Cars and Vans

Guidelines for Frontrunner Public Procurers

Photo courtesy of autogastechnik.eu

What is Topten?

- Topten.eu is a European web portal helping buyers to find **the most energy efficient products available in Europe**. Links to national Topten websites from a number of European countries are also available.
- All cars and vans displayed on **www.topten.eu** meet the criteria contained in these guidelines. Procurers can therefore use the website to check the availability of products currently on the market, which meet the **Topten selection criteria**.
- **Sample tender documents** are provided on **www.topten.eu/professional** to demonstrate how the criteria can be applied in practice.
- The European Commission's **GPP website** also contains valuable legal and practical guidance and procurement criteria for a range of commonly procured products and services.

Product group covered:

Cars and vans with combustion engines running on either diesel, petrol or natural gas, including hybrids.

Product availability:

All products listed on **www.topten.eu** meet the criteria listed below. Product information is updated regularly to reflect market developments.

Potential CO_2 savings:

The most efficient compact cars with a combustion engine have emissions as low as **85 gCO_2/km** – allowing for **savings of 20,8 Tonnes CO_2**[1] over the lifetime of the vehicle when compared to an inefficient model on the market. A **saving of 32,8 Tonnes CO_2** is possible with a Topten large van, which emits just **96 gCO_2/km.**

In terms of other categories, the best Topten mini car emits just **79 gCO_2/km,** the best middle class car just **88g gCO_2/km** and the best upper middle class car emits **107 gCO_2/km**.

Potential fuel and cost savings:

With fuel consumption as little as 3.5 litres per 100 km for a small vehicle, the **lifetime savings on fuel costs are significant - €10300**[2] compared with an inefficient model**.**

For 5-seater vans, cost **savings of €17000** are possible as the best Topten model consumes just 3.4 litres per 100 km. Savings are even more significant for 6-seaters, with **€17140** saved on fuel due to consumption being only 4,1 litres per 100 km.

[1]Based on a lifetime mileage of 200 000 km.
[2]Based on a lifetime mileage of 200 000 km and average diesel costs of €1.10/litre and petrol costs of €1.20/litre

Procurement criteria – Updated: June 2013

The following criteria can be inserted directly into tendering documents. Topten specifications are updated continuously. The newest versions are always available at **www.topten.eu**

For cars and vans, the specifications are based on the ecological rating system (Eco Points) used by the Swiss Association for Traffic and Environment (ATE). This system takes into account the greenhouse gas, air pollutant and noise emissions for each vehicle type and awards a cumulative score reflecting environmental performance. Higher Eco Points reflect better performance.

Subject matter:	**Purchase of cars and vans with high environmental performance**

Technical specifications:

1. All cars and vans must achieve the following minimum Eco Point rating and not exceed the maximum permissible emissions shown below for their vehicle category. The calculation scheme for Eco Points is shown below.

Category	Length of car (l)	Minimum Eco Points
Mini	l < 3.6 m	69.0
Small cars	3.6 m ≤ l < 4.0 m	66.5
Compacts	4.0 m ≤ l < 4.4 m	65.0
Middle class	4.4 m ≤ l < 4.8 m	58.3
Upper middle class	4.8 m ≤ l < 5.0 m	50.0
Vans with 5 seats	5.0 m < l	57.0
Vans, 6 or more seats	5.0 m < l	51.0

Calculation of Eco Points
The four categories of environmental effects contribute to the calculation of the Eco Points are as follows:

- Category A: CO_2 emissions – weighting: 60%
- Category B: noise emissions – weighting: 20%
- Category C: air pollutants affecting human health – weighting: 15%
- Category D: nature pollution – weighting: 5%

Category A: CO_2 emissions
A vehicle's CO_2 emissions are rated here with a linear function. For CO_2 emissions of 60 grams per kilometre 10 points are granted, while 180 grams of CO_2 per kilometre score 0 points. The precise formula for calculating the category A Eco Points is:

Eco Points = (180 – x)*0.0833 , x = CO_2 emissions in g/km

Category B: noise emissions

The rating is based on a model's indications of the type test. The scale runs linearly between 10 points for 65 dB(A) and 0 points for 75 dB(A) and more, as shown below:

dB(A)	65	66	67	68	69	70	71	72	73	74	75
Points	10	9	8	7	6	5	4	3	2	1	0

Categories C and D

A car's score in these categories is defined by its emission class (Euro 4, Euro 5 or Euro 6), according to the following table:

Emission Class*	C: Air pollutant points	D: Nature pollution points
Euro 5 petrol	9.35	7.6
Euro 5 petrol, direct fuel injection	7.48	7.6
Euro 5 diesel	6.4	2.8
Euro 6 petrol	9.35	7.6
Euro 6 petrol, direct fuel injection	7.48	7.6
Euro 6 diesel	8.4	6.8

*Cars driven by natural gas are treated like petrol cars, because they also use an Otto engine.

Total Eco points

For a vehicle's total Eco Points the scores of the single environmental effect categories are weighted, added up and multiplied by 10:

Eco points =
[(Cat A score)*0.6 + (Cat B score)*0.2 + (Cat C score)*0.15 + (Cat D score)*0.05)] *10

***Verification*:** Bidders must supply technical data and test results for the vehicles tendered to demonstrate performance in each of the categories covered by the Eco Point rating, accompanied by the above calculation demonstrating the Eco Points achieved.

2. All diesel vehicles must be fitted with a particle filter, or must comply with the current emissions threshold of 0.005g/km or less Particulate Matter (PM) by alternative means.

   Verification: Bidders must supply technical data and test results demonstrating that the vehicle complies with the current threshold under the EU Regulations on Emissions Standards emissions for particulate matter (PM).

Notes on implementation

- The above technical specifications only relate to cars and vans with a combustion engine, which run on petrol, diesel or natural gas, including hybrid models.
- Only automobiles with CO_2 emissions of 180 g/km are taken into consideration.
- The Eco Points rating system was developed by the Institut für Energie- und Umweltforschung (IFEU), by order of the German Office for Environment (Bundesumweltamt) and is used by ATE together with its sister organisations – the traffic associations of Germany and Austria.
- The **sample tender document** for cars/vans available on **www.topten.eu** demonstrates how the operational lifetime cost of vehicles can be calculated in accordance with the **Clean Vehicles Directive** (2009/33/EC) and provides additional guidance on selection and award criteria.

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 please contact the Procura+ team:

E-mail: procurement@iclei.org Tel: +49 761 368 9248

An expression of interest form is also available on **www.topten.eu/pro** for public authorities who would like support to apply these criteria in an upcoming procurement process.

Procura+ Sustainable Procurement Campaign

What is Procura+?

Procura+ is an initiative designed to help support public authorities in implementing Sustainable Procurement. The campaign is run by ICLEI – Local Governments for Sustainability, the Topten partner for public authorities. www.procuraplus.org