

Guidelines for Topten Public Procurers

Household Coffee Machines



[Steffen Hepp](#), June 2021

Why follow Topten criteria?

- Topten.eu/pro (www.topten.eu/pro) 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 household coffee machines displayed on www.topten.eu 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 [Topten selection criteria for Coffee Machines](#).
- 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?

The category household coffee machines, listed on www.topten.eu, includes fully automatic coffee machines and portioned machines for capsules and pads.

Not considered are filter coffee machines, machines with piston lever, combi-machines and (commercial) appliances with a permanent water supply.

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

- Assumptions
- Lifetime expectation: 10 years
 - kWh/year as per Swiss energy label
 - Electricity cost: 0.20 €/kWh

	Topten model	Inefficient model
Type	Fully automatic	Fully automatic
Energy class	A	B
Electricity consumption	43 kWh/year	66 kWh/year
Use cost (electricity in 10 years)	87 €	132 €
Savings in 10 years	34% energy / unit ⇒ 45 € / unit	

	Topten model	Inefficient model
Type	Portioned	Portioned
Energy class	A++	A
Electricity consumption	34 kWh/year	58 kWh/year
Use cost	68 €	116 €
Savings in 10 years	41% energy / unit ⇒ 48 € / unit	

The savings potential for a Topten model compared to an inefficient model is significant. In the example the electricity saving for a Topten fully automatic coffee machine is 34%, for a portioned coffee machine savings are 41%. Over the product life time of 10 years these efficiencies accumulate to 45 € per unit and 48 € per unit respectively.

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 www.topten.eu/pro.

SUBJECT: HIGHLY ENERGY-EFFICIENT HOUSEHOLD COFFEE MACHINES

TECHNICAL SPECIFICATIONS

1. Auto Power

Machine must possess Auto-power-down function switching off the permanent heating of the water after a certain delay time into "standby-mode" or "off-mode"

- Delay time of the auto-power-down: Default (factory setting)
 - Portioned machines: max. 15 minutes
 - Fully automatic machines / piston machines: max. 30 minutes
- Delay time of the auto-power-down: Programmable by the user
 - Portioned machines: max. 30 minutes
 - Fully automatic machines/piston machines: max 3 hours
- The auto-power-down-function can not be deactivated by the user or any function.

2. Swiss energy class

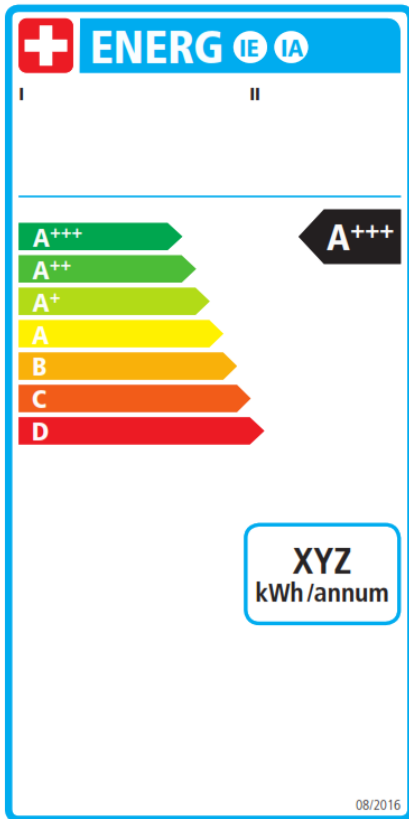
Coffee machine must have the following classes based on EN60661 according to Swiss energy regulation:

- Portioned machines: Energy class A+ (or better)
- Fully automatic machines/piston machines: Energy class A (or better)

Verification

Bidders must supply the Swiss energy class after EN60661 according to Swiss energy regulation.

FURTHER INFORMATION



Swiss Energy Label for Coffee Machines

Since 2015 the energy label is mandatory for coffee machines is mandatory in Switzerland.

The calculation of the energy efficiency class does not depend on the energy consumption alone. For example, it takes into consideration the energy needs for cooling and re-heating the water as well as the energy need during standby mode.

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

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

	Information details	Different unit costs in € (excluding tax)	Total cost in € (excluding tax)
Delivery			
Installation			
Use*	Annual energy consumption, in kWh, x 10 years, x n° units	Electricity cost**: 0,20 €/kWh	
Maintenance			
Recycling and disposal			

* Example of how use costs can be determined. The variables for the costs calculation during the product life time can be stated by the procurer (according to the equipment replacement rate, its daily and annual use, etc.).

** This figure is just an example. The procurer can use the average electricity 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 [Topten Pro](#) contact your national Topten team (find it on [Topten.eu](#)).

The European Commission's [Green Public Procurement](#) website contains valuable legal and practical guidance together with procurement criteria for a range of commonly procured products and services.



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