





## **Guidelines for Topten Public Procurers**

# Taps and Shower Heads

Steffen Hepp, August 2021

## Why follow Topten criteria?

- Topten.eu/pro (<u>www.topten.eu/pro</u>) is a European web portal helping buyers, professionals, public procurers and large buyers to find the most energy efficient products available in Europe. The products are selected and updated continuously, according to their high energy and environmental performances, independently from the manufacturers.
- The Topten criteria below can be inserted directly into tendering documents.
- All taps and shower heads displayed on <u>www.topten.eu</u> meet the criteria contained in these guidelines. Procurers can therefore use the website to check the availability and assortment of products currently on the market, which meet the <u>Topten selection criteria for Taps & Shower Heads</u>.
- Topten.eu/pro links to national partners Topten Pro websites and was developed under the Topten Act project, supported by the European Union through Horizon 2020 programme.

### How much can you save?

This category, listed on <u>www.topten.eu</u>, includes most energy-efficient taps, flow regulators and shower heads of Europe.

Considering the following assumptions, it is possible to achieve the savings indicated in the next table.

Assumptions → 4-person family home □ Water cost: 0.0025 €/litre □ Electricity cost: 0.20 €/kWh

Inefficient model **Topten model** Flow rate shower l/min 9 6 7 5 Flow rate wash basin I/min 5 5 Flow rate kitchen sink I/min 52.560 Consumption shower l/year 35.040 Consumption wash basin l/year 15,273 10,909 20,000 Consumption kitchen sink l/year 20,000 l/year **Total Consumption** 87,833 65,949 Savings ➡ Water savings 21,884 litre (25% less water) I / year ⇒ Energy savings kWh / year 875 kWh (25% less energy) ⇒ Cost savings EUR / year 230 EUR







A combination of water saving taps and flow regulators across kitchen and bathroom has the potential to save more than 25% of energy and water in use.

A four-person family can save 230 EUR within one year. The biggest cost is the energy needed to heat up the water. In fact, a usual household consumes more energy for the production of hot water than all other electrical devices and light in the household combined.

### **Procurement criteria**

The following criteria can be inserted directly into tendering documents. The Topten selection criteria and the product lists are updated regularly. The newest versions are always available at <a href="http://www.topten.eu/pro">www.topten.eu/pro</a>.

#### SUBJECT: HIGHLY WATER/ENERGY-EFFICIENT TAPS AND SHOWER HEADS

#### TECHNICAL SPECIFICATIONS

#### Efficiency class

Taps and shower heads must have at least the class A (dark green arrow) according to the Unified Water Label (also referred to as 'European Water Label')

#### Verification

Bidders must supply the efficiency label and show product is listed on the official product database of the Unified Water Label.







#### FURTHER INFORMATION

Unified Water Label		
Class	Max flow rate <sup>1</sup>	
1st class	≤ 6	
2nd class	≤ 8	
3rd class	≤ 10	
4th class	≤ 13	
5th class	> 13	
The lower the flow rate, the better the efficiency		

<sup>1</sup> Flow rate = litres / minute



The water label features the **flow rate**, corresponding **class** (colour coded) as well as **the annual energy consumption** for that product, based on average usage patterns and the energy needed to heat up that amount of water.

#### FURTHER INFORMATION

To increase savings and reduce environmental impact, procurers should evaluate life cycle costs when tendering for taps and shower heads. Thus, it is advisable to include in the tender a costing exercise - even if simple - for the product life cycle costs.

	Information details	Different unit costs in € (excluding tax)	Total cost in € (excluding tax)
Delivery			
Installation			
Use*	[Water consumption per year (I/yr.) + Energy consumption for hot water production in kWh/year] x product life time x n <sup>o</sup> units	Electricity cost**: 0,20 €/kWh Water cost**: 0,0025 €/litre	
Maintenance			
Recycling and disposal			

Table 1: Example of a breakdown costs table, to be filled in by bidders

\* Example of how use costs can be determined.

\*\* This figure is just an example. The procurer can use the average electricity/water price paid during the last 2 or 3 years, and also include subscription fee and taxes.







### Advice and support

If you would like further assistance in using the information presented here in your own procurement actions or more information on <u>Topten Pro</u> contact your national Topten team (find it on Topten.eu). The European Commission's <u>Green Public Procurement</u> website contains valuable legal and practical guidance together with procurement criteria for a range of commonly procured products and services.



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