



Photo courtesy of autogastechnik.eu

# Cars and Vans

## Guidelines for Frontrunner Public Procurers

### What is Topten?

- Topten is a European web portal helping buyers to find **the most energy efficient products available in Europe**.
- The cars and vans displayed on [www.topten.eu](http://www.topten.eu) all meet the criteria contained in these guidelines.
- Procurers can use the website to verify the availability of products meeting the criteria. Links to national websites in a number of European countries are also available.
- **Sample tender documents** are provided 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.

<b>Product group covered:</b>	Cars and vans with combustion engines, including hybrids.
<b>Product availability:</b>	All products listed on <a href="http://www.topten.eu">www.topten.eu</a> meet the criteria listed below. Product information is updated regularly to reflect market developments.
<b>Potential CO<sub>2</sub> savings:</b>	Excluding electric vehicles, the most efficient compact cars have emissions as low as 87g CO <sub>2</sub> /km – allowing for savings of <b>20,400 kg CO<sub>2</sub></b> <sup>1</sup> over the lifetime of the vehicle when compared to an inefficient model. The best upper middle class car emits 114g CO <sub>2</sub> /km, the best large van 117g CO <sub>2</sub> /km.
<b>Potential fuel and cost savings:</b>	With fuel consumption as little as 3.8 litres per 100 km for a compact vehicle, the lifetime savings on fuel costs are significant - <b>€7,040</b> <sup>2</sup> compared with an inefficient model.

<sup>1</sup>Based on a lifetime mileage of 200 000 km.

<sup>2</sup>Based on a lifetime mileage of 200 000 km and average fuel costs (diesel) of €1.10/litre

## Procurement criteria – Updated: July 2011

The following criteria can be inserted directly into tendering documents. The specifications are updated continuously. The newest versions are always available at [www.topten.eu](http://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.

<b>Subject matter:</b>	<b>Purchase of cars and vans with high environmental performance</b>										
<b>Technical specifications:</b>											
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	Maximum CO <sub>2</sub> emissions (g/km)	Maximum noise emissions (dB(A))							
Mini	$l < 3.6 \text{ m}$	65.8	105	75							
Small cars	$3.6 \text{ m} \leq l < 4.0 \text{ m}$	63.0	125	75							
Compacts	$4.0 \text{ m} \leq l < 4.4 \text{ m}$	58.5	125	75							
Middle class	$4.4 \text{ m} \leq l < 4.8 \text{ m}$	54.0	125	75							
Upper middle class	$4.8 \text{ m} \leq l < 5.0 \text{ m}$	38.0	155	75							
Vans with 5 seats	$5.0 \text{ m} < l$	51.5	133	75							
Vans, 6 or more seats	$5.0 \text{ m} < l$	43.8	138	75							
<b>Calculation of Eco Points</b>											
The four categories of environmental effects contribute to the calculation of the Eco Points are as follows:											
<ul style="list-style-type: none"> <li>▪ Category A: CO<sub>2</sub> emissions – weighting: 60%</li> <li>▪ Category B: noise emissions – weighting: 20%</li> <li>▪ Category C: air pollutants affecting human health – weighting: 15%</li> <li>▪ Category D: nature pollution – weighting: 5%</li> </ul>											
<b>Category A: CO<sub>2</sub> emissions</b>											
A vehicle's CO <sub>2</sub> emissions are rated here with a linear function. For CO <sub>2</sub> emissions of 60 grams per kilometre 10 points are granted, while 180 grams of CO <sub>2</sub> per kilometre score 0 points. The precise formula for calculating the category A Eco Points is:											
Eco Points = $(180 - x) \cdot 0.0833$ , $x = \text{CO}_2 \text{ emissions in g/km}$											
<b>Category B: noise emissions</b>											
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:											
<b>dB(A)</b>	65	66	67	68	69	70	71	72	73	74	75
<b>Points</b>	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 pollutants points	D: Nature pollution points
Euro 4 petrol	9.13	6.8
Euro 4 diesel	5.0	0.0
Euro 5 petrol	9.35	7.6
Euro 5 diesel	6.4	2.8
Euro 6 diesel	8.4	6.8

### 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 =

$$[(\text{Cat A score}) \times 0.6 + (\text{Cat B score}) \times 0.2 + (\text{Cat C score}) \times 0.15 + (\text{Cat D score}) \times 0.05] \times 10$$

**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.**

- All diesel vehicles must be fitted with a particle filter.

### Notes on implementation

- 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](http://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](mailto:procurement@iclei.org) Tel: +49 761 368 9244

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



### 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](http://www.procuraplus.org)