





# **Guidelines for Topten Public Procurers**

## Household Freezer

Steffen Hepp, June 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 household freezers 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 Household Freezers</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?

The category household freezer, listed on <a href="www.topten.eu">www.topten.eu</a>, includes upright (standing) and chest models. Considering the following assumptions, it is possible to achieve the savings indicated in the next table.

	Topten model	Inefficient model
Туре	Upright	Upright
Net volume (liter)	369	369
Energy class	D	F
Electricity consumption	224 kWh/year	336 kWh/year
Use cost (electricity in 15 yrs)	672 €	1,008 €
Savings in 15 years	33% energy / unit ⇒ 336 € / unit	

Topten model	Inefficient model		
Chest freezer	Chest freezer		
248	248		
D	F		
173 kWh/year	260 kWh/year		
519 €	780 €		
33% energy / unit ⇒ 261 € / unit			







Comparing models with similar net volume, the Topten models allow electricity savings from around 33% over their life time of 15 years, which translates into cost savings of 336 € / unit or 261 € / unit for the respective appliances.

Differences in electricity consumption between inefficient and Topten models rise as the net capacity grows, leading to higher energy savings and consequently greater money savings.

The form factor (upright vs chest), however, does not impact energy efficiency, hence, can be chosen as best suits the setting.

### **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="https://www.topten.eu/pro">www.topten.eu/pro</a>.

SUBJECT: HIGHLY ENERGY-EFFICIENT HOUSEHOLD FREEZERS

#### TECHNICAL SPECIFICATIONS

#### **Energy class**

Household freezers must have an energy class between A and D, declared in agreement with the European Energy Label.

#### Refrigerants

Consumer freezers must not use any regriferants, i.e., be free of CFC and HFC.

#### Verification

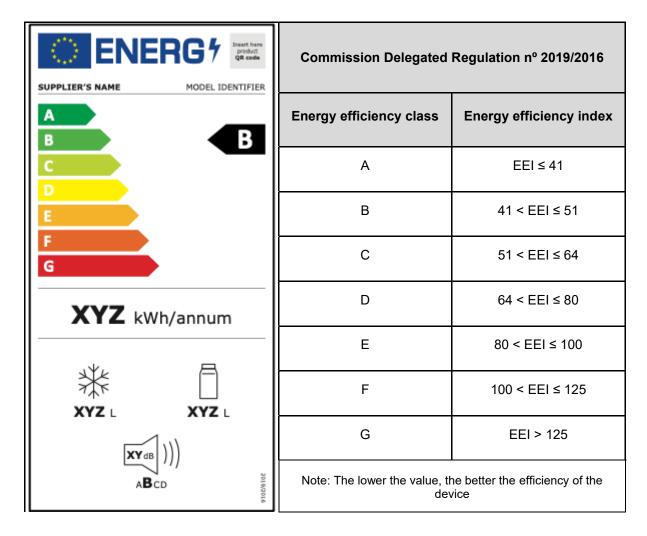
Bidders must supply the energy label and technical data according to EU Regulations No. 2019/2019 and No. 2019/2016.







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



Since 1 March 2021 the revised EU energy label for household refrigerating appliances is mandatory. It shows:

- the energy efficiency class;
- the annual electricity consumption in kWh per year;
- the net volume of freezer compartments;
- noise emission classes (A to D) that help compare noise levels







#### ADDITIONAL REMARKS

To increase savings and reduce environmental impact, procurers should evaluate life cycle costs when tendering for household freezers. 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*	Energy consumption in kWh/year x product life time (15 yrs) x no units	Electricity cost**: 0,20 €/kWh	
Maintenance			
Recycling and disposal			

<sup>\*</sup> Example of how use costs can be determined.

<sup>\*\*</sup> 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 <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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