the international water association

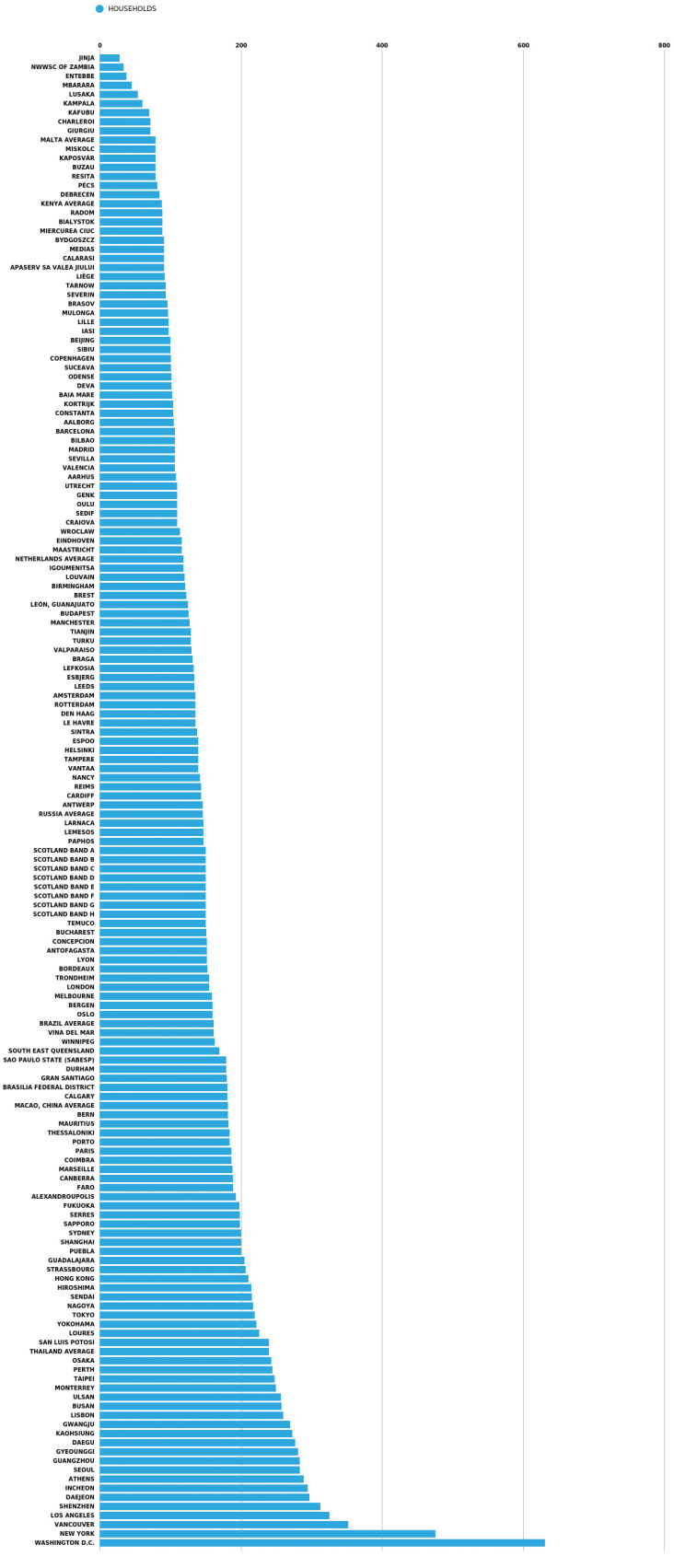
STATISTICS & ECONOMICS

International Statistics for Water Services 2016

Information every water manager should know

This report is now in it's twelfth edition, and this year contains data from 40 countries and 170 cities. For the first time we have been able to gather data from all five continents, a landmark as the report aims to enable high-level comparisons concerning abstraction, consumption, tariff structure and regulation of water services globally.

For more information visit:
www.waterstatistics.org



Graph: Specific Water Consumption for Households in 2014 in liters/capita/day

The data provide a starting point for debate on how services are financed, how various water tariff structures are set up, which measurements of performance service providers use, how they analyze their microeconomics, and how they manage their services efficiently.

Water Pricing, a useful tool for managing demand?

The universal ideal of total cost recovery for potable water production and distribution is not a reality on the ground; water consumption remains subsidized in many countries and cities.

However, one of the ultimate goals of water management should be making visible the total cost, and recovery, of the water we all use so that customers will have a better understanding of their own responsibilities to optimize their usage. By representing tariff structures in a transparent way, we hope this report provides some insight to water managers.

A significant trend in a number of countries is the use of water pricing as a tool to reduce water use in times of water scarcity. However, we must keep in mind that the price elasticity for potable water is, in general, very low or even zero.

However, water pricing alone cannot be the tool that ensures sustainable water use. This is only one of the tools available to water managers, regulators and politicians to reach the goal of sustainable water use. Perhaps the most important tool, and one often overlooked, is the behaviour of customers, and their awareness of the true value of the water resources they use. Even in regions with water scarcity we still have to invest in changing this customer behaviour.

Water is a human right, wastewater is not

The consumption of potable water is widely variable, with a large gap between cities in our research. Household consumption per capita varies from 28 to 631 liters per day, a factor of 20.

Taxes (VAT) form part of the water bill people receive, and this varies between zero and 28 percent. This raises the question whether very high taxes on potable water are ethical when water is a human right. High taxes on potable water exacerbate constraints on affordability and the ability to pay. One solution – zero taxation - is not as simple as it at first appears, as the affordability of the water bill must be considered within the broader context of local direct and indirect taxes, both historical and existing, in a particular country.

This, and a desire to keep water bills affordable, is driving a new trend: a divergence of the VAT charged on water and wastewater: a low VAT for potable water (which is a human right) and a higher VAT for wastewater collection and treatment.

Total cost recovery, the key to the future:

The affordability of water services must be combined with operating water services in a sustainable way. Developing and maintaining the assets for water production and distribution are capital intensive. This presents a challenge for both service providers and regulators to ensure that total cost recovery on investments is compatible with an affordable water bill. Special attention must be paid to social corrections of the water tariffs where necessary.

Pricing policies, a matter of common sense:

One thing is clear from the research, no single water tariff structure is trending worldwide. There is no magic bullet water managers can rely upon. Increasing blocks, decreasing blocks, fixed charges versus variable charges, environmental charges or not, they all have different advantages and disadvantages around the world.

Perhaps the most we can say is that the ideal tariff structure should seek to find a balance between the economic, environmental and social demands placed upon water resources and supplies.

From the authors

The IWA and the IWA Specialist Group on Statistics and Economics, are proud to present this International Statistics for Water Services 2016.

The survey has been realized and coordinated by **jan.hammenecker@dewatergroep.be** * and **ann.bijnens@dewatergroep.be** **.

This leaflet is intended to open a discussion and holds limited information. To explore the data from around the world and build your own graphs of abstraction, consumption, tariff structure and regulation of water services visit our Statistics Platform: **www.waterstatistics.org**

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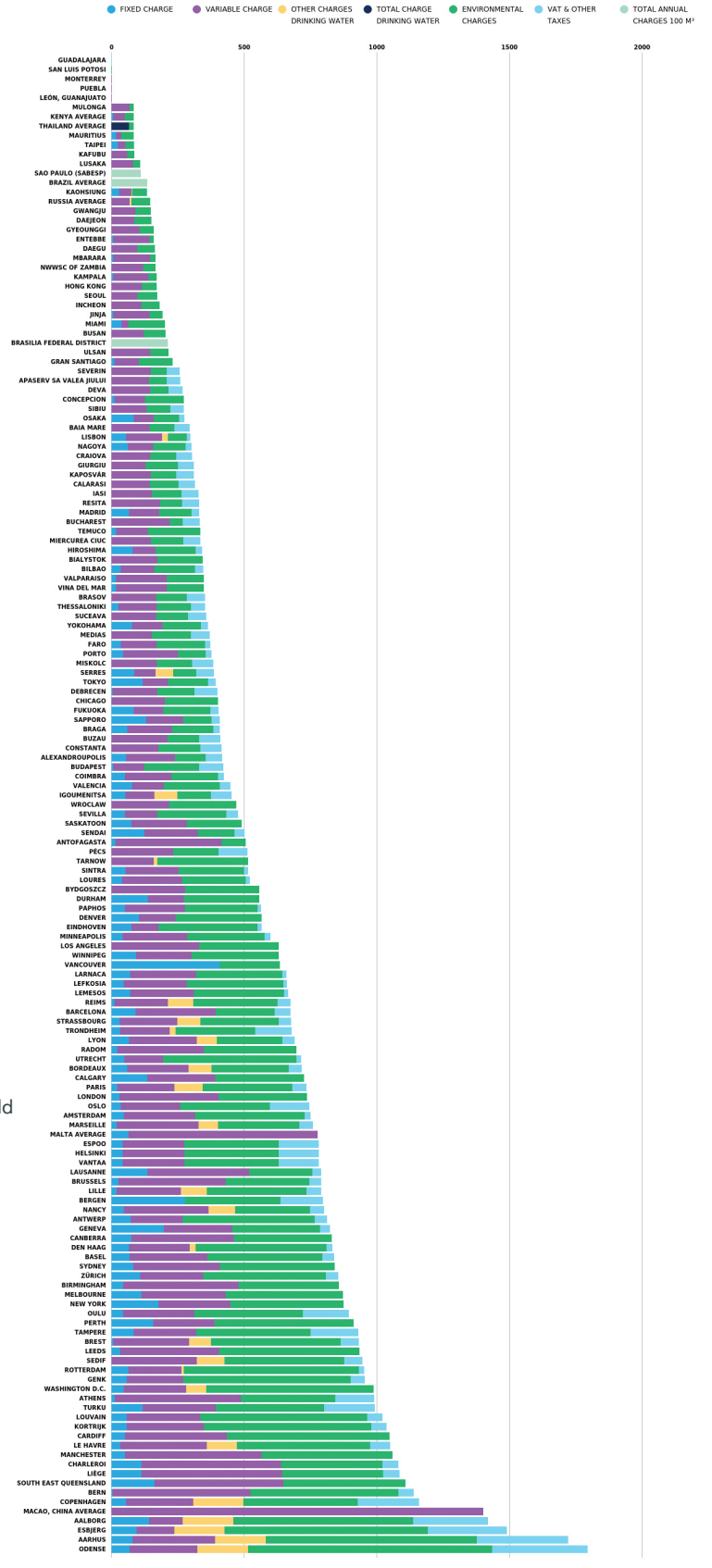

Graph: Total charges for 170 cities in 2015 for a consumption of 200 m³ in US$/200 m³

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