

Guidelines for Topten Public Procurers

Dishwashers

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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 dishwashers 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 dishwashers](#).
- 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 dishwashers, listed on www.topten.eu, includes freestanding and built-in models, with different number of place settings. Considering the following assumptions, it is possible to achieve the savings indicated in the next table.

- Assumptions
- Lifetime expectation: 15 years
 - Water cost: 2,5 €/m³, Electricity cost: 0,20 €/kWh
 - 280 washing cycles per year

| | Topten model | Inefficient model |
|---|---|-------------------|
| Type of installation / capacity | 13 place settings | 13 place settings |
| Energy class | B | D/E |
| Electricity consumption | 180 kWh/year | 250 kWh/year |
| Water consumption | 1800 l/year | 2650 l/year |
| Use cost (electricity and water in 15 years) | 600 € | 840 € |
| Savings in 15 years | 30% energy + 30% water / unit, 240 €/unit (energy + water) | |

Topten models can consume about 30% less energy and less water compared to inefficient models. This can lead to a saving of approximately 240 € / unit in energy and water over their lifetime.

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 DISHWASHERS

TECHNICAL SPECIFICATIONS

Energy class

Dishwashers must have energy efficiency class A or B, according to the European Energy Label.

Additional specifications to watch:

1. Annual water consumption

Efficient annual water consumption is around 1800 litres per year.

2. Noise emission label

The energy label shows also the label for noise emission. This should be no lower than B.

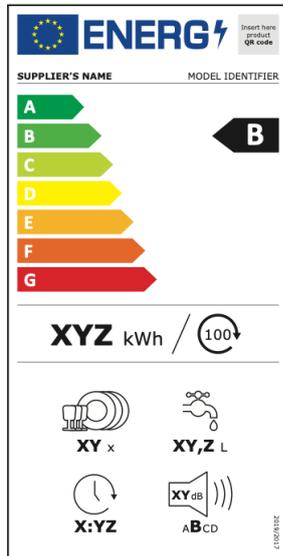
Verification

Bidders must supply a declaration regarding their product's energy efficiency class and water consumption, supported by technical data and results from tests carried out in accordance with Commission regulation No. 2019/2017, based on the measurement standard EN 50242:2016 or equivalent, or a relevant third-party certification/Type I eco-label attesting to compliance.

NOTES ON IMPLEMENTATION

According to EU Regulation No. 2019/2022 some household dishwashers cannot be placed on the market.

Table 1: Overview of energy classes allowed on the European market



Currently, all classes are allowed

| | |
|---------|--------------------|
| Class A | $EEI < 32$ |
| Class B | $32 \leq EEI < 38$ |
| Class C | $38 \leq EEI < 44$ |
| Class D | $44 \leq EEI < 50$ |
| Class E | $50 \leq EEI < 56$ |
| Class F | $56 \leq EEI < 62$ |
| Class G | $EEI \geq 62$ |

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

Table 2: 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/year, x n° units Annual water consumption, in l/year, x n° units | Electricity cost**: 0,20 €/kWh Water cost**: 2,5 €/m³ | |
| Maintenance | | | |
| Recycling and disposal | | | |

* Example of how use costs can be determined. In the EU regulation the annual energy consumption calculation considers 280 cleaning cycles, the left-on and off-mode consumption.

** 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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