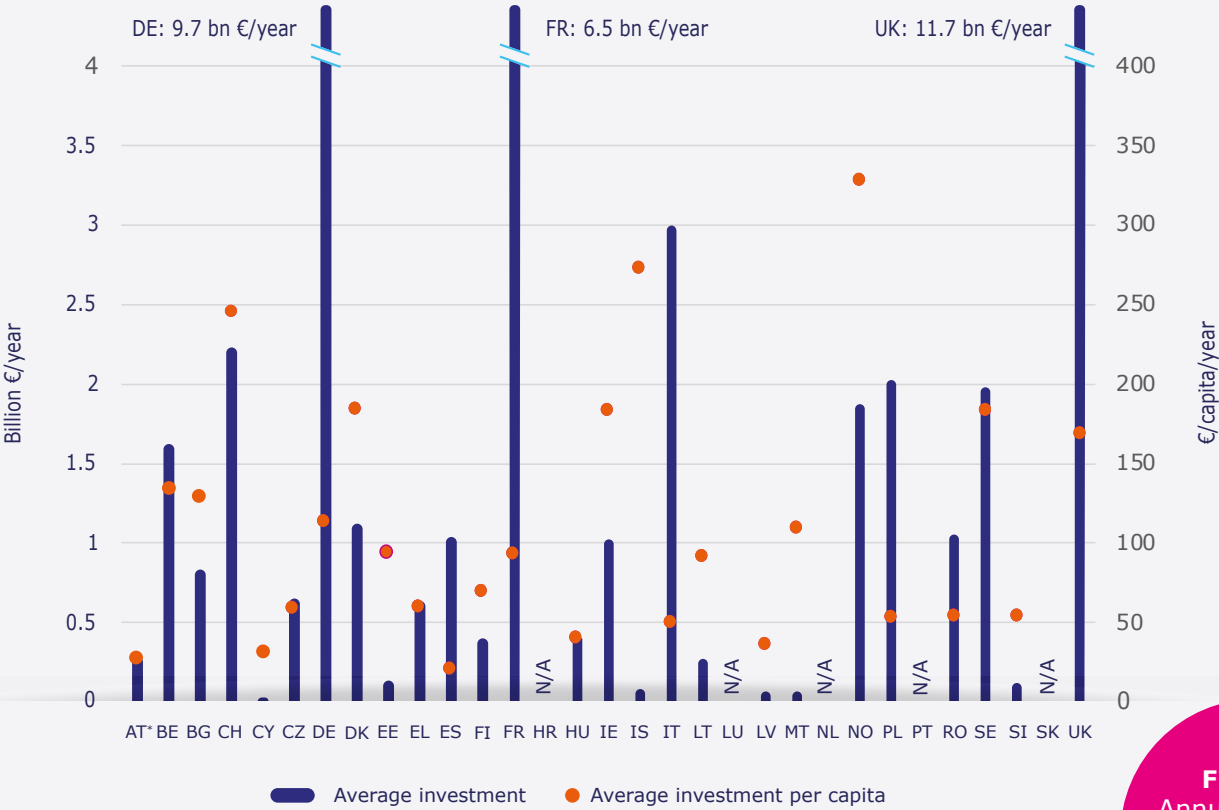
## 2.3 Investment and sources of finance

Investments are essential to connect more people to public water services, renew existing infrastructure, meet more stringent EU and national requirements, adapt to climate change, and develop circular economy and renewable energy general projects. **Figure 3** presents the amount of money per capita invested in drinking and wastewater infrastructure annually, with overall investment levels in Europe shown on the right. The extrapolation for missing data to obtain a European total is derived by regression analysis based on the population connected to drinking water services, with some country-specific adjustments.

Investment and investment rates can change significantly from one year to the next. The data are therefore based on an average of annual spending over five years, whereas the 2017 report represented a one-year snapshot.

Annually, water services providers invest approximately €52.5 billion in infrastructure (EU27: €36.6 billion). This represents a 17.5% increase compared to 2021.



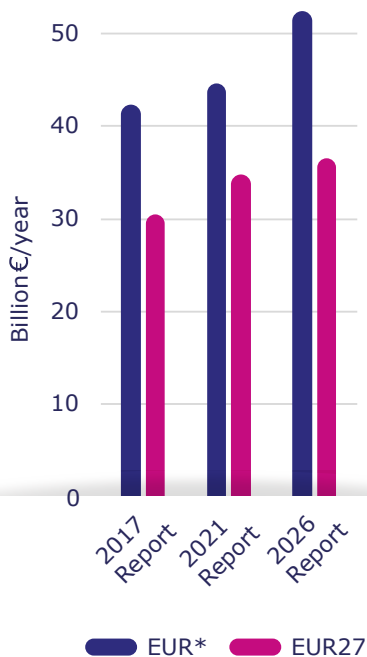


**Figure 3**  
Annual average investment per capita (over five years)

\*AT: wastewater only

When looking only at the EU27, the increase of 5% remains far below inflation, hinting at strong budgetary constraints and an increasing investment backlog in many countries.

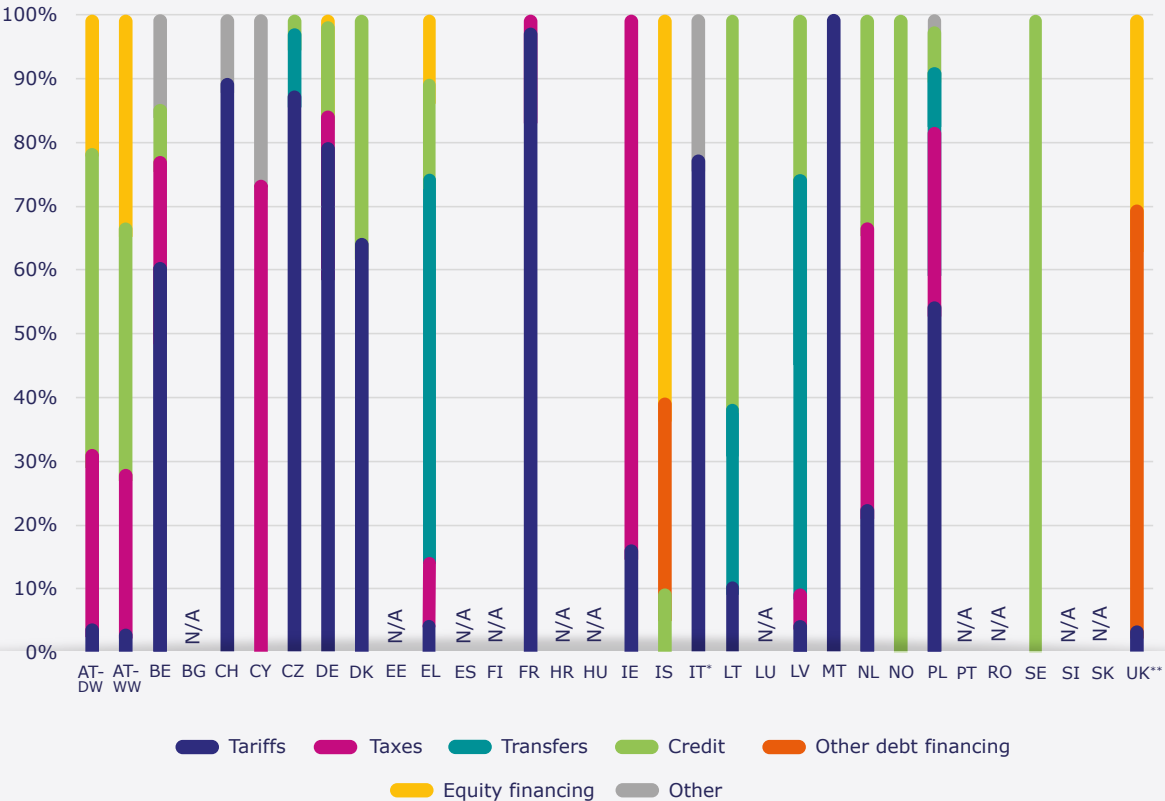
On average, water service providers invest €101.49 (EU27: €82.38) per inhabitant per year (median value is €103.50 (EU27: €73.26) per inhabitant per year) in water infrastructure.



**Figure 4** shows the financing sources for investments. Substantial differences appear across European countries with some heavily relying on tariffs while other are more dependent on subsidies (taxes) and transfers (including EU funding).

Debt financing is used regularly as a way to spread the costs of large long-term investments over time. Equity financing from private investors is rare outside of the UK, but in a handful of countries public investors (such as municipalities) may take an equity stake in investment projects.

**Figure 4**  
Sources of financing for investments



\*IT: in this case, "Other" covers all categories besides tariffs and taxes, but with an unknown breakdown between them.  
 \*\*UK: in this case, "Other debt financing" covers all debt financing including credit.

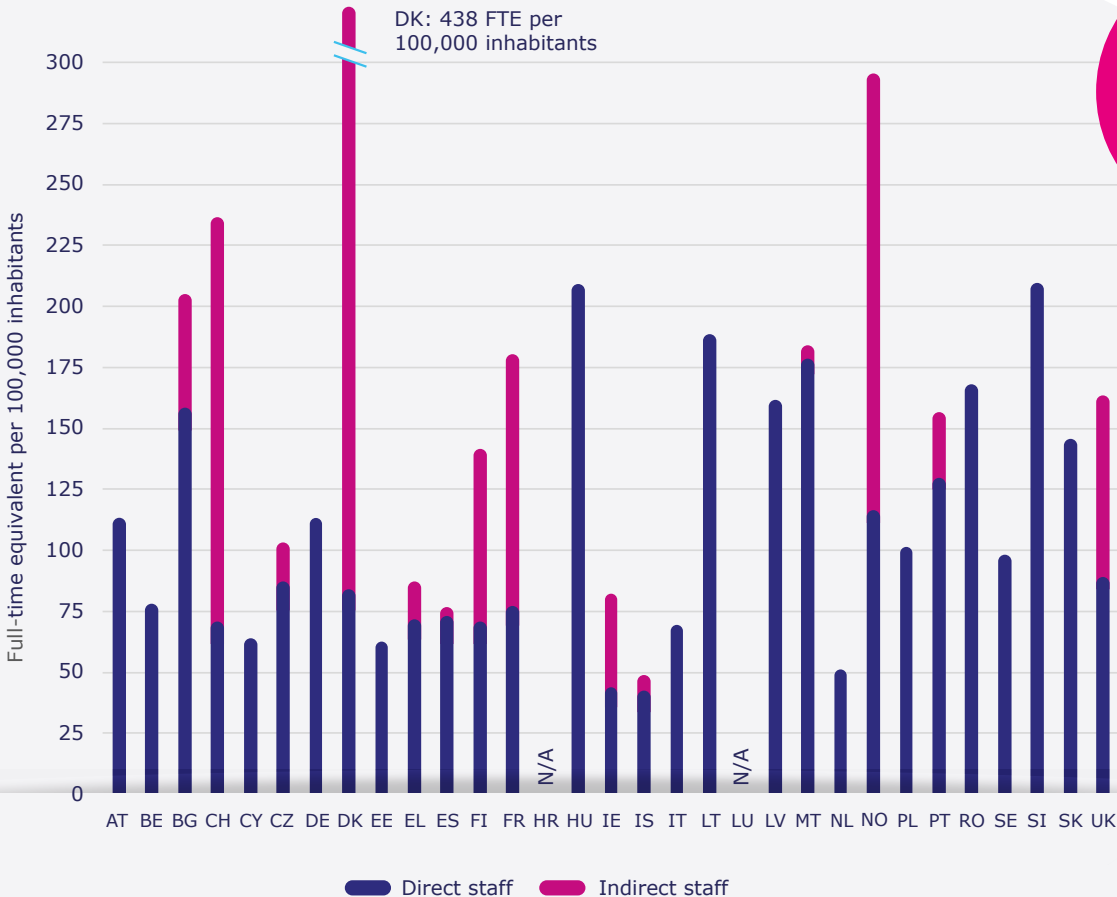
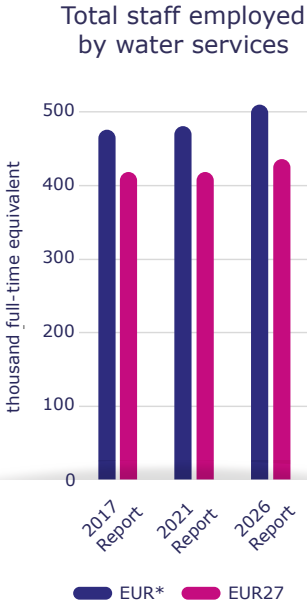
## 2.4 Employment

People are at the heart of the services we deliver. **Figure 5** shows the direct and indirect employment provided by drinking and wastewater services in Europe, in number of full-time-equivalent jobs per 100,000 inhabitants. Direct employment comprises the people employed by water operators for the design, construction, maintenance, control and management of water services.

The indirect employment is a rough estimation covering jobs in subcontracted companies as well as the share of the employment related to the production and distribution of equipment and chemical products used in the water services. This figure is difficult to measure and no extrapolation has been made.

Water services in Europe employ 517,000 (EU27: 444,000) full time equivalent (FTE) people.

The number of direct jobs has slightly but steadily increased when compared to the 2017 and 2021 data. This positive development may be due to higher connection rates, more complex treatment requirements, and circular economy activities.



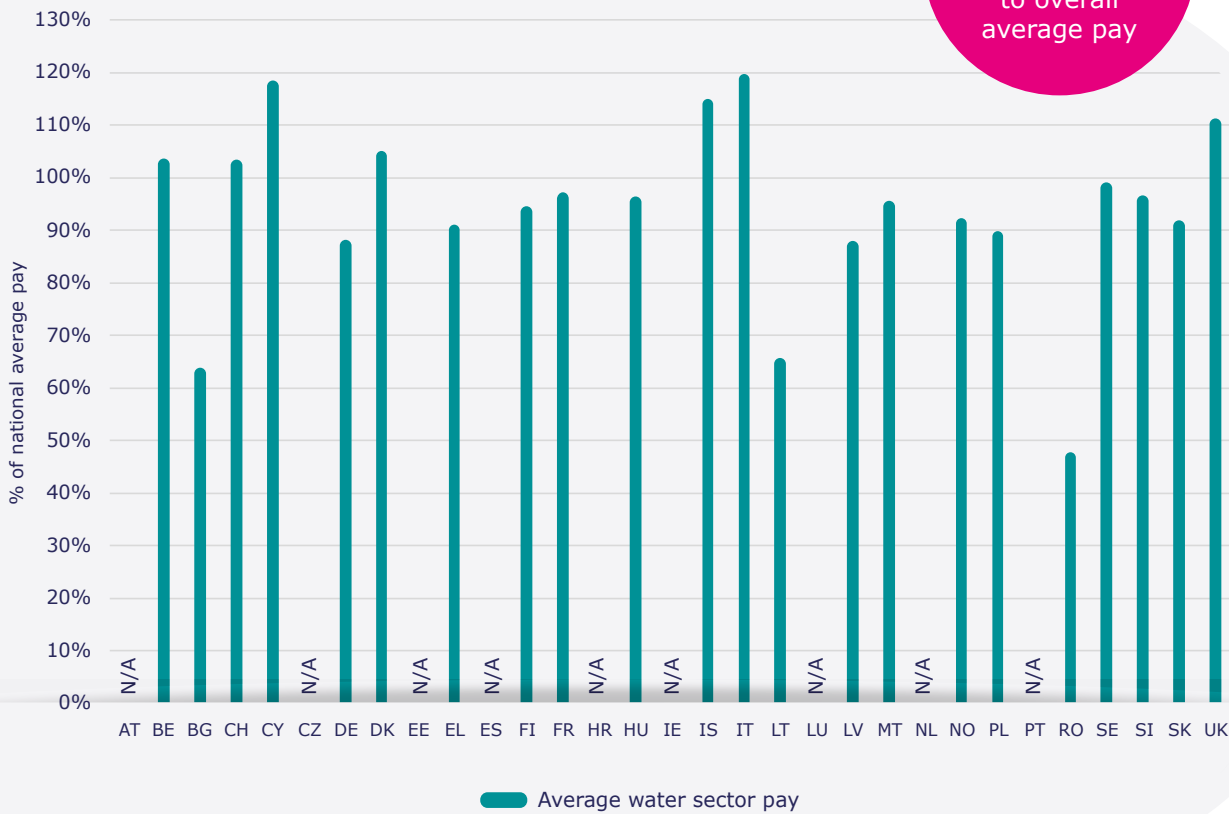
**Figure 5**  
Employment generated by the water sector

Despite this positive trend over the past years, our sector is facing an employment crisis. It needs highly-qualified professionals to deal with the increase in the complexity of drinking water and wastewater treatment processes (digitalisation, new pollutants, circular economy) and to replace an ageing workforce.

One way to measure the attractiveness of the sector is a comparison of its wage/salary levels compared with the overall economy.

As **Figure 6** shows, pay levels in most countries are in line with or (sometimes significantly) below the national average. The situation is even more worrying when comparing this situation with 2021. While in 2021 the average wage/salary stood at 107% (EU27: 112%) of the national average, this figure has dropped to 86% (EU27: 83%). This trend may be a knock-on effect of below-inflation billing increases.

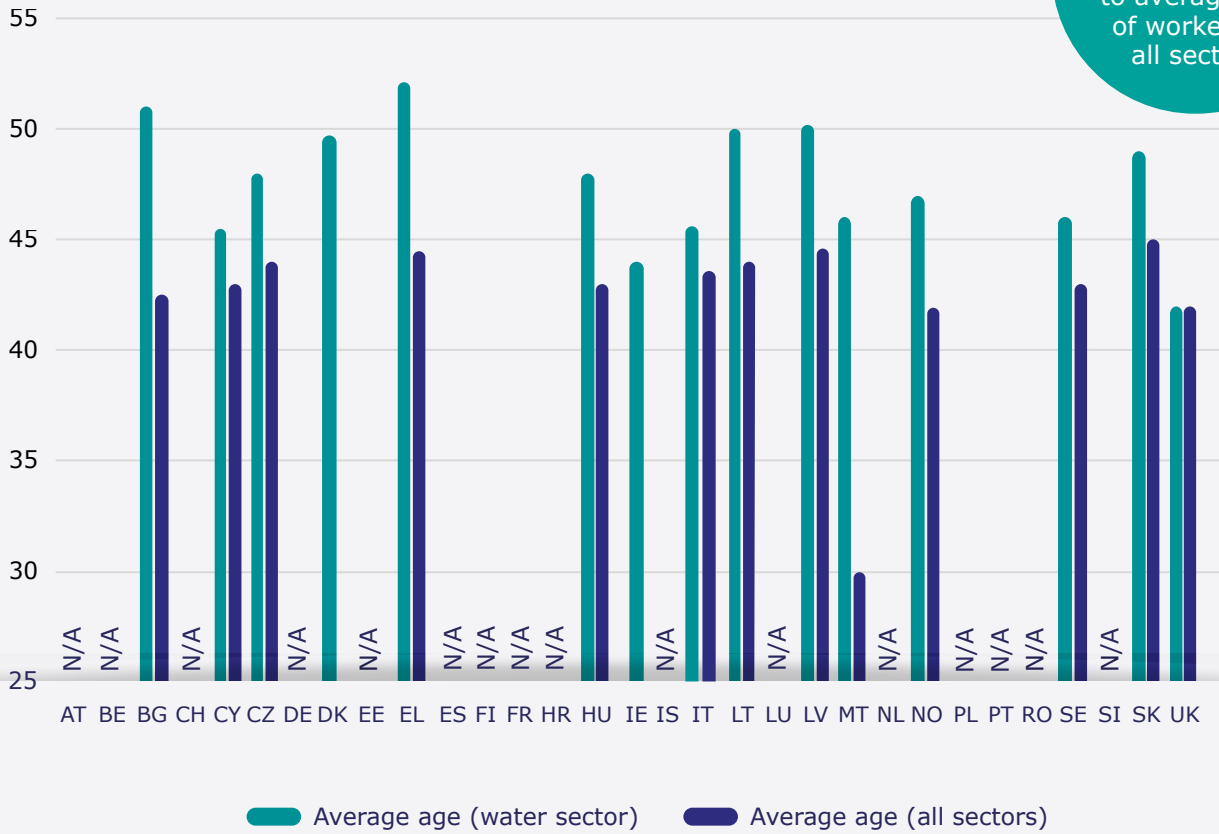
**Figure 6**  
Average water sector pay compared to overall average pay



Lower wages/salaries translate into fewer young people joining the sector. Across Europe, there is a general trend of an ageing workforce but, worryingly, the average age of water sector employees is significantly higher than the

average age in 11 out of 13 European countries able to supply data, as shown in **Figure 7**. Urgent measures at all levels are needed to reverse this trend.

**Figure 7**  
Average age of water-sector workers compared to average age of workers of all sectors



## 2.5 Water Governance and Management

Europe's water sector is extremely heterogeneous. Each country, or even region, has developed specific solutions adapted to its local conditions. **Figures 8 and 9** show the density of water utilities per country. The elements determining this number include the size of the country, prerogatives of municipalities and other institutional choices, population density and topography.

It is not possible to estimate a total number of water utilities in Europe from the data we collected, as a large but unknown number of utilities integrate drinking water supply and wastewater management under one organisation.

**Figure 10** and **Figure 11** present the percentage of the population covered by the different types of drinking water and wastewater management models. The type of management is a competence of the individual country and varies a lot.

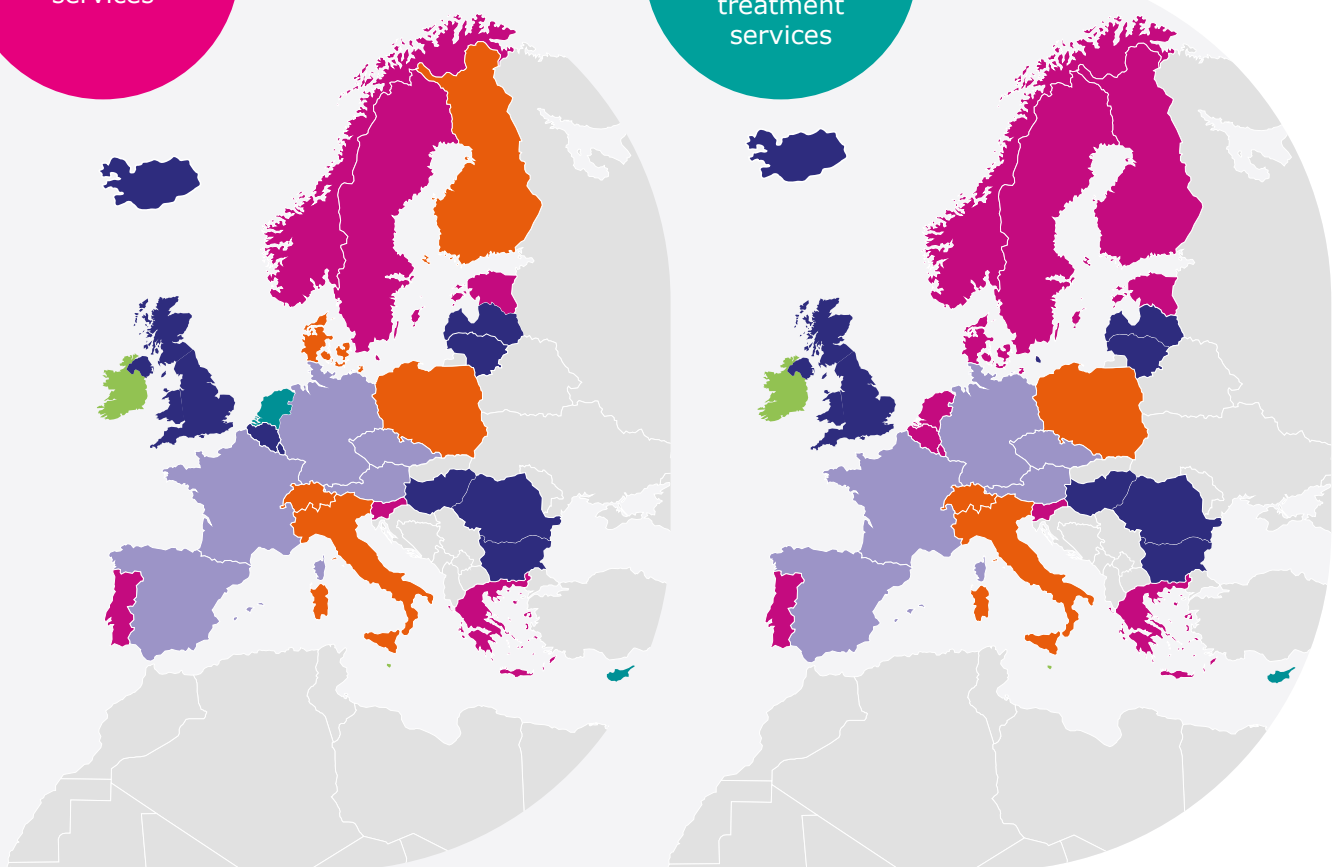
For clarification, the definition of the management types are as follows:

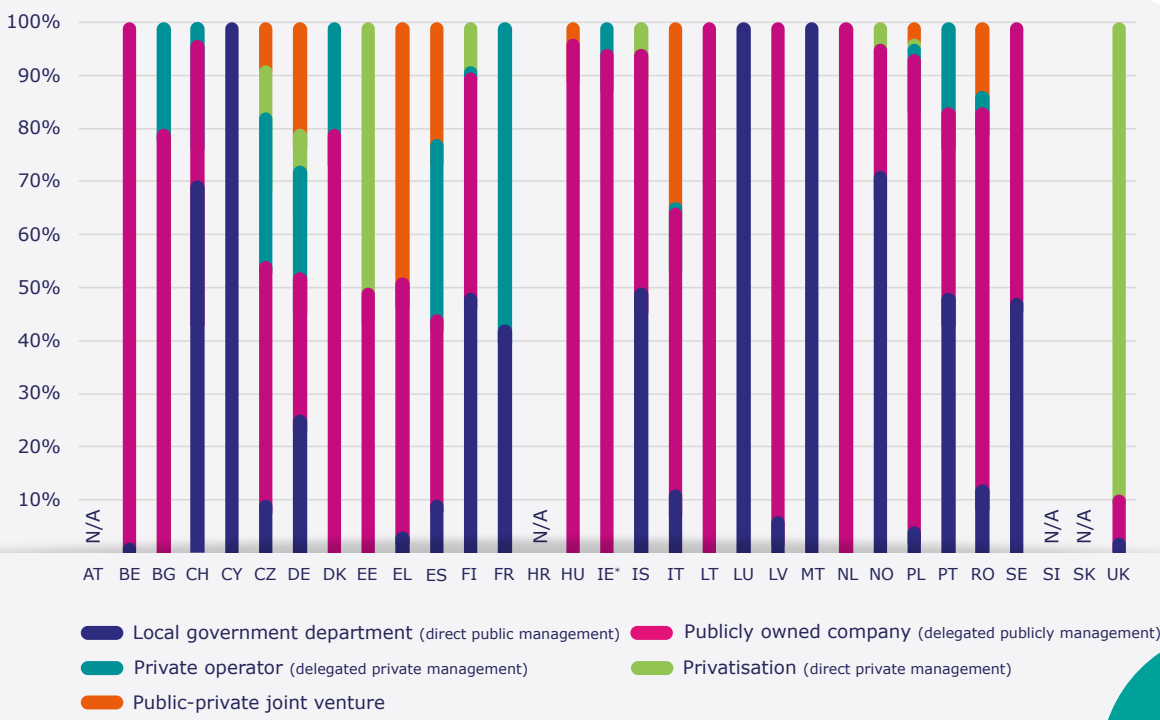
- **Local government department**  
The infrastructure and the service are owned and managed entirely by a public authority being a municipality or a group of municipalities.
- **Publicly owned company**  
The infrastructure is publicly owned by the local authority and the service is delegated to a publicly owned company.

- **Private operator**  
The infrastructure is publicly owned by the local authority but the service is delegated to private company.
- **Privatisation**  
The infrastructure and the service are owned and managed entirely by a private company, generally supervised by a public regulator.
- **Public-Private joint venture**  
The infrastructure and the service are owned and managed entirely by a consortium made up of public and private companies.

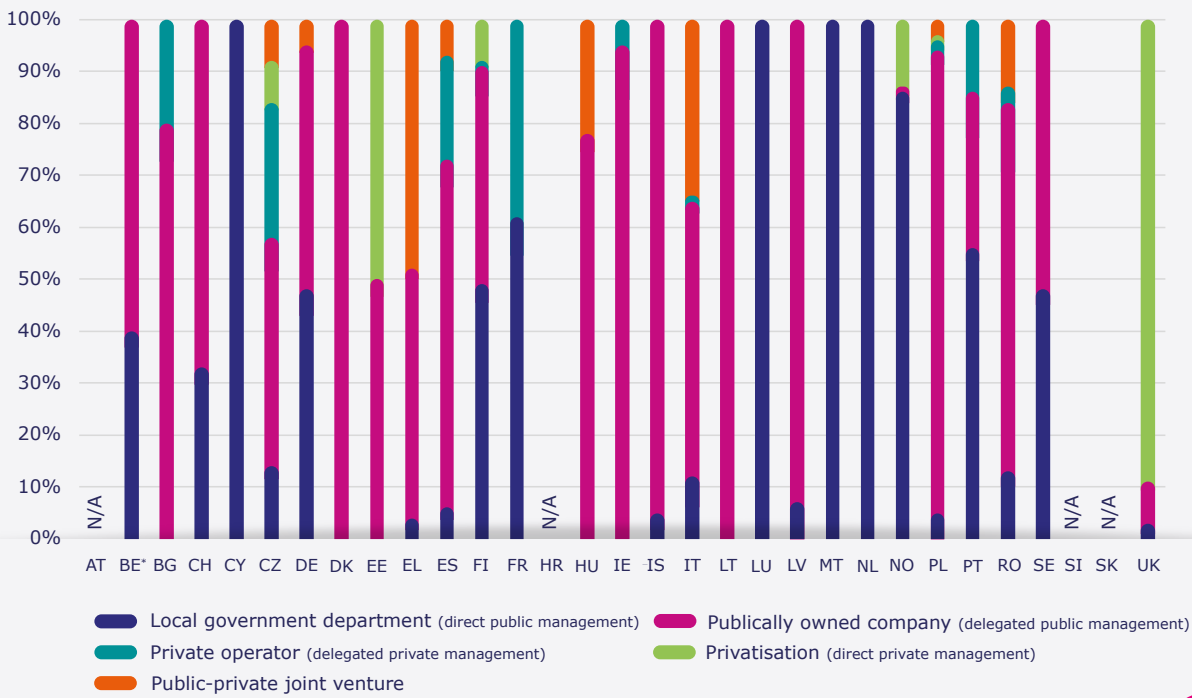
**Figure 8**  
Number of drinking water services

**Figure 9**  
Number of wastewater collection and/or treatment services





**Figure 10**  
Management types - drinking water sector



\*BE: wastewater collection only. Treatment is 100% by publicly-owned companies.

**Figure 11**  
Management types - wastewater sector

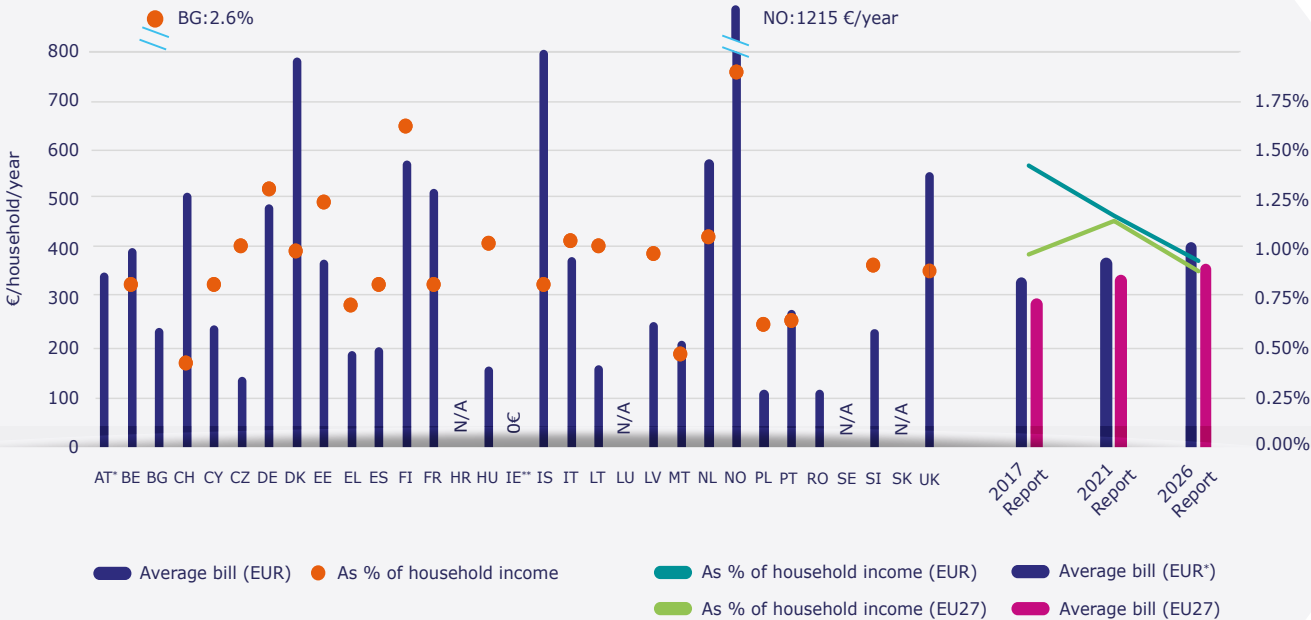
## 2.6 Water Tariffs

Water tariffing is a complex topic as tariffs depend on multiple national and local parameters like tax level, water sources (groundwater usually requires less treatment than surface water or desalination), the length of network per inhabitant, receiving waters (sensitive areas require a higher level of treatment for wastewater), services covered by the water bill, etc.

In this section, "water tariff" and "water bill" are understood to cover drinking water and wastewater services together.

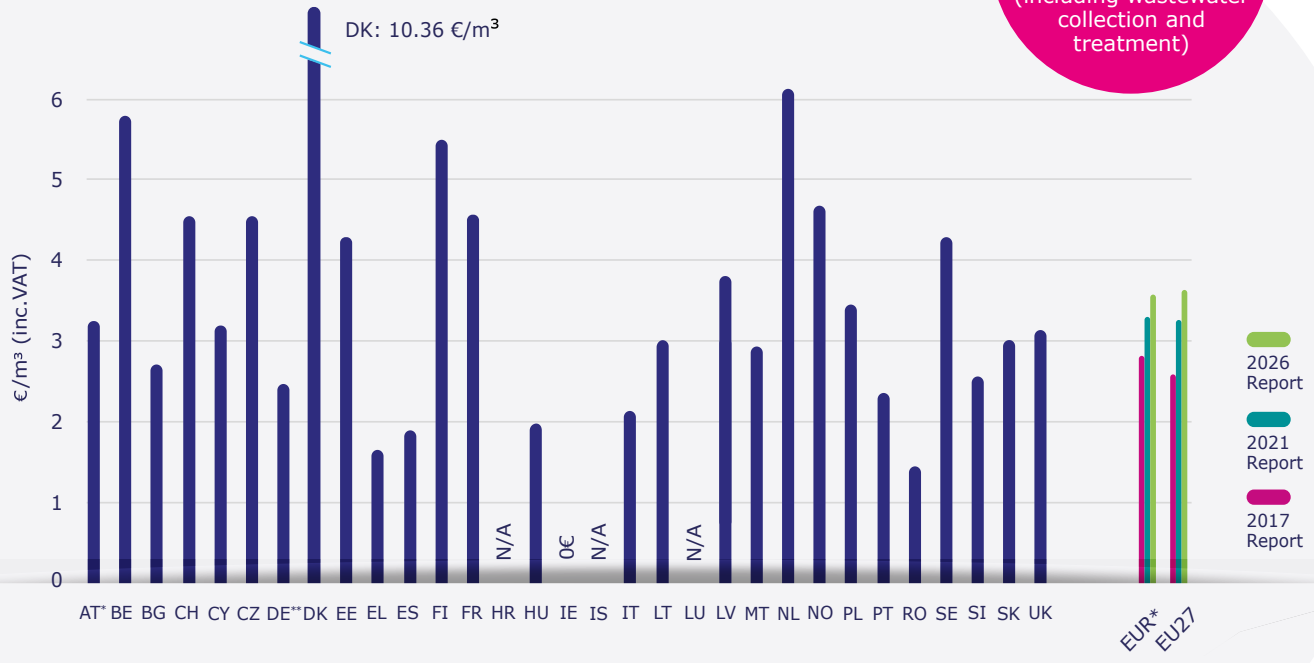
It is generally regulated through a public body; either a national/regional regulator or the local government. **Figures 12 and Figure 13** present averages at country level, which might be composed of very different local prices. They are useful in evaluating the global diversity of prices across Europe but a direct comparison of water bills or the price per cubic metre between countries, or even regions is not possible.

**Figure 12**  
Average household water bill



\*AT: Wastewater only.  
\*\*There are no residential water charges in Ireland.

**Figure 13**  
Average water tariff for residential consumption (including wastewater collection and treatment)

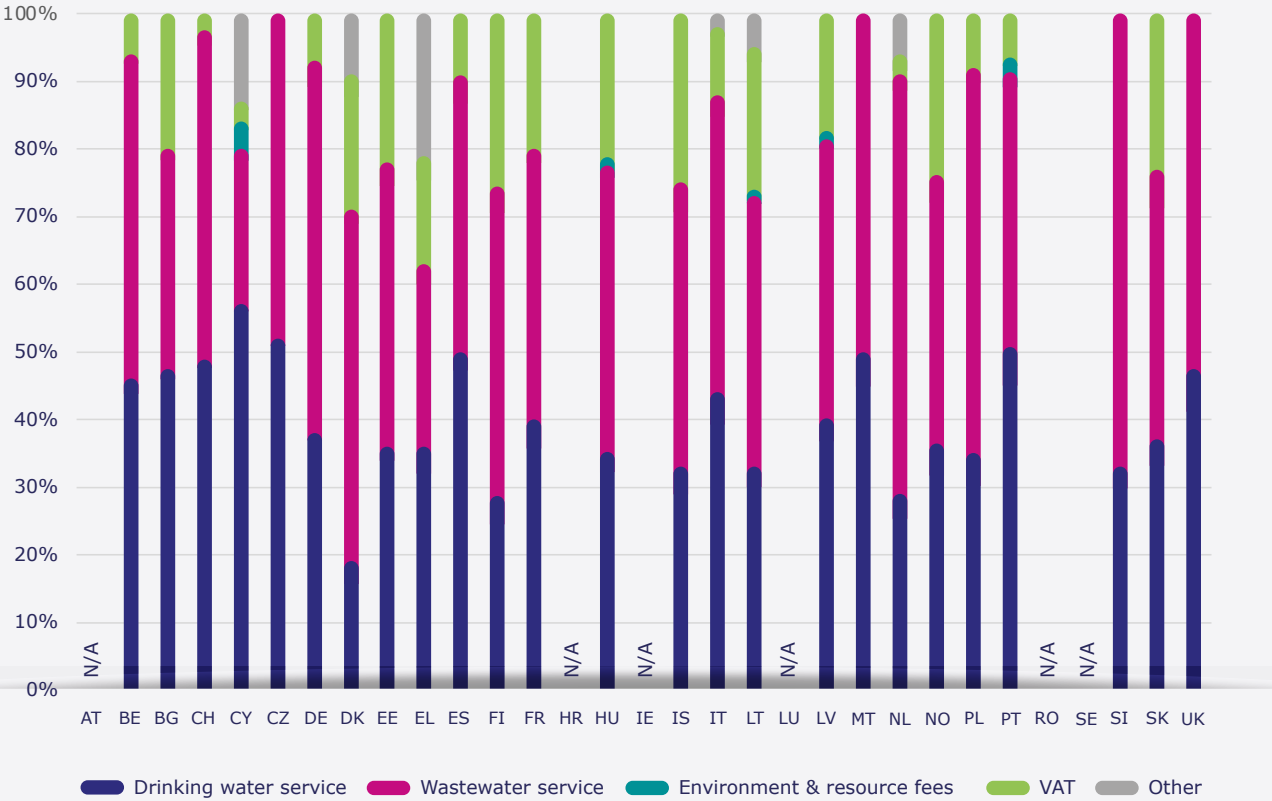


\*AT: Wastewater only. \*\*DE: drinking water only.

In most countries, households spend around 1% of their income on water services. As the trend lines for **Figure 12** show, household water bills did not keep up with the growth in household income. While improved affordability is desirable from a social point of view, this low and further decreasing share in household income hampers urgently needed investment and maintenance works. Clearly, our societies do not yet fully recognise the value of resilient and sustainable water services.

Unlike in the previous editions, the average water tariff for residential consumption is weighted per capita connected. We have re-calculated average tariffs for the previous reports using the same methodology, in order to allow comparisons.

**Figure 14** shows that the water tariff may include elements (taxes, fees) that do contribute to the cost recovery of water services.



**Figure 14**  
Composition of the water tariff



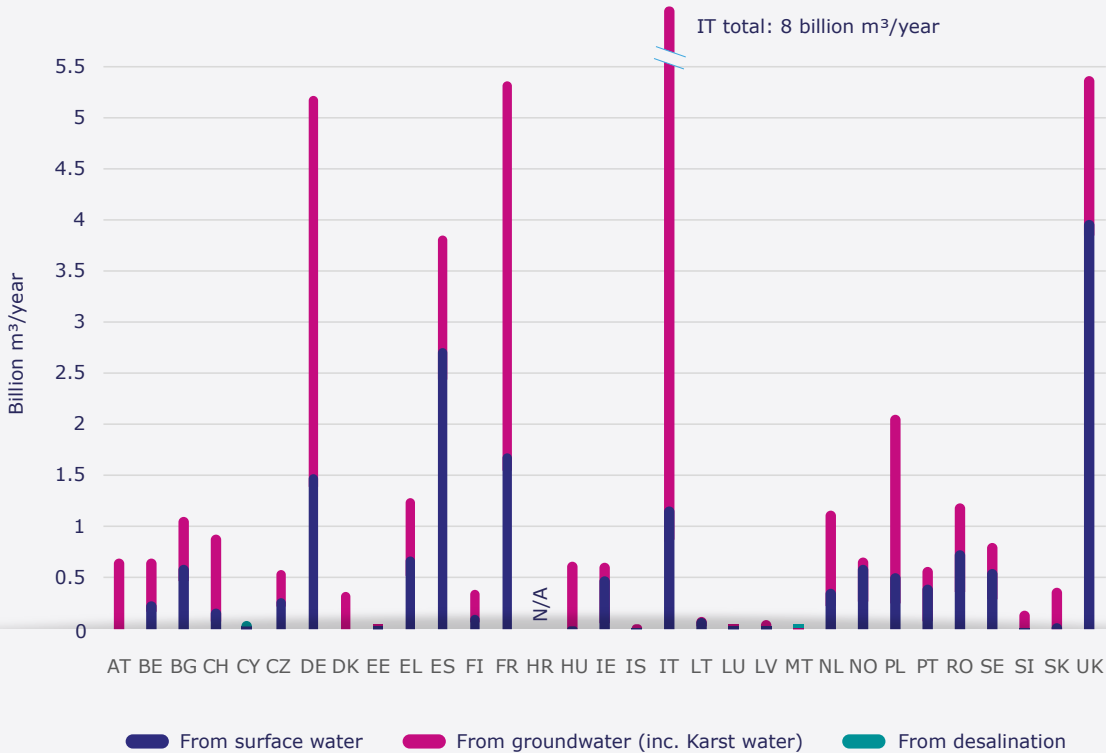
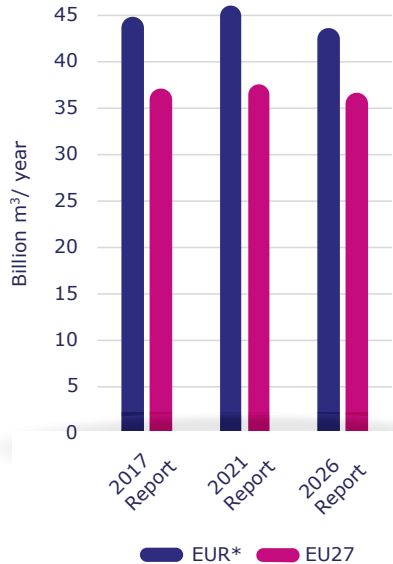
# 3 Drinking water

## 3.1 Water production and consumption

Compared with previous editions of this report, our latest data shows a clear downward trend in both the production and consumption of drinking water in Europe. Overall billed consumption (in Fig. 16) and residential consumption per capita (in Fig. 17) both decreased by 9% compared to our 2021 report, while drinking water production went down by 5% over the same period.

This is good news for water resilience, and strongly demonstrates the contribution of water services and their customers – households and businesses alike – to alleviating quantitative pressure on water resources.

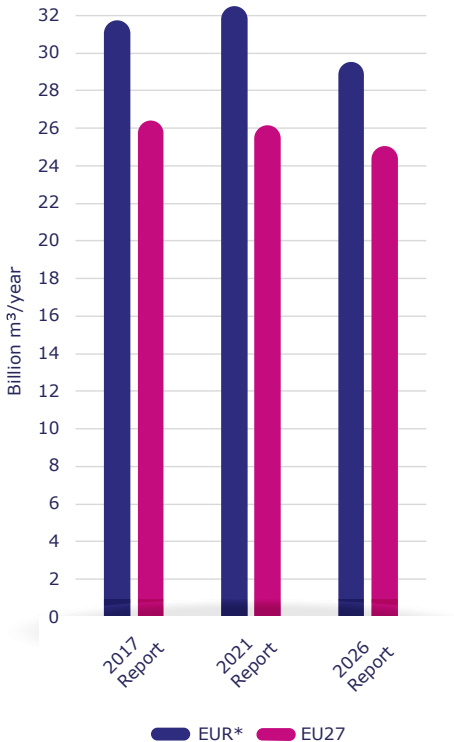
At the same time, it highlights the structural financial challenge our sector faces: lower consumption means lower revenue from bills, while operating costs for water services largely remain fixed.



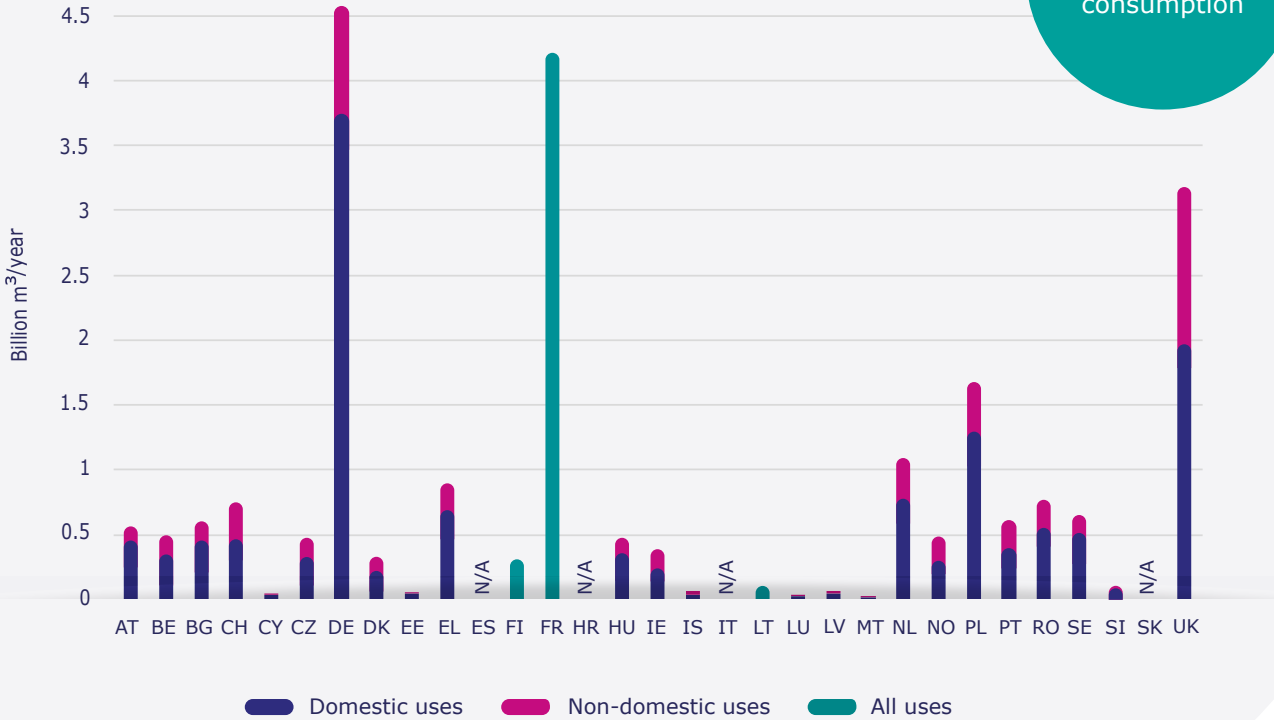
**Figure 15**  
Drinking water production

**Figure 15** details the volume of drinking water produced annually in each country, broken down by the source of raw water used. Overall, around 58% of drinking water in Europe comes from groundwater (63% for EU27), while the rest comes mostly from surface water. Desalination accounts for just over 1% of drinking water production at the European level, with production concentrated in Mediterranean countries.

**Figure 16** shows the annual consumption volumes of drinking water, with a breakdown between household and non-household consumption where available. Overall volumes largely follow population patterns, and households represent the majority of drinking water consumption in all countries who provided differentiated figures.

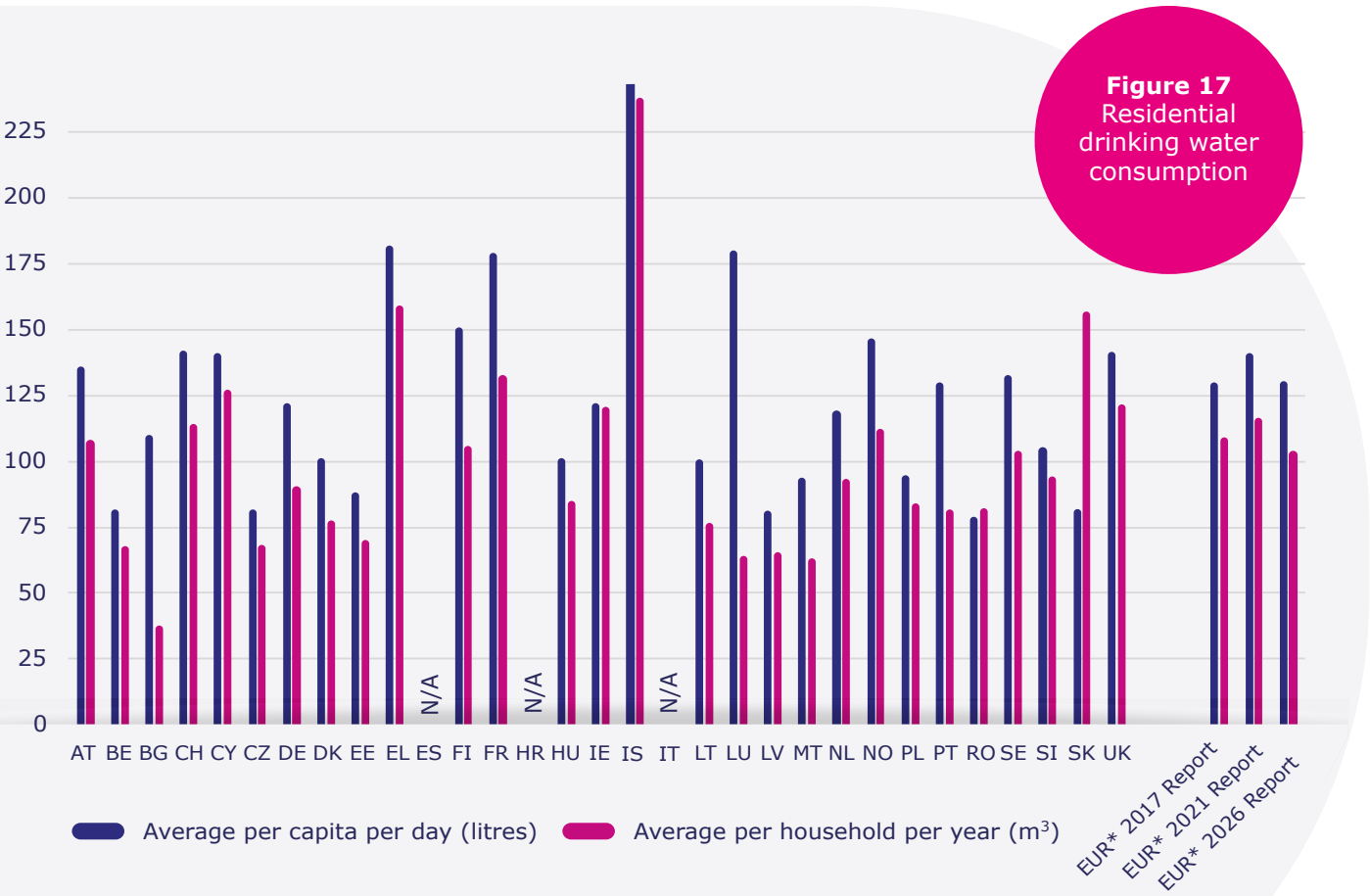


**Figure 16**  
Annual billed drinking water consumption



**Figure 17** displays two different measures of average household water consumption: in blue, the average consumption per person per day (in litres); in pink, the average consumption per household per year (in m<sup>3</sup>).

The European averages are 130.2 l/capita/day and 103.9 m<sup>3</sup>/household/year, respectively (127.2 l/capita/day and 99.6 m<sup>3</sup>/household/year for EU27), showing significant decreases compared to our previous report.

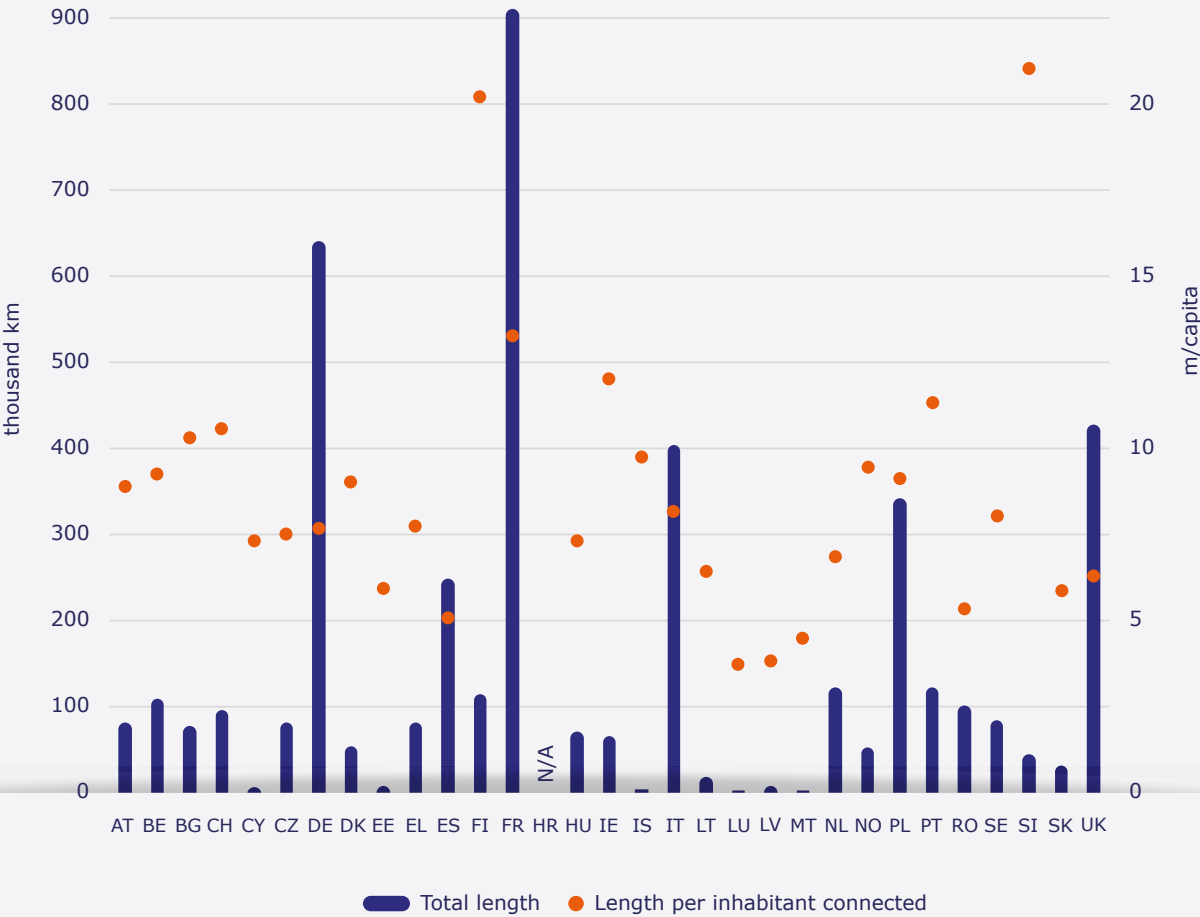


### 3.2 Drinking water network infrastructure

**Figure 18** presents the total length of the drinking water pipe network per country, as well as the length per connected inhabitant. The total length of the network in EurEau countries, including a population-based extrapolation for missing data, is 4.4 million km, up slightly from our 2021 Report. Of these, 3.9 million km are in the EU27.

The length of network per capita varies significantly between countries, due to factors such as geography, population density and connection rates in rural areas.

**Figure 18**  
Length of drinking water network



**Figure 19** displays, in blue, the percentage of contracted customers equipped with a water meter and, in pink, the percentage of meters equipped with an automatic remote reading system (often known as “smart meters”). Meter coverage is generally high, particularly in the EU27 where most countries are at or near 100%. Smart meter coverage, on the other hand, varies considerably, with only four countries reporting rates above 50%.

Please note that, where the number of contracted customers was not available, meter coverage was calculated using the reported or estimated number of connected households in the country.

**Figure 19**  
Meter coverage



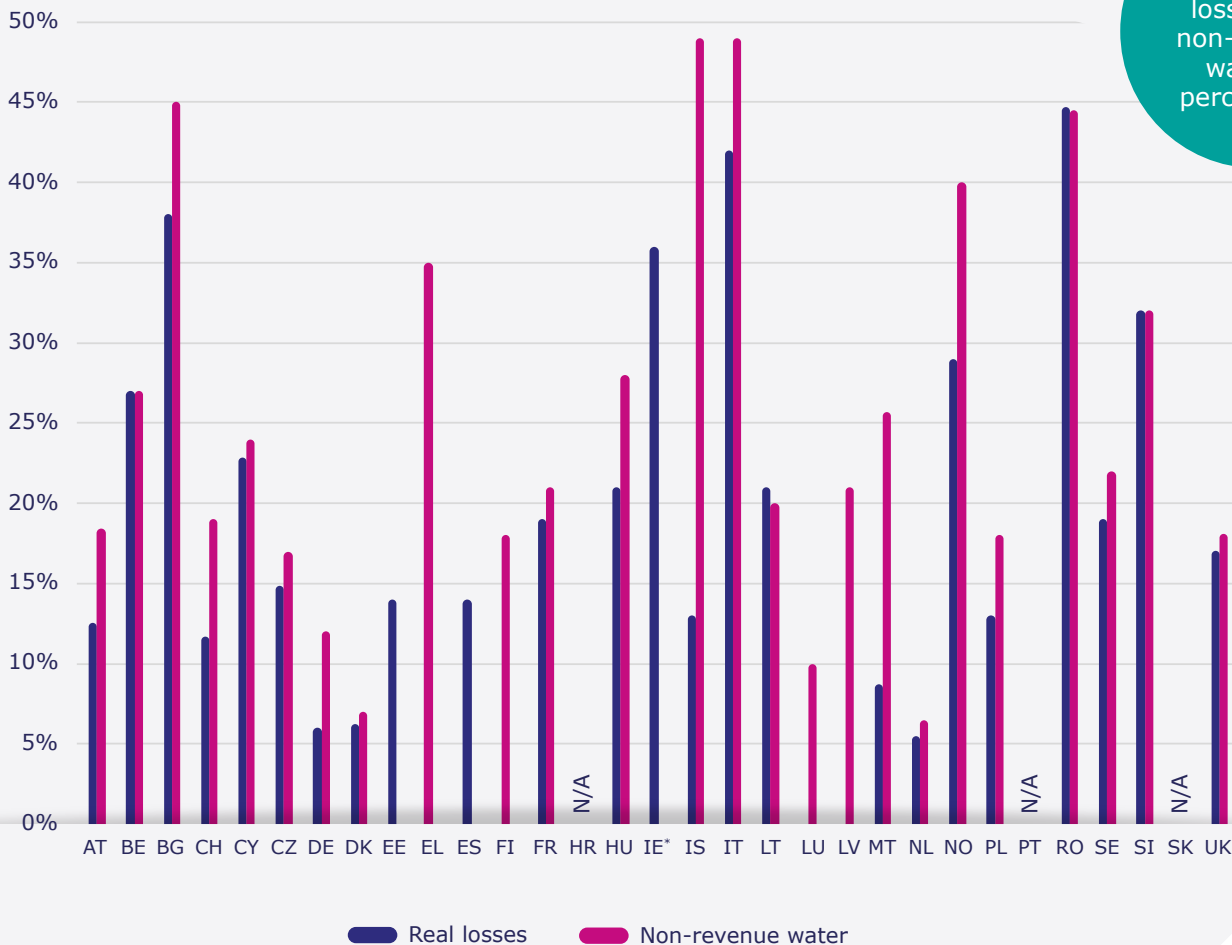
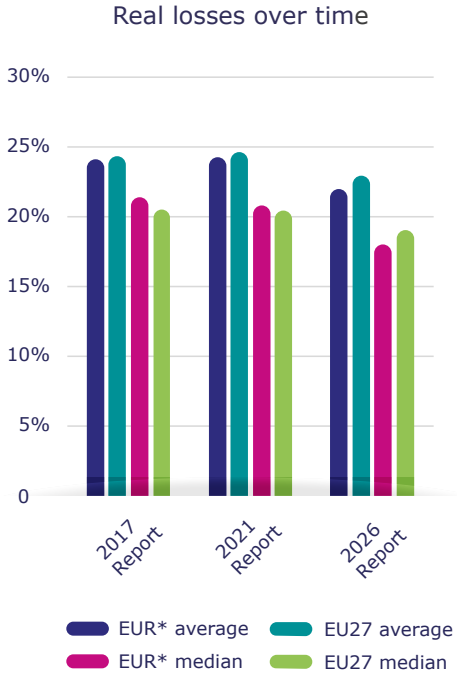
**Figures 20 and 21** show different metrics of water losses in the distribution network, using two units commonly used by professionals: percentage and volume per km of mains. Figure 20 presents percentage figures for both non-revenue water and real losses, while Figure 21 features an index of water losses in distribution networks, based on the volume of non-revenue water divided by the length of each country’s mains network.

This index was recommended by EurEau to the European Commission and endorsed by most Member States for their reporting under the Drinking Water Directive.

Non-revenue water may include leakage, water used for maintenance, street cleaning, public buildings, fire-fighting, etc. Real losses focus specifically on leakage but can be harder to measure accurately, hence the widespread use of non-revenue water as a proxy.

It is worth noting that, as for other indicators in this report, we have used a weighted average to give an aggregate figure. Our previous reports used simple averages so, in order to make meaningful comparisons, the past data shown in the charts has been recalculated to fit our current methodology.

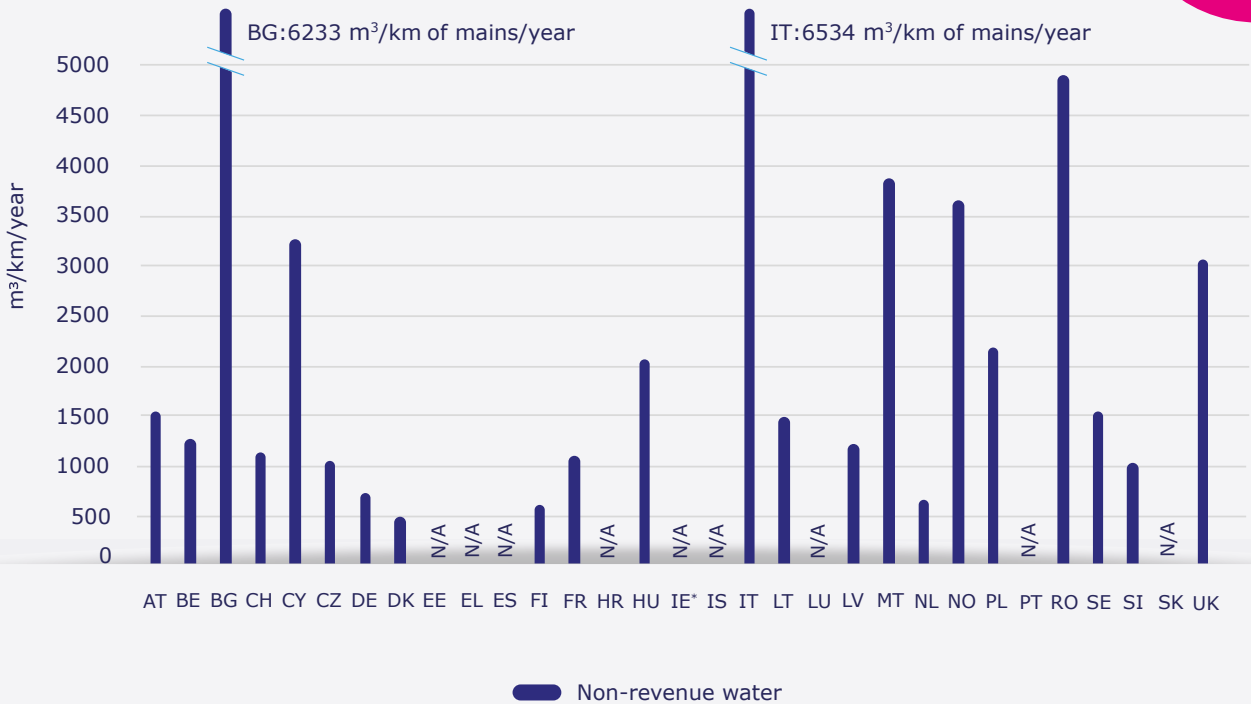
Compared to our previous report, both real losses (in %) and non-revenue water (in m<sup>3</sup>/km/year) have gone down significantly at the aggregate European level. Although wide disparities remain between countries, this shows that water services' commitment to curbing distribution losses is bearing fruit.



**Figure 20**  
Average real losses and non-revenue water in percentages

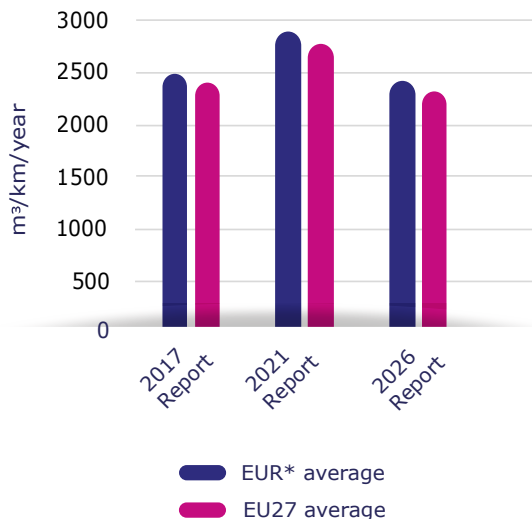
\*IE: non-revenue water is not applicable as a metric, since water delivered to households is not billed.

**Figure 21**  
Linear leakage index



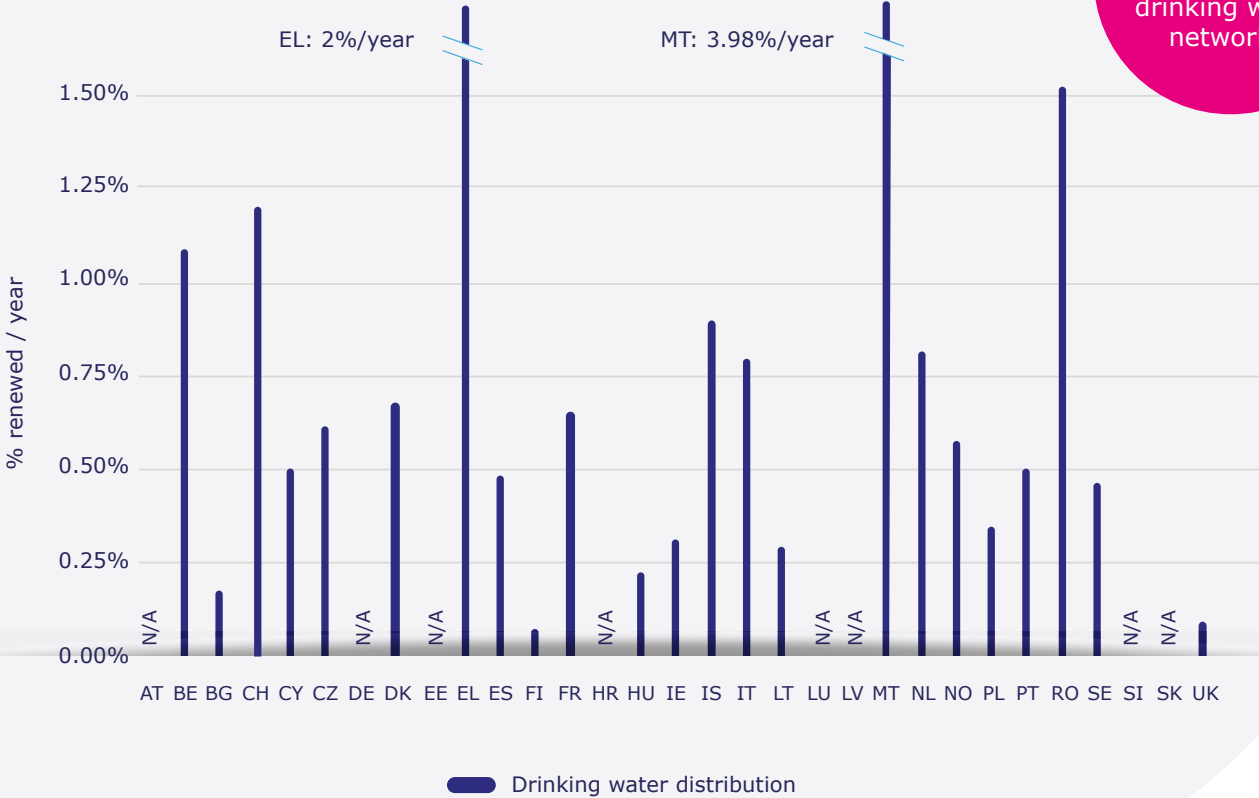
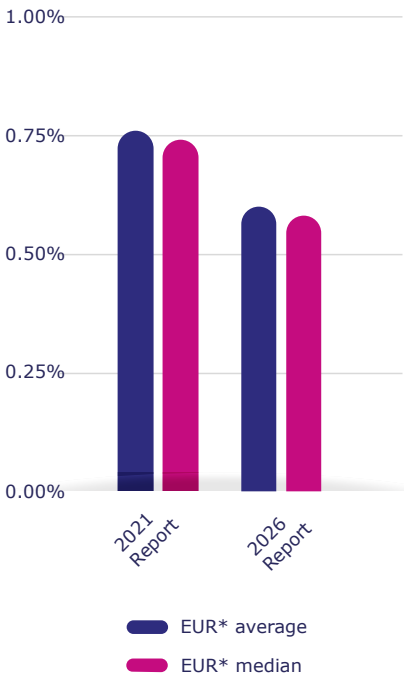
\*IE: non-revenue water is not applicable as a metric, since water delivered to households is not billed.

This is despite a lower average renewal rate for drinking water assets compared to our 2021 statistical report, as shown in **Figure 22**. This trend illustrates why 'infrastructure renewal' came out as the top challenge in many European countries (see page 6). The average and median renewal rates remain far too low to avoid degradation over time.



The average and median figures should not overshadow the significant variations between countries, however. Renewal rates may depend on factors such as the local water management system, the age of the existing infrastructure, the impact of depreciation or the origin of drinking water, as well as available funds.

These rates can also vary significantly year-on-year based on budget decisions, typically made at the local level. Of the countries that contributed to this report, six reported higher rates than in our previous edition, while seven reported lower figures than before. This makes it difficult to discern long-term trends for individual countries.



**Figure 22**  
Average asset renewal rate for drinking water networks

# 4 Wastewater services

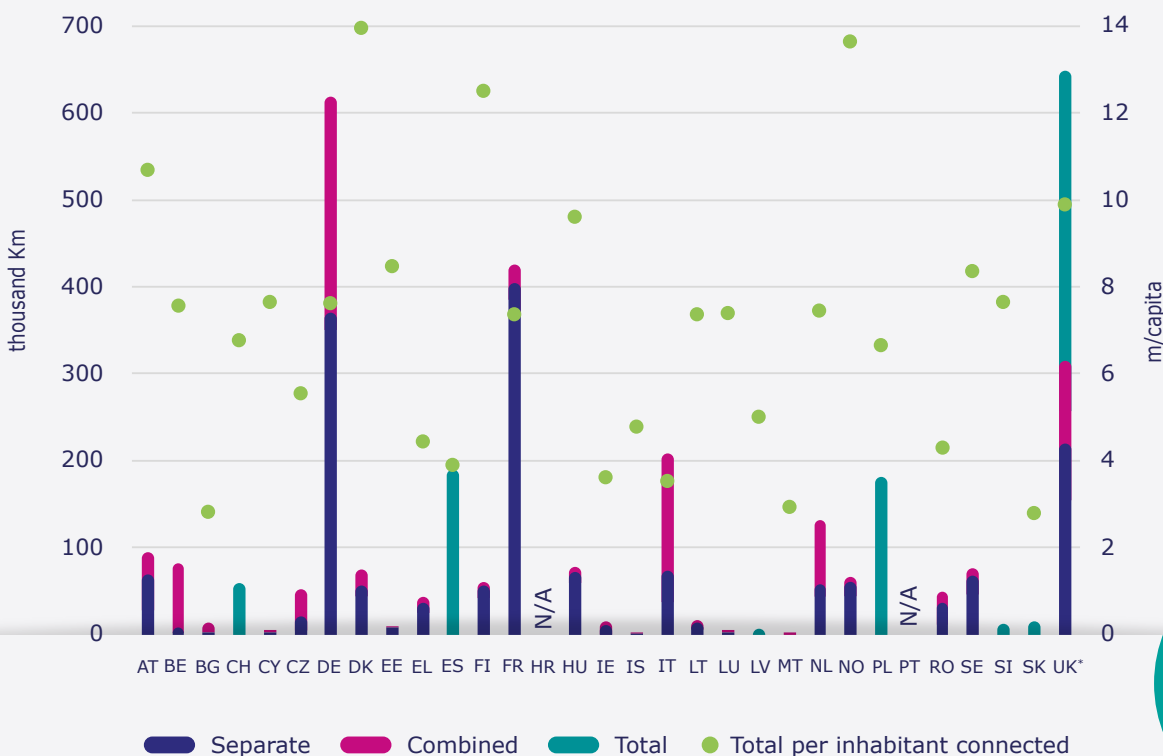
This section provides an overview of wastewater services across Europe, including water reuse and sludge management.

## 4.1 Wastewater network infrastructure

**Figure 23** shows the length of wastewater networks in each country, differentiating (where data is available) between combined and separate sewers. In combined sewers, rainwater and wastewater are collected in the same pipe, while for separate sewers, each type of water is conveyed by independent pipes. The extrapolated total length of sewer networks in Europe is 3.3 million km (2.6 million km in EU27), up slightly from our 2021 Report.

The figure also displays the length of sewers per connected inhabitant as dots on the chart. These are based on the total length only (combined + separate). As for drinking water networks, the average length of sewer per capita can vary based on factors such as population density and connection rates in rural areas.

In addition to the data on this chart, we asked our members about the modelling and monitoring of their networks. While many were unable to provide data for their country, what we received enables us to say that, across Europe, wastewater services have built hydraulic modelling for collecting systems serving at least 26% of the population (18% for EU27), while at least 12% of people in Europe are served by utilities monitoring their overflow discharge points, largely in the UK (the figure for EU27 is 3%). Strategic drainage plans have been put in place covering at least 21.5% of Europe's population connected to wastewater networks (9% for EU27).



**Figure 23**  
Length of sewer network

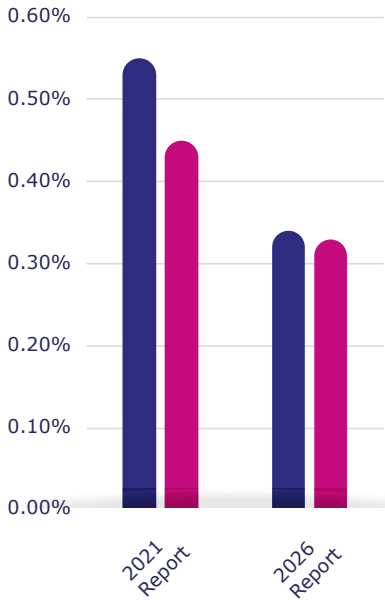
\*UK: data discriminating between separated and combined sewers is only partially available.

Note that these figures likely underestimate reality by a wide margin, given the lack of data for most European countries.

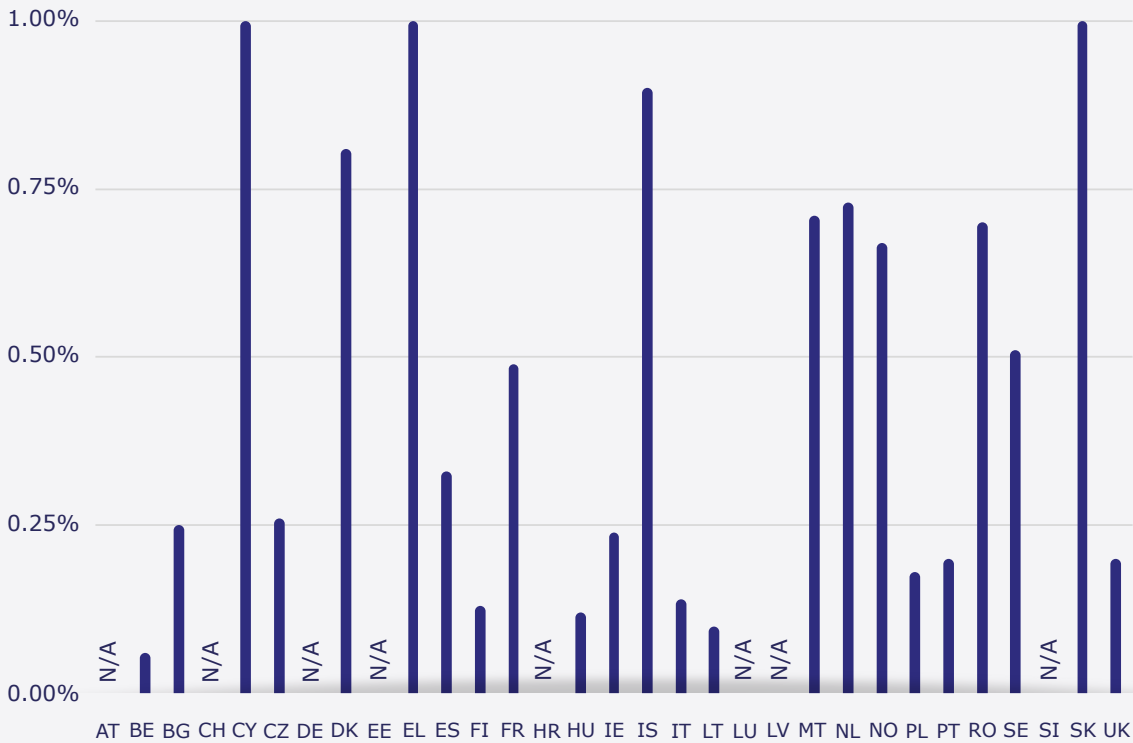
**Figure 24** displays average renewal rates for wastewater network infrastructure. While both the average and median renewal rates at European level are down compared to our previous report, the numbers vary considerably from country to country depending on the local water management system, the age of the infrastructure, the impact of depreciation and local requirements.

These rates can also vary significantly year-on-year based on budget decisions, typically made at the local level.

Of the countries in this report, five reported higher rates than in our previous edition, while seven reported lower figures than before. This makes it difficult to discern long-term trends for individual countries.



**Figure 24**  
Average asset renewal rate for wastewater networks



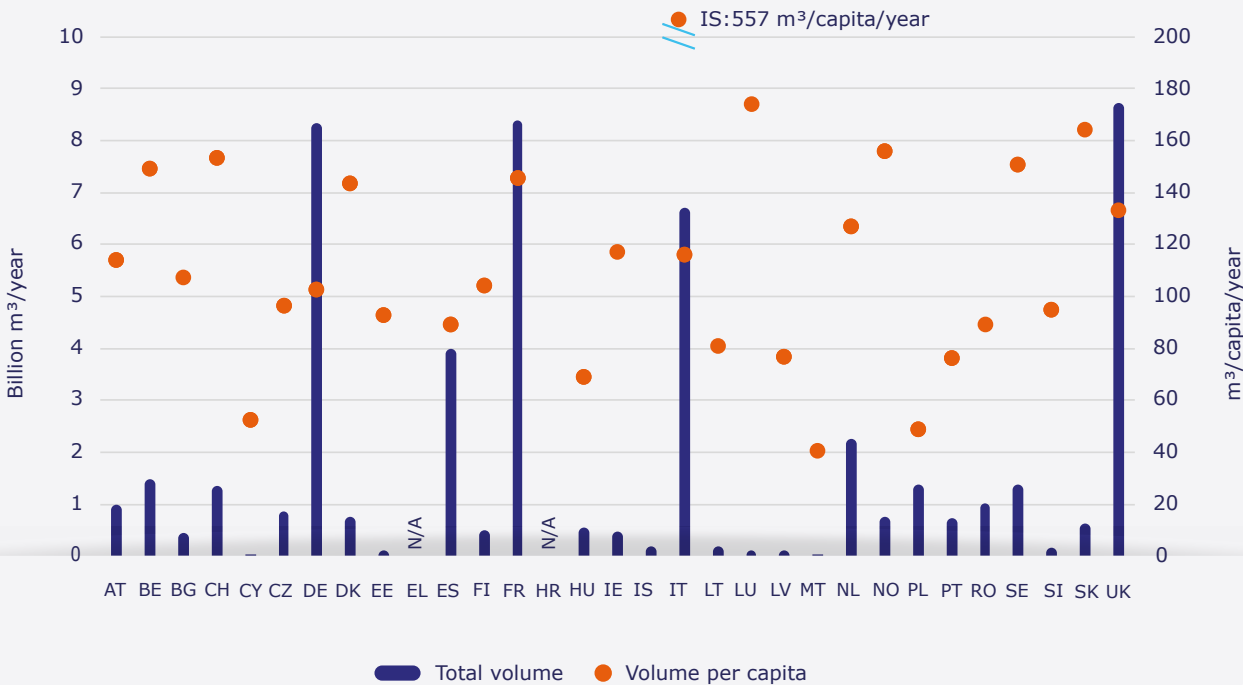
## 4.2 Wastewater treatment

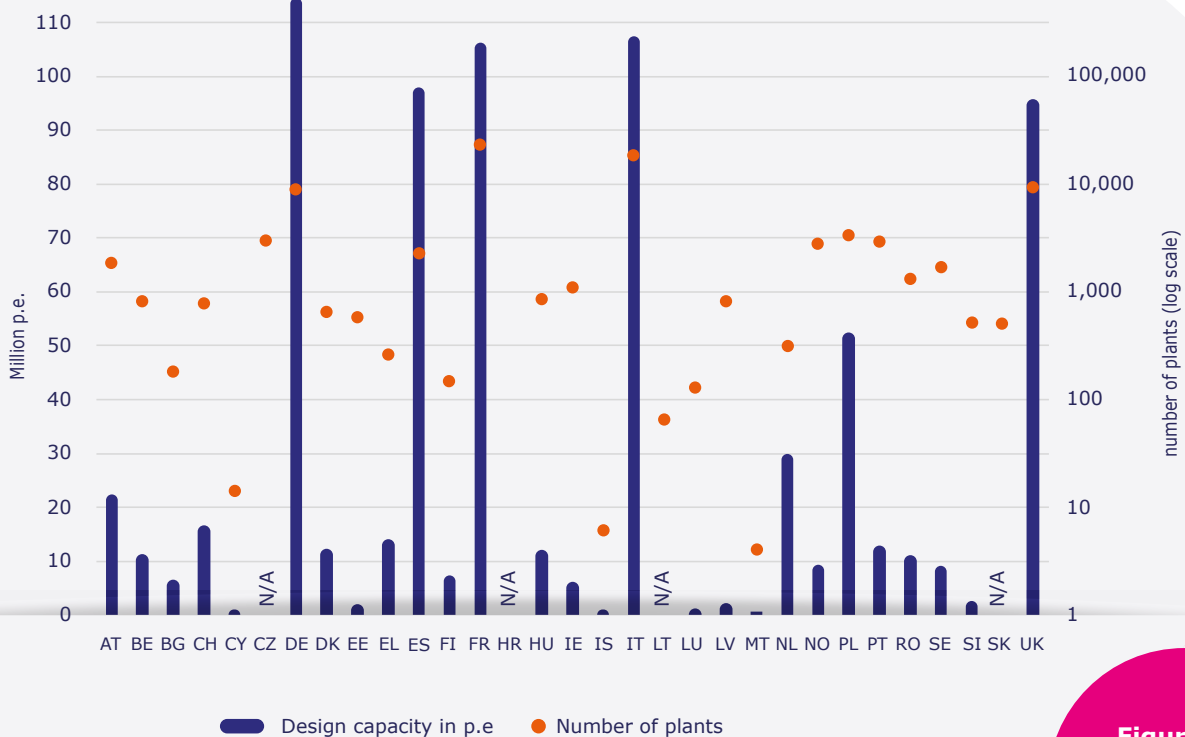
The data contained in this section provides an overview of Europe's wastewater treatment services before the recast Urban Wastewater Treatment Directive (EU 2024/3019, rUWWTD) comes into effect, as this report is published before its transposition deadline of 31 July 2027.

**Figure 25** presents the volume of wastewater treated annually in Europe's urban wastewater treatment plants (UWWTPs) in billion m<sup>3</sup>, as well as the volume per connected inhabitant. This includes the volume of rainwater entering UWWTPs through combined sewers.

Two major factors influencing volume per capita are therefore the proportion of combined versus separated sewers, and the level of rainfall experienced in the country. Iceland, with its high level of precipitation and predominantly combined sewers, is the principal outlier on this chart.

**Figure 25**  
Volume of wastewater treated





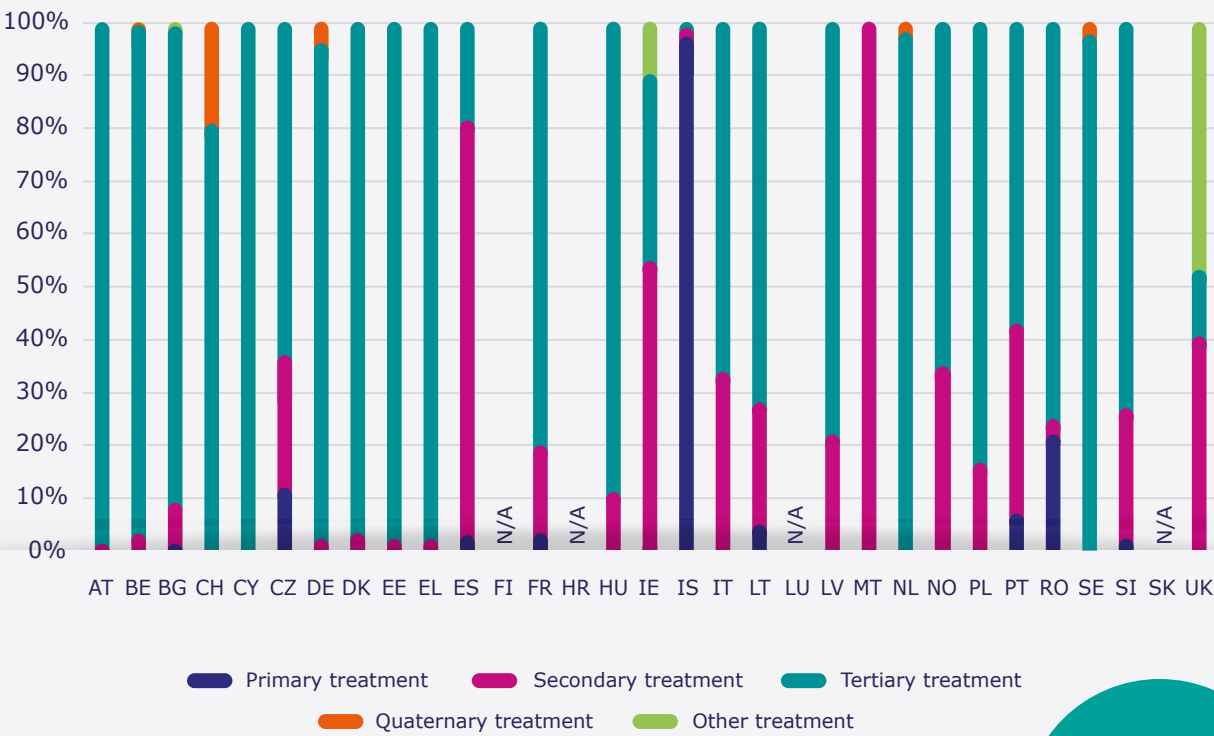
**Figure 26**  
Wastewater treatment infrastructure

**Figure 26** shows the total wastewater treatment capacity in each country, as well as the number of UWWTPs (on a logarithmic scale). Treatment capacity is the total load that a UWWTP is able to treat, as measured in population equivalent (p.e.). Treatment capacity in p.e. has to be bigger than the actual population in order to anticipate the changes occurring during the lifetime of the plants, as well as to handle non-household sources of pollution load if they are authorised by the competent authorities.

The total treatment capacity in Europe, extrapolated by regression analysis based on population connected to a wastewater treatment plant, stands at 800 million p.e., a 2% increase from our last report.

**Figure 27** displays the percentage of the pollution load (in p.e.) treated by UWWTPs depending on their level of treatment<sup>2</sup>: primary treatment (understood as solids removal), secondary treatment (organic matter removal), tertiary treatment (removal of nutrients), quaternary treatment (removal of micropollutants) and other treatment (related to any additional treatment besides those mentioned in the UWWTD or the rUWWTD, for example disinfection).

<sup>2</sup> Figure 27 is not intended to show compliance with standards set for each level of treatment but only the level of treatment that is implemented in each country.



**Figure 27**  
Wastewater treatment levels

Wastewater treatment steps are typically consecutive, hence the percentage of e.g. "primary treatment" on this chart shows the load which only underwent primary treatment. All wastewater treated by secondary treatment has first passed through primary treatment, and so on for further treatment levels. On the other hand, wastewater receiving "other treatment" does not imply that it has been subject to quaternary treatment before.

In Europe, 1.2% of wastewater receives quaternary treatment (which is not yet an obligation outside of Switzerland), 66.5% receives tertiary treatment while a further 23.9% receives secondary treatment, 6.8% receives other treatment, while 1.6% receives only primary treatment.

### 4.3 Water reuse

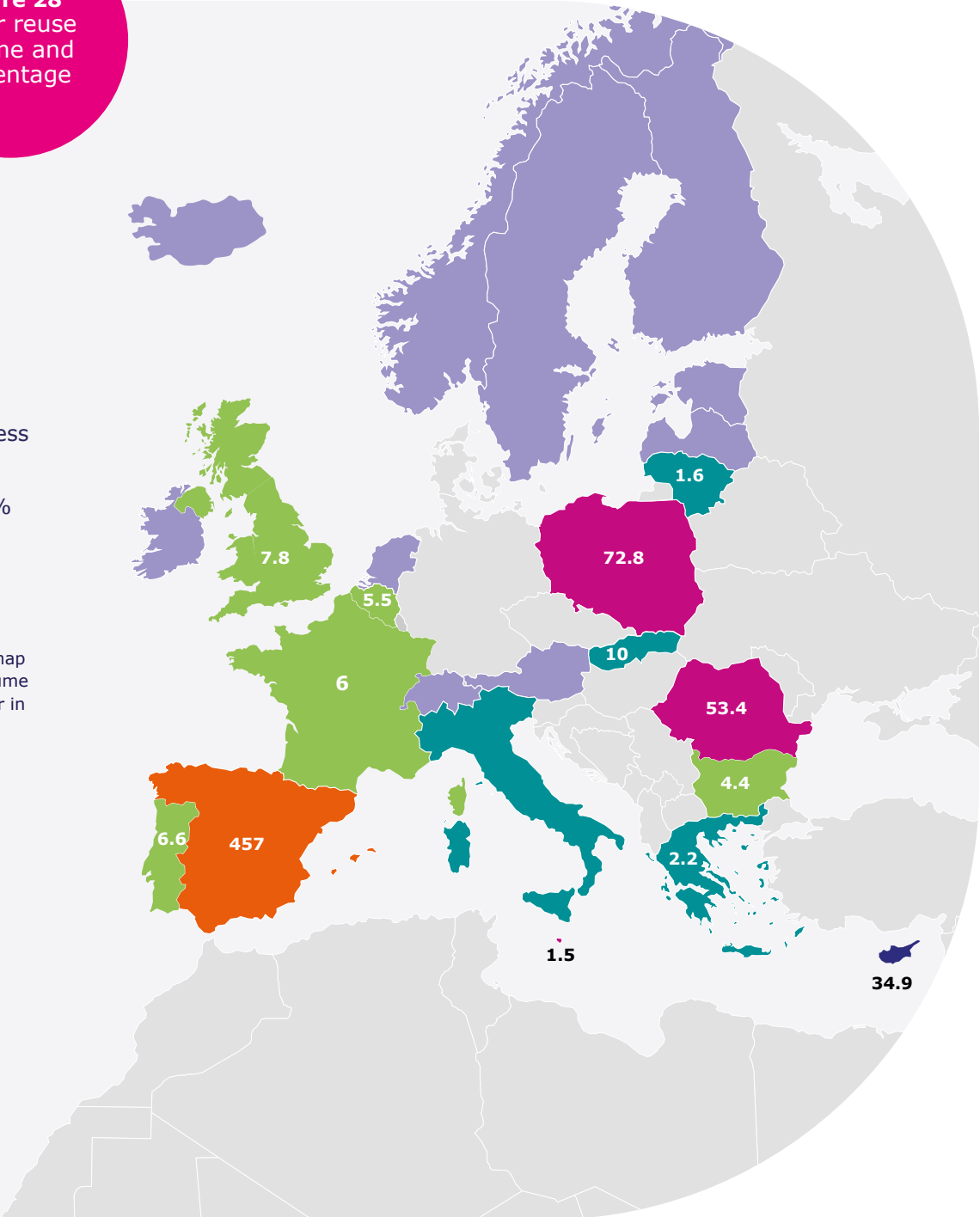
Reuse of treated wastewater, commonly known as water reuse, can be an important contribution to sustainable water management and to tackling water scarcity. As **Figure 28** shows, not all countries with the highest levels of water reuse are in Southern Europe, although Spain

produces by far the highest volume of treated wastewater for reuse in Europe, and Cyprus's reuse rate is near 100%. In terms of volume, however, Poland and Romania both reuse more water than Cyprus, while smaller-scale reuse schemes are dotted around Northern and Central Europe.

**Figure 28**  
Water reuse  
volume and  
percentage

- No data
- 0%
- 1% or less
- 1%-5%
- 5%-10%
- 11%
- 99%

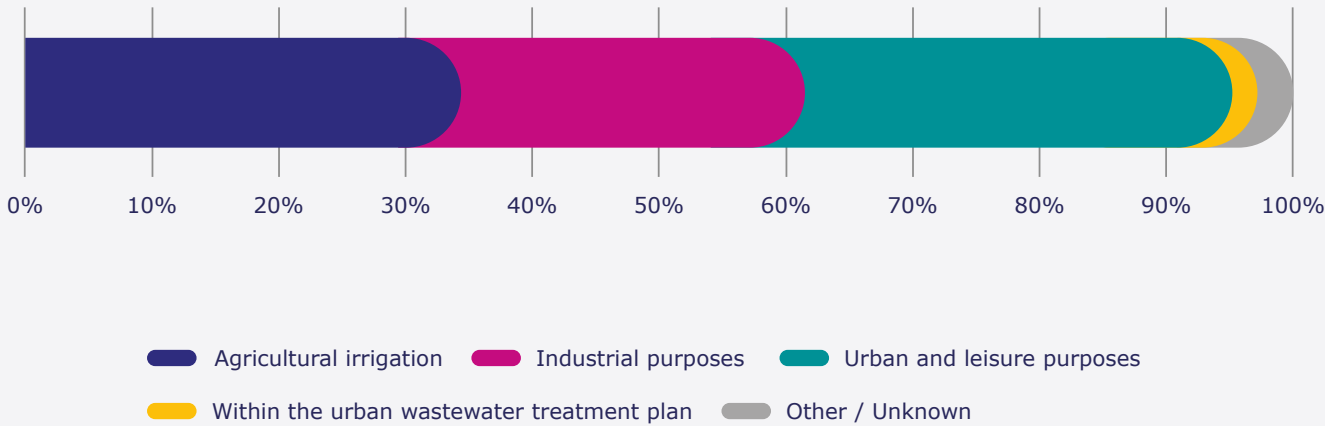
Numbers on the map represent the volume of reclaimed water in million m<sup>3</sup>/year.



At the aggregate European level, the purposes of water reuse, shown in **Figure 29**, are fairly evenly split between agricultural irrigation, industrial uses and urban & leisure purposes such as watering public parks or golf courses.

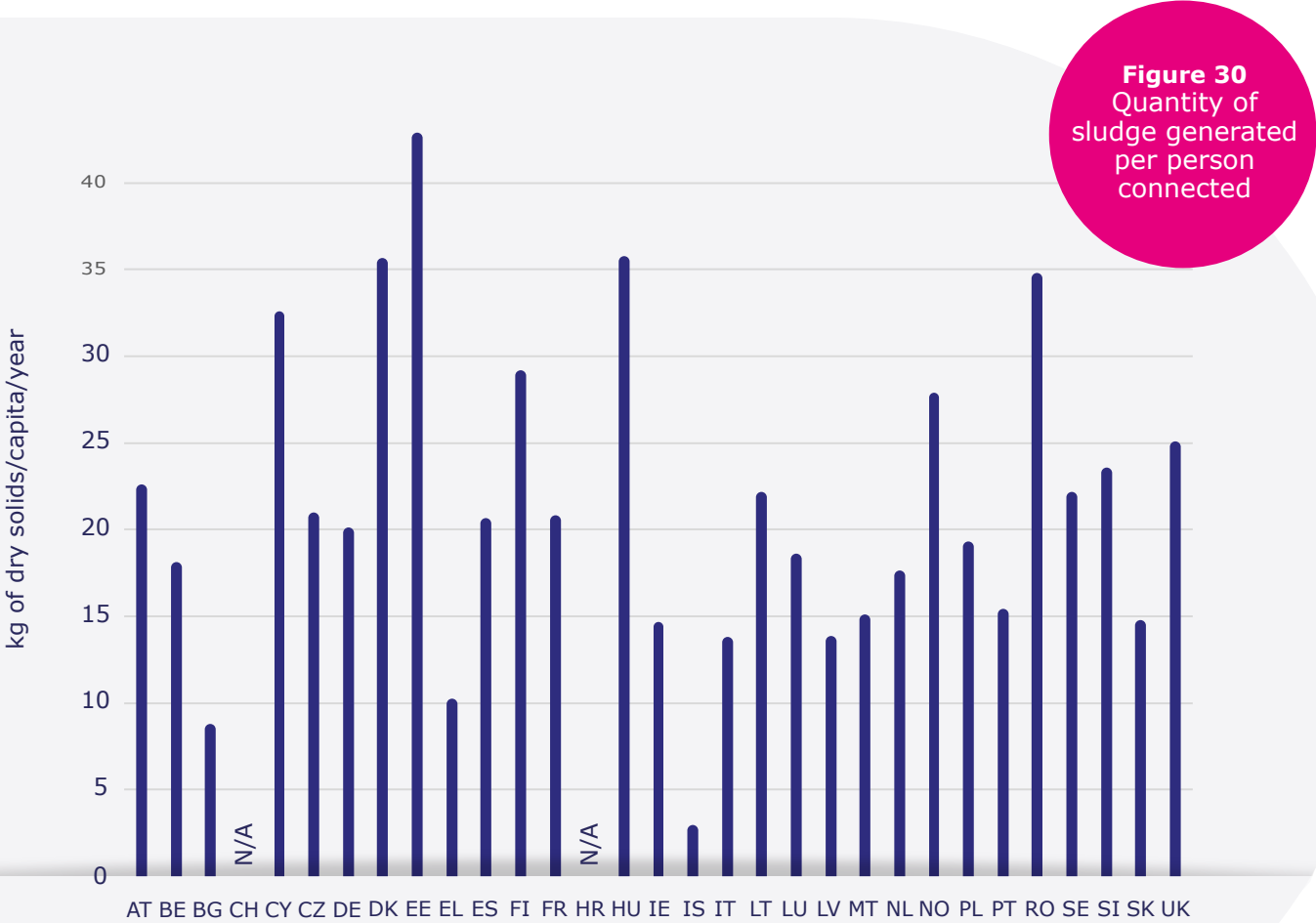
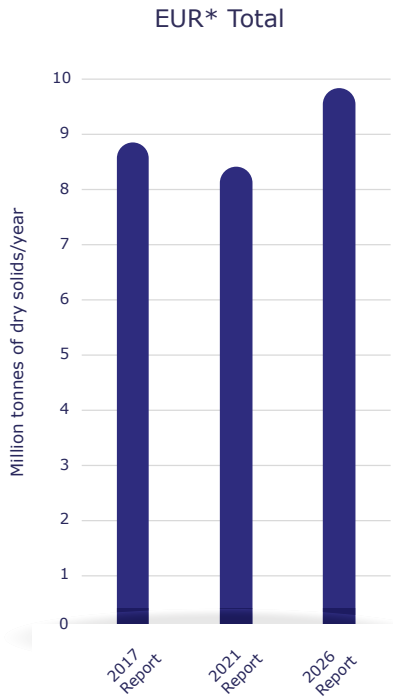
The percentage reported as reuse within the UWWTP is small, likely because this practice, while common, is not typically categorised as water reuse.

**Figure 29**  
Water reuse volume and percentage



### 4.4 Sewage sludge management

**Figure 30** shows the amounts of sewage sludge generated per connected inhabitant in each country, as measured in mass of dry solids. The EUR\* and EU27 totals include extrapolations for missing data, using a regression analysis based on the population connected to a wastewater treatment plant. While overall sludge production decreased between our 2017 and 2021 reports, our latest data shows a reversal of this trend, possibly as a result of more countries providing data than before.

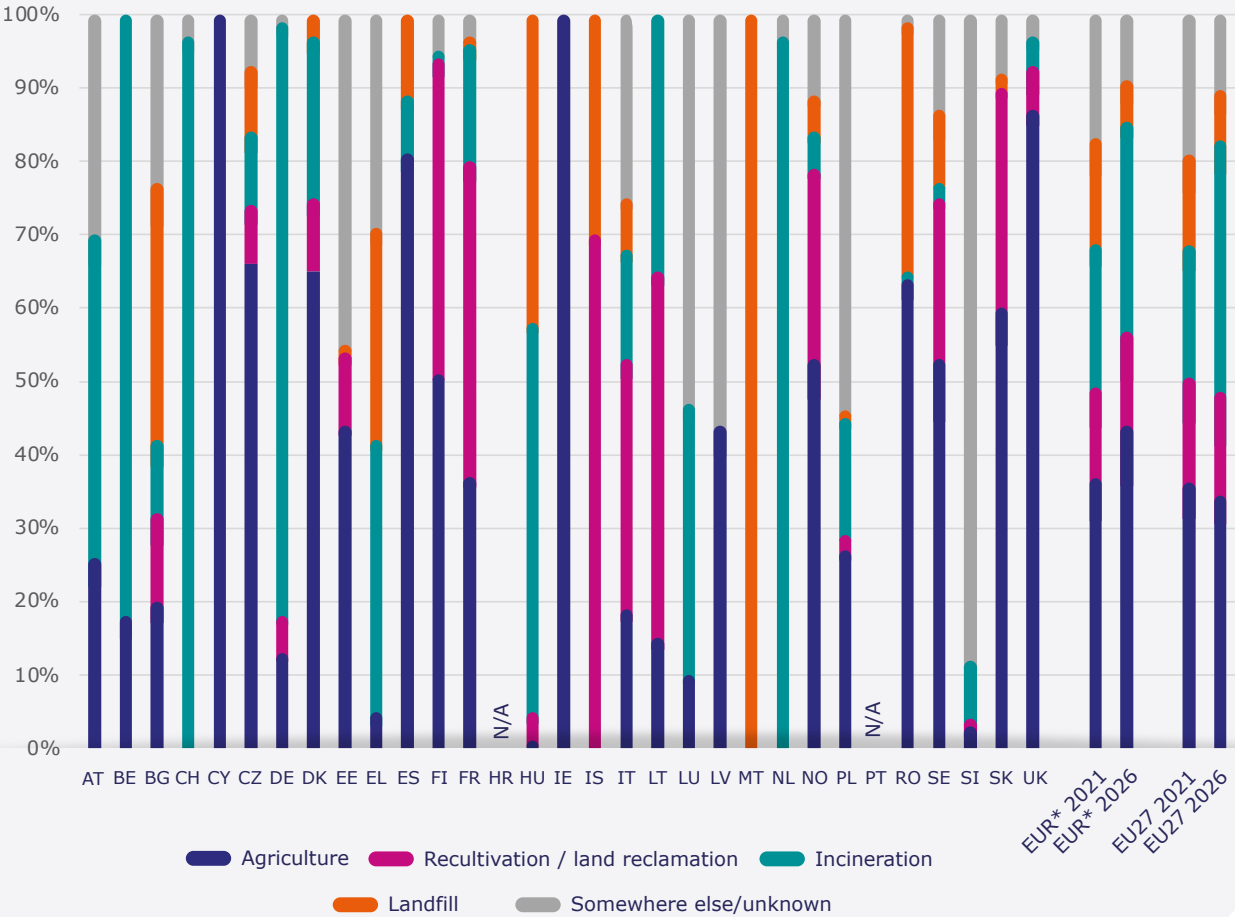


**Figure 31** details the destination of sludge in each country, alongside an aggregate picture of this indicator at the European and EU27 levels, based on quantity of dry solids. Compared to our previous report, incineration has increased significantly as a sludge disposal pathway, largely at the expense of landfilling and other/unknown destinations (both down to single-figure percentages). The proportion of sludge going to land reclamation remained largely stable, while agriculture's share increased in

Europe as a whole (from 37% to 44%) but slightly decreased in EU27 (from 36% to 34.5%).

The EUR\* and EU27 data in this figure is the sum of available data without extrapolation, as the split between different destinations for sludge varies from country to country with no predictable pattern.

**Figure 31**  
Destination of the treated wastewater sludge generated



# 5 Energy and climate

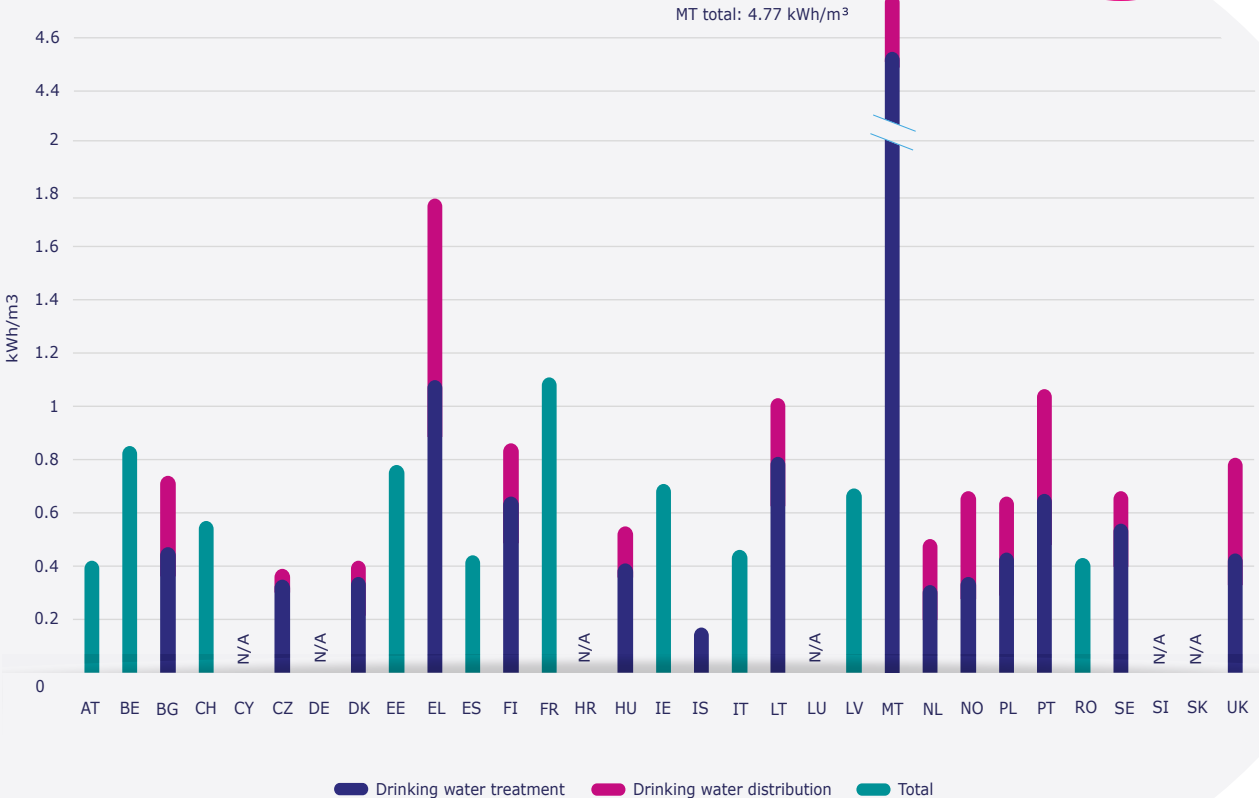
The link between water and energy is both complex and relevant. On the one hand, the water sector is a major consumer of energy. On the other hand, it contains many energy-related opportunities within its processes, including the consumption of the sector's energy production by external uses, such as district heating or biogas-powered vehicles.

This section explores both the sector's energy consumption patterns and the energy it produces, alongside a brief overview of its carbon footprint. For a more detailed look at the relationship between energy security and water resilience, you can read our 2025 **Briefing Note**.

## 5.1 Energy consumption

Figures 32 and 33 show the gross energy consumption of drinking water services and wastewater services, respectively, in kWh per m<sup>3</sup> of water sold. As for other indicators, these are national averages and not necessarily representative of any individual operator. The data here do not account for the production of renewable energy by water services, which can cover some (or in rare cases all) of their energy needs.

**Figure 32**  
Energy consumption for the extraction, treatment and distribution of drinking water

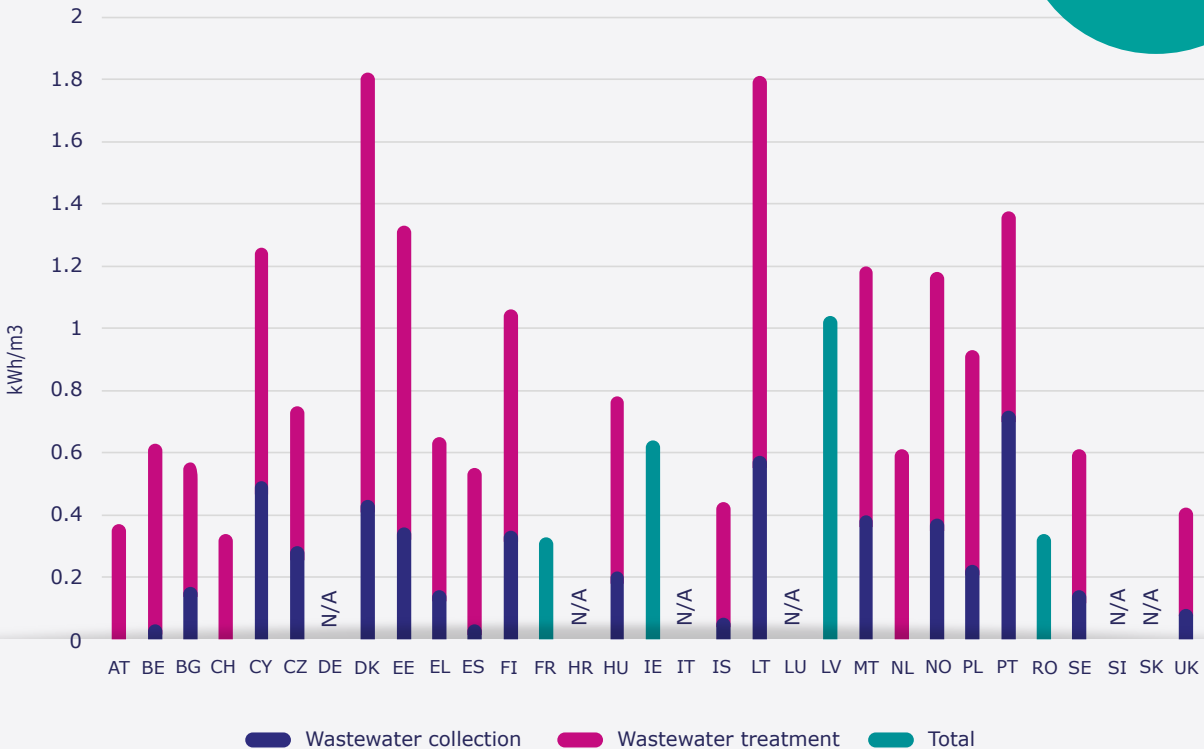


Water operators are continuously increasing the efficiency of their processes. However, their energy consumption depends on multiple factors, many of which are beyond their control. On the drinking water side, this includes the sources used (groundwater, surface water, seawater), the topography (gravitational vs pump-driven networks), population density (length of network per capita), and the required treatment (micropollutants, pesticides, nitrates, etc.).

Malta's high energy demand for drinking water treatment, for example, is due to the island nation's strong reliance on seawater desalination for its water supply.

The energy consumption of wastewater collection and treatment depends on the level of pollution of the incoming wastewater, the flow rate, weather conditions, topography, population density, and the requirements for receiving waters (e.g. sensitive areas may require more treatment).

**Figure 33**  
Energy consumption for the collection and treatment of wastewater



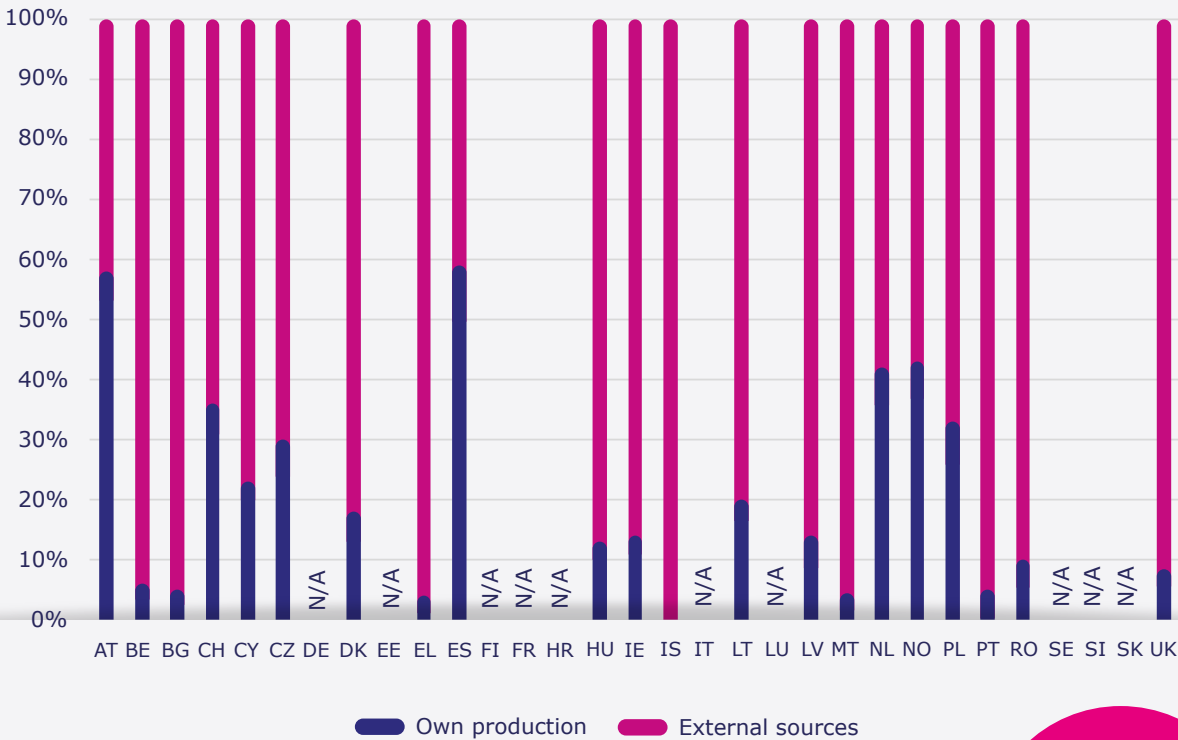
## 5.2 Renewable energy production

Water services can be energy producers as well as energy consumers. **Figure 34** outlines how much of the sector's energy consumption is covered by its own production in each country.

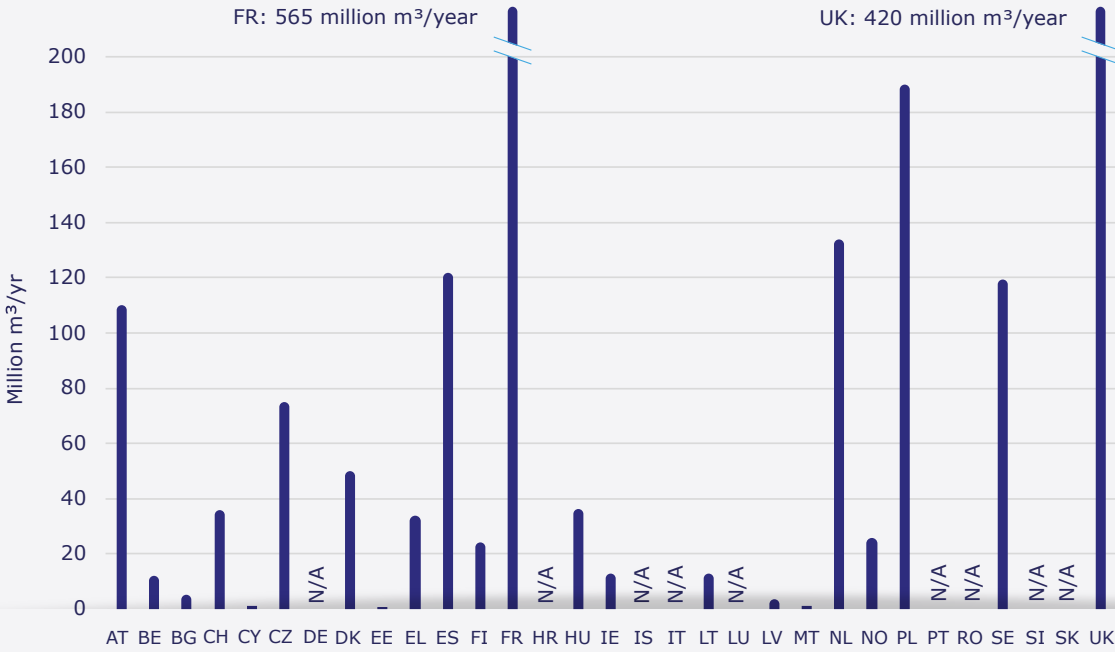
One way for wastewater operators to generate renewable energy is the production of biogas through anaerobic digestion of sewage sludge. This practice is generally limited to large and mid-sized plants, as it requires a significant amount of sludge to be economically viable. The gas can be used to cover the operator's own energy demand, or refined for injection into the urban gas grid or for use as vehicle fuel.

**Figure 35** shows biogas production by wastewater services in each country, while **Figure 36** shows energy produced by water operators in other forms. In this context, heat energy may come from the incineration of sludge and/or from heat recovery from sewers – although the latter provides much lower energy levels due to the mild temperature of operation. Electricity can be generated via hydropower in reservoirs, drinking water or wastewater networks, as well as from wind turbines and solar panels installed on utility premises.

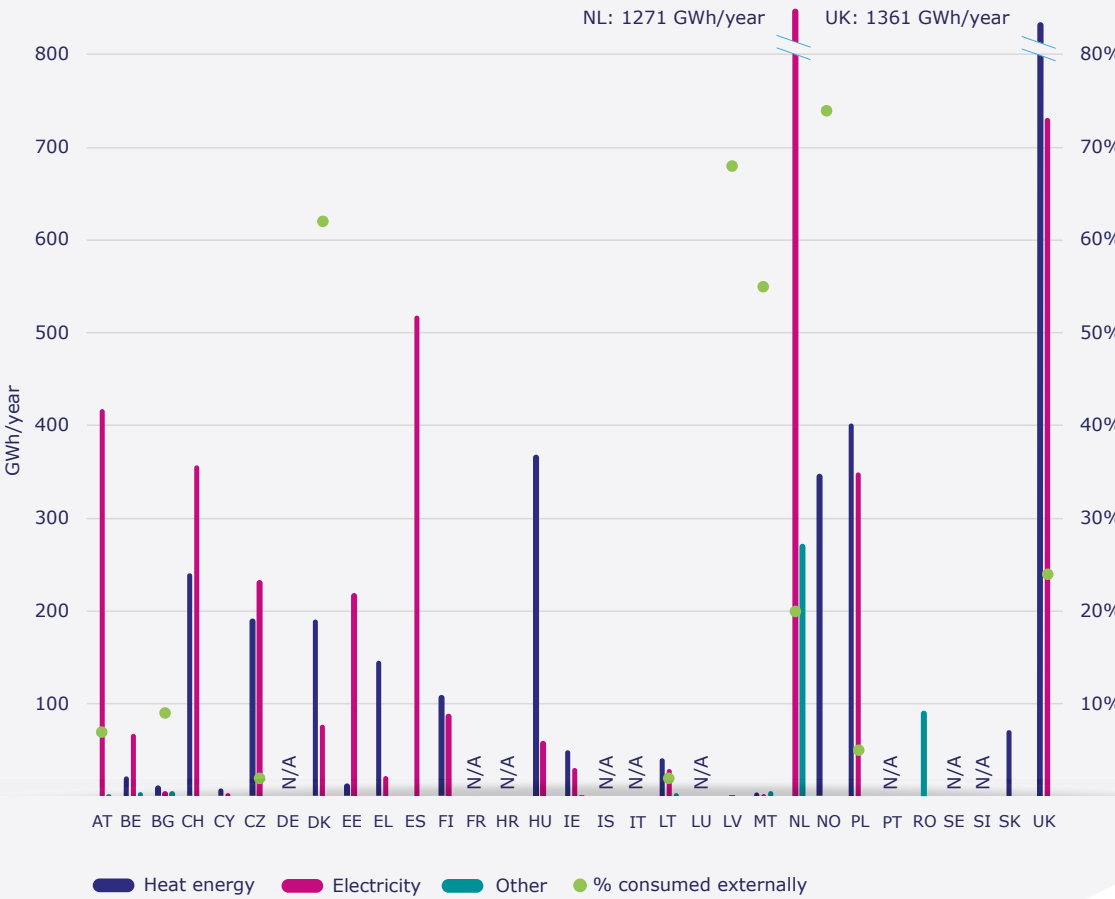
It is not possible to extrapolate European totals for these indicators, as the missing data cannot be reliably predicted.



**Figure 34**  
Sources of energy



**Figure 35**  
Biogas production in UWWTPs



**Figure 36**  
Types of energy produced by water operators

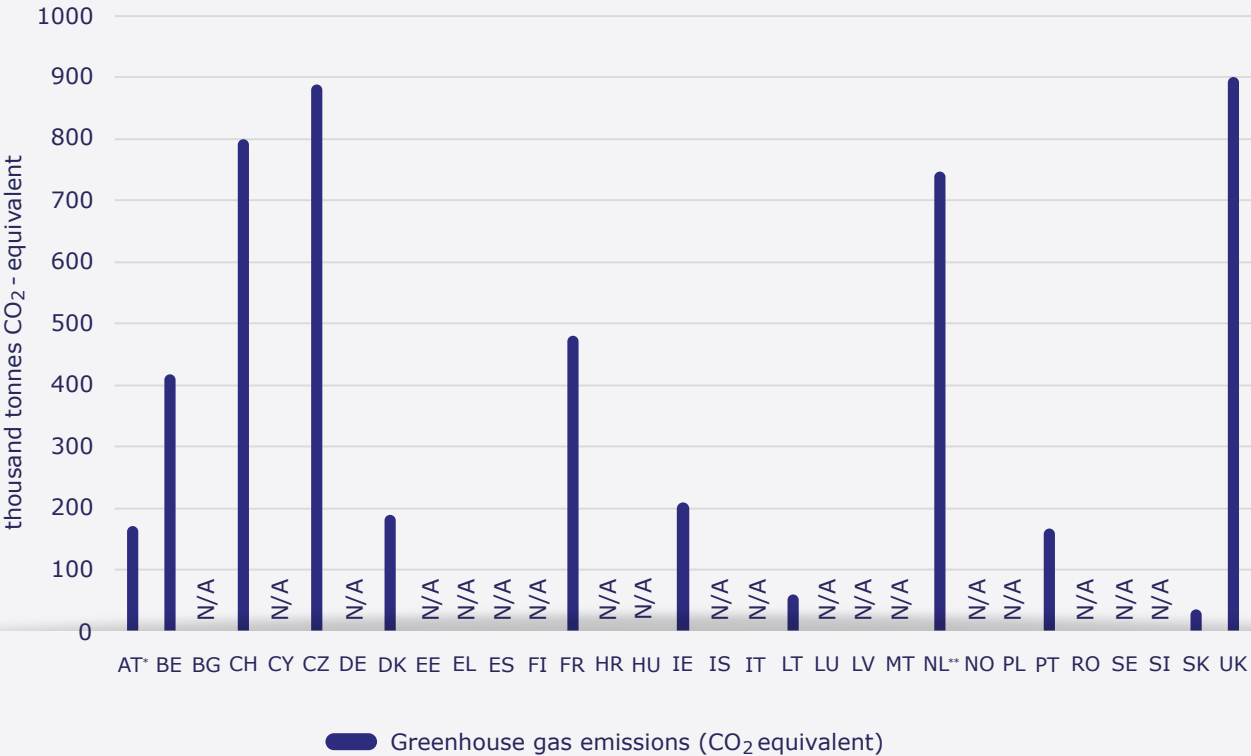
### 5.3 Greenhouse gas emissions

The reduction of greenhouse gas (GHG) emissions is an ongoing process for the water sector, including when it comes to data collection. The data in **Figure 37** covers five more countries than the previous edition of this report, and therefore a greater share of the European population (approximately 135 million more people), making the results impossible to compare with the previous report at the European level.

The data shown covers specifically scope 1 emissions (i.e. direct emissions, excluding emissions from e.g. energy consumed from the grid).

For each operator, the level of GHG emissions and the ability to reduce them depends on the level of drinking water and wastewater treatment required to protect public health and the environment.

**Figure 37**  
Greenhouse gas emissions by water operators



\*AT: wastewater only.  
\*\* NL: includes DW and WW treatment but excludes WW collection

## 6 Sector outlook

This report shows that the water services sector is at a crossroads. Increasing investment needs, chronic under-financing, a quickly ageing workforce; these are all signs of structural problems.

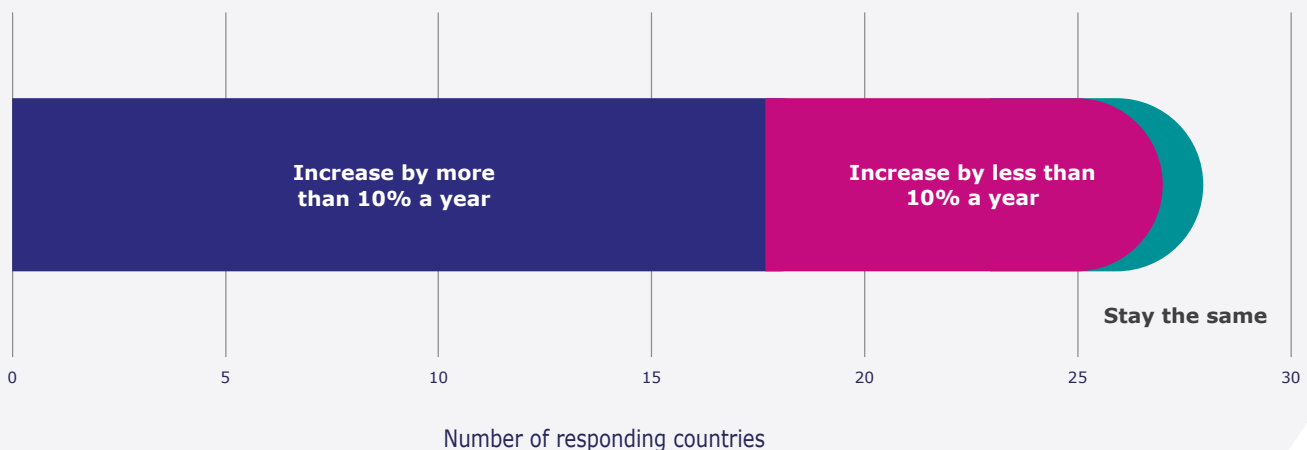
But there is also reason for optimism. Policy makers and businesses increasingly recognise the strategic value of water and reliable water services. The publication of the EU Water Resilience Strategy is just one example. Numerous water service providers implement innovative solutions and launch image campaigns to attract motivated young people.

The sector transitions to managers of the urban water cycle and resource recovery plants.

Almost all EurEau member countries expect investment needs to increase over the next five years (**Figure 38**) with most of them anticipating an increase of more than 10%. A substantial part of these needs will be linked to compliance with the recast Urban Wastewater Treatment Directive. The extent to which these needs will translate into real investment will depend on sufficient long-term resources.

**Figure 38**  
Investment outlook

**Over the next five years, do you expect investment needs in your country's water sector to:**



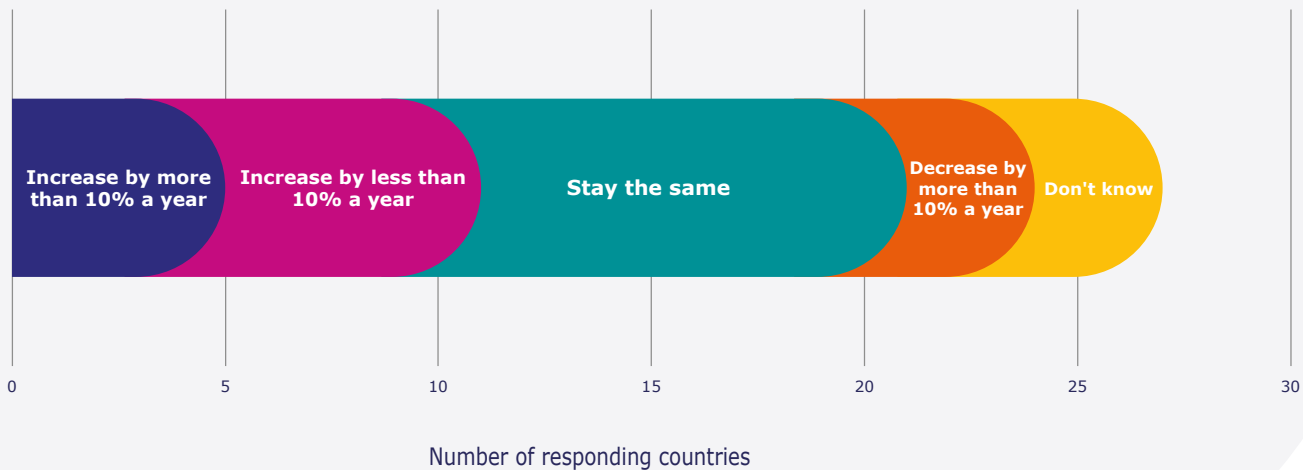
The outlook is also mixed when it comes to the implementation of the cost-recovery principle (**Figure 39**). While the largest share of respondents does not expect significant changes, only a few countries see a positive development while some anticipate a worsening situation.

Our sector is a cornerstone of public health protection, economic prosperity and food security. While we are fully aware of our own responsibility in becoming an attractive and innovative societal solution provider, this report is a call to policy makers at all levels – from European to local - to put the enabling factors in place:

- **Control pollutants at the source**  
Reduce water treatment intensity and free funds for innovation
- **Ensure stable long-term financing**  
Clear the investment backlog for infrastructure renewal, ensure regulatory compliance, enable climate-change adaptation, and exploit the sector's circular economy potential.
- **Support the water services sector**  
Attract a competent workforce and obtain societal recognition.

**Figure 39**  
Cost-recovery outlook

**Over the next five years, do you expect your sector's level of cost recovery to:**



# Annex

Fig.	Indicator	Unit	AT	BE	BG	CH	CY	CZ	DE	DK	EE	EL	ES	FI	FR	HR	HU	IE	IS
1	Pop. connected to a DW network	%	92%	98.9%	99.6%	99.4%	100%	95%	100%	98%	84%	99%	100%	94%	99%	N/A	95%	80%	100%
	Pop. connected to a WW network	%	96%	92.3%	72.6%	97.3%	85%	87%	97%	90%	83%	92%	98%	85%	84%	N/A	84%	76%	90%
	Pop. connected to a WWTP	%	96%	85%	63.9%	97.3%	85%	83%	97%	90%	83%	92%	91%	85%	84%	N/A	84%	75%	81%
2	Annual bil. DWH	Million €	N/A	946	393.7	950	72.83	763.6	8,958.87	429	59.83	587	2,732	501.99	7,226	N/A	228.13		30
	Annual bil. DWNH	Million €	N/A	367		580	10.51	355.8	N/A	221	35.39	166	1,605	N/A		N/A	N/A	98.29	137
	Annual bil. WWH	Million €	N/A	986.5	134.8	1,500	2.3	648.5	11,544.9	924	84.48	361	2,101	800.8	5,423	N/A	230.29	0	74
	Annual bil. WWNH	Million €	N/A	382.7		61.2	105.0	91.9	70.2	107.2	72.2	43.5	56.0	55.7		89.0	105.3	N/A	108.25
	Annual bil. DWH	€/capita	N/A	80.4	61.2	64.1	13.3	32.7	N/A	37.2	25.7	15.8	32.7	N/A	79.0	N/A	23.8	0.0	76.9
	Annual bil. DWNH	€/capita	N/A	31.2		20.9	165.7	2.9	59.6	138.2	155.5	61.5	34.4	42.8		142.0	N/A	10.2	25.1
	Annual bil. WWH	€/capita	N/A	83.9	20.9	0.6	27.7	N/A	80.1	46.9	7.1	25.1	N/A	N/A	N/A	N/A	24.0	0.0	189.7
	Annual bil. WWNH	€/capita	N/A	32.5		0.6	27.7	N/A	80.1	46.9	7.1	25.1	N/A	N/A	N/A	N/A	11.3	19.8	159.0
	3	Annual investment average	Million €	280.2	1,621	831.21	2,223	23.2	648.8	9,661	1,117	131.04	633	1,034	399	6,500	N/A	395.29	1,019
Annual investment average		€/capita	30.7	137.8	129.1	245.6	29.3	59.6	115.6	188.0	95.3	60.4	21.1	70.8	94.7	N/A	41.2	186.9	278.4
4	Tariffs	%	DW: 4.5% WW: 3.6%	61%	N/A	90%	0%	88%	80%	65%	N/A	5%	N/A	N/A	98%	N/A	N/A	17%	0%
	Taxes	%	DW: 27.5% WW: 25.2%	17%	N/A	0%	74%	0%	5%	0%	N/A	10%	N/A	N/A	2%	N/A	N/A	83%	0%
	Transfers	%	DW: 0% WW: 0%	0%	N/A	0%	0%	10%	0%	0%	N/A	60%	N/A	N/A	0%	N/A	N/A	0%	0%
	Credit	%	DW: 47.2% WW: 38.7%	8%	N/A	0%	0%	2%	14%	35%	N/A	15%	N/A	N/A	0%	N/A	N/A	0%	10%
	Other debt financing	%	DW: 0% WW: 0%	0%	N/A	0%	0%	0%	0%	0%	N/A	0%	N/A	N/A	0%	N/A	N/A	0%	30%
	Equity financing	%	DW: 20.8% WW: 32.5%	0%	N/A	0%	0%	0%	1%	0%	N/A	10%	N/A	N/A	0%	N/A	N/A	0%	60%
	Other	%	DW: 0% WW: 0%	14%	N/A	10%	26%	0%	0%	0%	N/A	0%	N/A	N/A	0%	N/A	N/A	0%	0%

Fig.	Indicator	Unit	IT	LT	LU	LV	MT	NL	NO	PL	PT	RO	SE	SI	SK	UK	EUR*	EU27
1	Pop. connected to a DW network	%	100%	82%	99.9%	85%	100%	100%	85%	93%	96.4%	77%	89%	93%	90.5%	99%	97%	96.8%
	Pop. connected to a WW network	%	99%	79%	99%	77%	100%	99%	88%	73%	87.2%	60%	87%	79%	71.5%	96%	90.2%	89.2%
	Pop. connected to a WWTP	%	98%	79%	98.7%	77%	100%	99%	86%	76%	88.4%	59%	87%	77%	70.5%	96%	89.2%	88.1%
2	Annual bil. DWH	Million €	10214	120	N/A	67.5	47.97	1,314.52	1,044	1,623	1041	788	705	N/A	600	5,810	109249	88037
	Annual bil. DWNH	Million €		N/A	41.76		349.58	281	737	291		209	N/A	1,610				
	Annual bil. WWH	Million €	161	N/A	85.6	0	3,507	1,169	2,186	740	479	705	N/A	110.6	6,372			
	Annual bil. WWNH	Million €	N/A	0	0	N/A	1,177	293	209		N/A	1,574						
	Annual bil. DWH	€/capita	173.2	42.0	N/A	42.8	83.5	73.5	186.9	43.3	N/A	41.3	66.8	N/A	110.6	85.1	Average: 101.5 Median: 175.4	Average: 197.0 Median: 173.2
	Annual bil. DWNH	€/capita		N/A	72.7	19.6	50.3	19.7	N/A	15.3	19.8	N/A	23.6					
	Annual bil. WWH	€/capita	56.3	N/A	59.6	0.0	196.2	209.3	58.3	N/A	25.1	66.8	N/A	110.6	93.3			
	Annual bil. WWNH	€/capita	N/A	0.0	0.0	N/A	31.4	N/A	15.4	19.8	N/A	23.1						
3	Annual investment average	Million €	2,993.6	266.48	N/A	68.61	63.91	N/A	1,868	2,017.92	N/A	1,046	1973	117.5	N/A	11,744	52,518	36,607
	Annual investment average	€/capita	50.8	93.3	N/A	37.0	111.3	N/A	334.5	53.8	N/A	54.9	187.0	55.1	N/A	172.0	Average: 101.5 Median: 103.5	Average: 82.4 Median: 73.3
4	Tariffs	%	78%	11%	N/A	5%	100%	23%	0%	55%	N/A	N/A	0%	N/A	N/A	4%	N/A	N/A
	Taxes	%	0%	0%	N/A	5%	0%	44%	0%	27%	N/A	N/A	0%	N/A	N/A	0%	N/A	N/A
	Transfers	%	0%	28%	N/A	65%	0%	0%	0%	9%	N/A	N/A	0%	N/A	N/A	0%	N/A	N/A
	Credit	%	0%	61%	N/A	25%	0%	32%	100%	6%	N/A	N/A	100%	N/A	N/A	0%	N/A	N/A
	Other debt financing	%	0%	0%	N/A	0%	0%	0%	0%	0%	N/A	N/A	0%	N/A	N/A	66%	N/A	N/A
	Equity financing	%	0%	0%	N/A	0%	0%	0%	0%	0%	N/A	N/A	0%	N/A	N/A	30%	N/A	N/A
	Other	%	22%	0%	N/A	0%	0%	0%	0%	2%	N/A	N/A	0%	N/A	N/A	0%	N/A	N/A

Fig.	Indicator	Unit	AT	BE	BG	CH	CY	CZ	DE	DK	EE	EL	ES	FI	FR	HR	HU	IE	IS
5	Direct staff	FTE per 100,000 inhabitants	112.9	78.3	158.5	70.9	64.2	87.3	113.3	84.2	62.6	71.6	72.9	70.9	77.3	N/A	209.4	43.8	42.3
	Indirect staff	FTE per 100,000 inhabitants	N/A	N/A	46.6	165.7	N/A	16	N/A	353.5	N/A	15.7	3.8	70.9	103.2	N/A	N/A	38.5	6.4
6	Water sector pay / national avg pay	%	N/A	104%	64%	104%	119%	N/A	88%	105%	N/A	91%	N/A	95%	97%	N/A	97%	N/A	115%
7	Water sector avg age	years	N/A	N/A	51	N/A	45.5	48	N/A	49.7	N/A	52	N/A	N/A	N/A	N/A	48	44	N/A
	National workforce avg age	years	N/A	N/A	42.5	N/A	43	44	N/A	N/A	N/A	44.5	N/A	N/A	N/A	N/A	43	N/A	N/A
8	Number of DW services	number (range)	>5,000	11-100	11-100	1,001-5,000	2-10	>5,000	>5,000	1,001-5,000	101-1,000	101-1,000	>5,000	1001-5,000	>5,000	N/A	11-100	1	11-100
9	Number of WW services	number (range)	>5,000	101-1,000	11-100	1,001-5,000	2-10	>5,000	>5,000	101-1,000	101-1,000	101-1,000	>5,000	101-1,000	>5,000	N/A	11-100	1	11-100
10	DW local gov. dept.	%	N/A	2%	0%	70%	100%	10%	26%	0%	0%	4%	10%	47%	43%	N/A	0%	0%	50%
	DW public company	%	N/A	98%	80%	26%	0%	45%	27%	80%	50%	48%	35%	40%	0%	N/A	97%	95%	45%
	DW private operator	%	N/A	0%	20%	4%	0%	28%	20%	20%	0%	0%	33%	1%	57%	N/A	0%	5%	0%
	DW private ownership	%	N/A	0%	0%	0%	0%	9%	7%	0%	50%	0%	0%	8%	0%	N/A	0%	0%	5%
	DW P-P joint venture	%	N/A	0%	0%	0%	0%	8%	20%	0%	0%	48%	22%	0%	0%	N/A	3%	0%	0%

Fig.	Indicator	Unit	IT	LT	LU	LV	MT	NL	NO	PL	PT	RO	SE	SI	SK	UK	EUR*	EU27
5	Direct staff	FTE per 100,000 inhabitants	69.6	188.8	N/A	161.9	178.8	51	116.4	101.4	129.7	168	98.3	209.7	145.6	88.9	Total: 517,000	Total: 444,000
	Indirect staff	FTE per 100,000 inhabitants	N/A	N/A	N/A	0	5.2	N/A	179.1	N/A	27.1	N/A	N/A	N/A	N/A	74.7	N/A	N/A
6	Water sector pay / national avg pay	%	120%	66%	N/A	88%	96%	N/A	92%	90%	N/A	48%	99%	97%	92%	111%	N/A	N/A
7	Water sector avg age	years	45.5	50	N/A	50.2	46	N/A	47	N/A	N/A	N/A	46	N/A	49	42	N/A	N/A
	National workforce avg age	years	43.5	44	N/A	44.6	30	N/A	41.9	N/A	N/A	N/A	43	N/A	45	42	N/A	N/A
8	Number of DW services	number (range)	1,001-5,000	11-100	11-100	11-100	1	2-10	101-1,000	1,001-5,000	101-1,000	11-100	101-1,000	101-1,000	N/A	11-100	N/A	N/A
9	Number of WW services	number (range)	1,001-5,000	11-100	101-1,000	11-100	1	101-1,000	101-1,000	1,001-5,000	101-1,000	11-100	101-1,000	101-1,000	N/A	11-100	N/A	N/A
10	DW local gov. dept.	%	12%	0%	100%	7%	100%	0%	72%	5%	49%	13%	48%	N/A	N/A	3%	N/A	N/A
	DW public company	%	53%	100%	0%	93%	0%	100%	24%	89%	35%	71%	52%	N/A	N/A	8%	N/A	N/A
	DW private operator	%	1%	0%	0%	0%	0%	0%	0%	2%	16%	3%	0%	N/A	N/A	0%	N/A	N/A
	DW private ownership	%	0%	0%	0%	0%	0%	0%	4%	1%	0%	0%	0%	N/A	N/A	89%	N/A	N/A
	DW P-P joint venture	%	34%	0%	0%	0%	0%	0%	0%	0%	3%	0%	13%	0%	N/A	N/A	0%	N/A

Fig.	Indicator	Unit	AT	BE	BG	CH	CY	CZ	DE	DK	EE	EL	ES	FI	FR	HR	HU	IE	IS
11	WW local gov. dept.	%	N/A	40%	0%	33%	100%	14%	48%	0%	0%	4%	6%	49%	62%	N/A	0%	0%	5%
	WW public company	%	N/A	60%	80%	67%	0%	44%	47%	100%	50%	48%	67%	42%	0%	N/A	78%	95%	95%
	WW private operator	%	N/A	0%	20%	0%	0%	26%	0%	0%	0%	0%	20%	1%	38%	N/A	0%	5%	0%
	WW private ownership	%	N/A	0%	0%	0%	0%	8%	0%	0%	50%	0%	0%	8%	0%	N/A	0%	0%	0%
	WW P-P joint venture	%	N/A	0%	0%	0%	0%	8%	5%	0%	0%	48%	7%	0%	0%	N/A	22%	0%	0%
12	Avg household water bill	€/household/y	350.98	402.40	239.80	513.12	246.00	142.10	490.48	784.00	378.25	193.43	203.00	577.03	520.80	N/A	163.30	0.00	800.00
	... as a % of household income	%	N/A	0.80%	2.60%	0.41%	0.80%	1.00%	1.29%	0.97%	1.22%	0.70%	0.80%	1.60%	0.80%	N/A	1.01%	0.00%	0.80%
13	Avg residential tariff	€/m <sup>3</sup>	3.20	5.76	2.66	4.50	3.16	4.50	2.42	10.36	4.25	1.60	1.96	5.45	4.52	N/A	1.99	0.00	N/A
14	DW service	%	N/A	46%	48%	49%	57%	52%	38%	19%	36%	36%	50%	29%	40%	N/A	35%	N/A	33%
	WW service	%	N/A	48%	32%	49%	23%	48%	55%	52%	42%	27%	41%	46%	40%	N/A	42%	N/A	42%
	Env. & resource fee	%	N/A	0%	0%	0%	4%	0%	0%	0%	0%	0%	0%	0%	0%	N/A	1%	N/A	0%
	VAT	%	N/A	6%	20%	2%	3%	0%	7%	20%	22%	16%	9%	26%	20%	N/A	21%	N/A	25%
	Other	%	N/A	0%	0%	0%	13%	0%	0%	9%	0%	21%	0%	0%	0%	N/A	0%	N/A	0%
15	Drinking water production	Million m <sup>3</sup> /year	686	684	1100	925	68	575	5222	358	48	1288	4233	380	5361	N/A	655	650	51
	Surface water	%	0%	40%	57%	21%	21%	52%	29%	0%	60%	55%	65%	35%	32%	N/A	4%	79%	10%
	Groundwater	%	100%	60%	43%	79%	4%	48%	71%	100%	40%	44%	26%	65%	68%	N/A	96%	21%	90%
	Desalination	%	0%	0%	0%	0%	75%	0%	0%	0%	0%	0%	1%	9%	0%	N/A	0%	0%	0%

Fig.	Indicator	Unit	IT	LT	LU	LV	MT	NL	NO	PL	PT	RO	SE	SI	SK	UK	EUR*	EU27
11	WW local gov. dept.	%	12%	0%	100%	7%	100%	100%	86%	5%	56%	13%	48%	N/A	N/A	3%	N/A	N/A
	WW public company	%	53%	100%	0%	93%	0%	0%	1%	89%	30%	71%	52%	N/A	N/A	8%	N/A	N/A
	WW private operator	%	1%	0%	0%	0%	0%	0%	0%	2%	14%	3%	0%	N/A	N/A	0%	N/A	N/A
	WW private ownership	%	0%	0%	0%	0%	0%	0%	13%	1%	0%	0%	0%	N/A	N/A	89%	N/A	N/A
	WW P-P joint venture	%	34%	0%	0%	0%	0%	0%	0%	3%	0%	13%	0%	N/A	N/A	0%	N/A	N/A
12	Avg household water bill	€/household/y	384.00	165.00	N/A	246.10	214.00	580.20	1,215.81	117.20	278.26	115.50	N/A	238.69	N/A	554.73	404.06	367.33
	... as a % of household income	%	1.02%	1.00%	N/A	1.09%	0.45%	1.04%	1.87%	0.60%	0.62%	N/A	N/A	0.90%	N/A	0.85%	0.95%	0.90%
13	Avg residential tariff	€/m <sup>3</sup>	2.10	3.00	N/A	3.76	2.90	6.09	4.63	3.41	2.31	1.41	4.25	2.52	3.00	3.10	3.59	3.63
14	DW service	%	44%	33%	N/A	40%	50%	29%	36%	35%	51%	N/A	N/A	33%	37%	47%	N/A	N/A
	WW service	%	44%	40%	N/A	41%	50%	62%	40%	57%	41%	N/A	N/A	67%	40%	53%	N/A	N/A
	Env. & resource fee	%	0%	1%	N/A	1%	0%	0%	0%	0%	2%	N/A	N/A	0%	0%	0%	N/A	N/A
	VAT	%	10%	21%	N/A	17%	0%	3%	24%	8%	6%	N/A	N/A	0%	23%	0%	N/A	N/A
	Other	%	2%	5%	N/A	0%	0%	6%	0%	0%	0%	N/A	N/A	0%	0%	0%	N/A	N/A
15	Drinking water production	Million m <sup>3</sup> /year	8,000	122	44	87	39	1,158	700	2,091	608	1,263	844	183	398	5,409	43,571	36,485
	Surface water	%	15%	92%	50%	27%	0%	34%	89%	26%	71%	61%	70%	2%	15%	74%	41%	35%
	Groundwater	%	85%	8%	50%	73%	34%	66%	11%	74%	29%	36%	30%	98%	85%	26%	58%	63%
	Desalination	%	0%	0%	0%	0%	66%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%

Fig.	Indicator	Unit	AT	BE	BG	CH	CY	CZ	DE	DK	EE	EL	ES	FI	FR	HR	HU	IE	IS
16	DW billed consumption - domestic	Million m <sup>3</sup> /year	453	351	460	469	40.8	325.3	3743	219	44.17	695	N/A	310	4,214	N/A	354.77	242.92	35
	DW billed consumption - non-domestic	Million m <sup>3</sup> /year	106	148.2	140	282	6.07	151.6	835	113	6.39	196	N/A			N/A	118.4	148.38	35
17	Avg residential consumption	L/capita/day	135.9	81.8	110.0	142.0	141.0	81.9	122.0	101.0	88.0	181.7	N/A	150.6	179.0	N/A	101.2	122.1	245.9
	Avg residential consumption	m <sup>3</sup> /household/y	108.2	67.7	37.6	114.0	126.9	68.5	90.4	77.8	70.1	159.1	N/A	105.9	132.7	N/A	85.0	120.7	237.8
18	DW network length	Thousand km	81.0	108.5	77.5	95.4	5.8	81.4	640.0	53.4	8.1	81.0	248.2	113.7	910.0	N/A	70.1	65.3	3.8
	DW network length per connected inhabitant	m/person	8.9	9.2	10.3	10.5	7.3	7.5	7.7	9.0	5.9	7.7	5.1	20.2	13.3	N/A	7.3	12.0	9.7
19	Metered customers	%	100%	99.9%	100%	57.1%	94.2%	100%	N/A	100%	100%	93.8%	100%	100%	N/A	N/A	100%	63.1%	5.2%
	Meters with auto. reading system	%	N/A	14.5%	0.0%	N/A	2.9%	18.0%	N/A	75.0%	6.0%	12.8%	27.0%	10.0%	N/A	N/A	3.9%	N/A	0.0%
20	Real losses	%	12.5%	27.0%	38.0%	11.7%	23.0%	14.8%	6.0%	6.5%	14.0%	N/A	14.0%	N/A	19.0%	N/A	21.0%	36.0%	13.0%
	Non-revenue water	%	18.5%	27.0%	45.0%	19.0%	24.0%	17.0%	12.0%	7.3%	N/A	35.0%	N/A	18.0%	21.0%	N/A	28.0%	N/A	49.0%
21	Non-revenue water	m <sup>3</sup> /km/year	1564	1277	6233	1140	3268.55	1045	732.97	493	N/A	N/A	N/A	615.6	1095.75	N/A	2061.14	N/A	N/A

Fig.	Indicator	Unit	IT	LT	LU	LV	MT	NL	NO	PL	PT	RO	SE	SI	SK	UK	EUR*	EU27
16	DW billed consumption - domestic	Million m <sup>3</sup> /year	N/A	105	24.2	46.6	19.6	777.9	299.0	1,296.4	402.3	550.0	511.0	82.0	N/A	1,967.9	29,553	25,073
	DW billed consumption - non-domestic	Million m <sup>3</sup> /year	N/A		16.2	15.8	9.1	315.5	184.0	376.7	214.2	215.0	143.0	42.8	N/A	1,208.6		
17	Avg residential consumption	L/capita/day	N/A	100.7	180.0	81.0	93.7	119.2	146.7	94.7	130.1	79.0	132.7	105.4	83.0	141.4	130.2	127.2
	Avg residential consumption	m <sup>3</sup> /household/y	N/A	76.4	63.9	65.4	63.2	93.5	112.4	84.0	81.6	82.2	104.1	94.4	157.0	121.8	103.9	99.6
18	DW network length	Thousand km	403.8	18.3	2.5	7.1	2.6	122.3	52.6	341.1	121.7	101.5	84.5	44.8	31.7	427.6	4,443.9	3,864.5
	DW network length per connected inhabitant	m/person	8.14	6.41	3.7	3.82	4.47	6.84	9.42	9.1	11.32	5.32	8.01	21.01	5.83	6.26	Average: 8.4 Median: 7.9	Average: 8.6 Median: 7.7
19	Metered customers	%	79.8%	96.9%	N/A	95.8%	100%	99.6%	39.0%	100%	N/A	94.1%	99.8%	N/A	N/A	58.2%	N/A	N/A
	Meters with auto. reading system	%	16.7%	14.6%	N/A	13.6%	91.6%	0.2%	56.7%	74.0%	N/A	N/A	44.5%	N/A	N/A	35.7%	N/A	N/A
20	Real losses	%	42.0%	21.0%	0.0%	N/A	8.7%	5.5%	29.0%	13.0%	N/A	44.7%	19.0%	32.0%	N/A	17.1%	Average: 21.96% Median: 18.03%	Average: 22.9% Median: 19%
	Non-revenue water	%	49.0%	20.0%	10.0%	21.0%	25.7%	6.5%	40.0%	18.0%	N/A	44.5%	22.0%	32.0%	N/A	18.1%	Average: 27.07% Median: 21%	Average: 28.59% Median: 21%
21	Non-revenue water	m <sup>3</sup> /km/year	6,533.5	1491	N/A	1,219	3,874	659.14	3,650	2,180	N/A	4905.2	1569	1299.72	N/A	3,055.73	Average: 2416.6	Average: 2,309.74



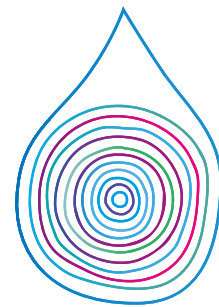
Fig.	Indicator	Unit	IT	LT	LU	LV	MT	NL	NO	PL	PT	RO	SE	SI	SK	UK	EUR*	EU27	
27	WW - Primary treatment	%	0%	5%	N/A	0%	0%	0%	0%	0%	7%	22%	0%	1%	N/A	0%	1.6%	1.8%	
	WW - Secondary treatment	%	34%	23%	N/A	22%	100%	0%	35%	16%	36%	3%	0%	26%	N/A	41%	23.8%	21.4%	
	WW - Tertiary treatment	%	66%	72%	N/A	78%	0%	98%	65%	84%	57%	75%	98%	73%	N/A	12%	66.6%	75.7%	
	WW - Quaternary treatment	%	0%	0%	N/A	0%	0%	2%	0%	0%	0%	0%	3%	0%	N/A	0%	1.2%	1.0%	
	WW - Other treatment	%	0%	0%	N/A	0%	0%	0%	0%	0%	0%	0%	0%	0%	N/A	47%	6.7%	0.1%	
28	Volume of reclaimed water	Million m <sup>3</sup> /year	0	1.6	N/A	0	1.49	0	0	72.8	6.62	53.4	0	N/A	10	7.85	N/A	N/A	
	Percentage of water reuse	% of treated WW	4%	2%	N/A	0%	6%	0%	0%	5%	1%	5%	0%	N/A	2%	0.1%	N/A	N/A	
29	Reuse - agri irrigation	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	34.4%	34.4%
	Reuse - industr. purposes	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	27.2%	27.2%
	Reuse - urban & leisure	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	33.7%	33.7%
	Reuse - within WWTP	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.9%	1.9%
	Reuse - other/unknown	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.8%	2.8%

Fig.	Indicator	Unit	AT	BE	BG	CH	CY	CZ	DE	DK	EE	EL	ES	FI	FR	HR	HU	IE	IS
30	Quantity of sludge generated	thousand tonnes of dry solids/y	198	181.2	36.2	N/A	22	189.2	1,629.9	190.6	49	99.1	922.4	140	1,200	N/A	288.6	60	0.9
	Quantity of sludge generated per person	kg of dry solids/person/y	22.6	18.1	8.8	N/A	32.6	21	20.1	35.7	42.9	10.3	20.7	29.2	20.8	N/A	35.8	14.7	2.9
31	Sludge - agriculture	%	26%	18%	20%	0%	100%	66%	13%	65%	44%	5%	81%	51%	37%	N/A	1%	100%	0%
	Sludge - land reclamation	%	0%	0%	12%	0%	0%	8%	5%	10%	10%	0%	0%	43%	43%	N/A	4%	0%	70%
	Sludge - incineration	%	44%	82%	10%	97%	0%	10%	81%	22%	0%	37%	8%	1%	16%	N/A	53%	0%	0%
	Sludge - landfill	%	0%	0%	35%	0%	0%	9%	0%	3%	1%	29%	11%	0%	1%	N/A	42%	0%	30%
	Sludge - other/unknown	%	30%	0%	23%	3%	0%	7%	1%	0%	45%	29%	0%	5%	3%	N/A	0%	0%	0%
32	Ener. cons. DW treatment	kWh/m <sup>3</sup>	0.42	0.85	0.47	0.57	N/A	0.35	N/A	0.36	0.78	1.1	0.44	0.66	1.11	N/A	0.41	0.71	0.17
	Ener. cons. DW distrib.	kWh/m <sup>3</sup>			0.27		N/A	0.04	N/A	0.06		0.68		0.2		N/A	0.14		0
33	Ener. cons. WW collection	kWh/m <sup>3</sup>	N/A	0.05	0.17	N/A	0.51	0.3	N/A	0.45	0.36	0.16	0.05	0.35	0.33	N/A	0.22	0.64	N/A
	Ener. cons. WW treatment	kWh/m <sup>3</sup>	0.37	0.58	0.4	0.34	0.75	0.45	N/A	1.37	0.97	0.49	0.5	0.71		N/A	0.56		N/A

Fig.	Indicator	Unit	IT	LT	LU	LV	MT	NL	NO	PL	PT	RO	SE	SI	SK	UK	EUR*	EU27
30	Quantity of sludge generated	thousand tonnes of dry solids/y	797	50	12.5	19.8	8.7	311.9	134	549.7	146.7	391.8	203.8	38.7	56.4	1,643.6	9,841.1	7,877.5
	Quantity of sludge generated per person	kg of dry solids/person/y	13.8	22.2	18.6	13.8	15.1	17.6	27.9	19.3	15.4	34.8	22.2	23.6	14.8	25.1	N/A	N/A
31	Sludge - agriculture	%	19%	15%	10%	44%	0%	0%	53%	27%	N/A	64%	53%	3%	60%	87%	44%	35%
	Sludge - land reclamation	%	34%	50%	0%	0%	0%	0%	26%	2%	N/A	0%	22%	1%	30%	6%	13%	14%
	Sludge - incineration	%	15%	35%	37%	0%	0%	97%	5%	16%	N/A	1%	2%	8%	0%	4%	29%	34%
	Sludge - landfill	%	7%	0%	0%	0%	100%	0%	5%	1%	N/A	34%	10%	0%	2%	0%	6%	7%
	Sludge - other/unknown	%	25%	0%	53%	56%	0%	3%	11%	54%	N/A	1%	13%	88%	8%	3%	9%	10%
32	Ener. cons. DW treatment	kWh/m <sup>3</sup>	0.46	0.81	N/A	0.69	4.54	0.33	0.36	0.45	0.67	0.43	0.56	N/A	N/A	0.45	N/A	N/A
	Ener. cons. DW distrib.	kWh/m <sup>3</sup>		0.22	N/A		0.23	0.17	0.32	0.21			0.39	0.12	N/A	N/A	0.36	N/A
33	Ener. cons. WW collection	kWh/m <sup>3</sup>	0.07	0.59	N/A	1.04	0.4	N/A	0.39	0.24	0.73	0.34	0.16	N/A	N/A	0.1	N/A	N/A
	Ener. cons. WW treatment	kWh/m <sup>3</sup>	0.37	1.22	N/A		0.8	0.61	0.79	0.69			0.64	0.45	N/A	N/A	0.33	N/A

Fig.	Indicator	Unit	AT	BE	BG	CH	CY	CZ	DE	DK	EE	EL	ES	FI	FR	HR	HU	IE	IS
34	Ener. from own prod.	%	58%	6%	5%	36%	23%	27%	0%	18%	N/A	4%	59%	N/A	N/A	N/A	13%	14%	0%
	Ener. from external sources	%	42%	94%	95%	64%	77%	63%	0%	82%	N/A	96%	41%	N/A	N/A	N/A	87%	86%	100%
35	Biogas prod. In UWWTPs	Million m <sup>3</sup> /year	110	12	5.2	35.7	1	75	N/A	50	0.7	34	122	24.2	565	N/A	36.3	12.7	N/A
36	Ener. prod. - heat	GWh/year	N/A	19.6	9.8	239	7.24	190	N/A	189	12.02	145	N/A	108	N/A	N/A	366.4	48.62	N/A
	Ener. prod. - electricity	GWh/year	418	67.4	6.2	357	3.95	234	N/A	77	219.64	22	519	89	N/A	N/A	60.5	30.31	N/A
	Ener. prod. - other	GWh/year	3.1	4.7	6.2	N/A	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0	0.16	N/A
	Ener. prod. - consumed externally	%	7%	0%	9%	N/A	0%	2%	N/A	62%	N/A	N/A	N/A	N/A	N/A	N/A	0%	0%	N/A
37	GHG emissions	thousand tonnes of CO <sub>2</sub> -eq	171	418	N/A	800	N/A	888	N/A	189	N/A	2	N/A	N/A	480	N/A	N/A	210	N/A

Fig.	Indicator	Unit	IT	LT	LU	LV	MT	NL	NO	PL	PT	RO	SE	SI	SK	UK	EUR*	EU27
34	Ener. from own prod.	%	N/A	20%	N/A	14%	5%	42%	43%	33%	5%	10%	N/A	N/A	N/A	9%	N/A	N/A
	Ener. from external sources	%	N/A	80%	N/A	86%	96%	58%	57%	67%	95%	90%	N/A	N/A	N/A	92%	N/A	N/A
35	Biogas prod. In UWWTPs	Million m <sup>3</sup> /year	N/A	13	N/A	3.6	1.2	134	25.7	190	N/A	N/A	119.4	N/A	N/A	419.9	N/A	N/A
36	Ener. prod. - heat	GWh/year	N/A	40	N/A	0	2.6	N/A	346	400	N/A	N/A	N/A	N/A	70.3	1,61.0	N/A	N/A
	Ener. prod. - electricity	GWh/year	N/A	30	N/A	1.8	2.2	1,271.2	0	350	N/A	N/A	N/A	N/A	N/A	731.0	N/A	N/A
	Ener. prod. - other	GWh/year	N/A	4	N/A	21.7	5.8	272.0	0	N/A	N/A	93	N/A	N/A	N/A	0	N/A	N/A
	Ener. prod. - consumed externally	%	N/A	2%	N/A	68%	55%	20%	74%	5%	N/A	N/A	N/A	N/A	N/A	24%	N/A	N/A
37	GHG emissions	thousand tonnes of CO <sub>2</sub> -eq	N/A	60	N/A	N/A	N/A	746	N/A	N/A	166	N/A	N/A	N/A	36	900	N/A	N/A



**EurEau**

**EurEau**

European Water Services

Rue du Luxembourg 47-51  
B-1050 Brussels, Belgium

T: +32 2 706 40 80

E: [info@eureau.org](mailto:info@eureau.org)

W: [www.eureau.org](http://www.eureau.org)

 [EurEau](#)

 [@eureauinsta](#)

 [@eureau.bsky.social](#)